Rethinking project management: A project value creation perspective on a European Capital of Culture

PhD dissertation

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Preface

The foundation for this PhD dissertation was laid already during my first semester at the now-rebranded Aarhus School of Business around late 2008. I remember thinking it must be awesome to teach at the university. However, during my bachelor studies little pointed towards a PhD, as I was focused on business. But a well-meaning bachelor thesis supervisor and an interesting project at least made me interested in actually doing that little piece of research. Also, I learned more than my supervisor ever imagined, maybe because some the learning only materialized later.

During the time as a master student at ITKO, I was lucky enough to be employed part time at the LEGO Group. It took my boss one year to realize that it was a good idea to hire me, but I got in and was working with Change Management in Corporate IT. Soon I started thinking about the master thesis, as I figured it is good to be well-prepared. I started looking at user adoption for information systems and other theories related to my area of work, which I was very happy about. It was not until I started talking with the manager of the IT portfolio management office that I got onto the right track. I ended up in an excellent joint effort with one of his student workers. It was then, during the master thesis write-up that the idea came to me again; maybe I should do a PhD or an industrial PhD like a student worker from another department had just changed into. I was not finished studying the topic of benefits management.

When finishing I was not planning to apply for either types of PhD, but shortly after finishing my master’s degree an associate professor came to me, while I was at the university congratulating a fellow graduate from my former study group. Right there, my future supervisor handed me a call for a PhD scholarship in the management of projects with a special focus on rethinking project management – it was a good fit! I started out in benefits management with a business mindset, and I finish in creating public value in a cultural setting. It has been an amazing ride, a mile long rollercoaster full of loops and hills with the feeling that I sometimes had to Flintstone foot-power the wagon to the top of the ride. At times I was gazing down and at others quickly on to the next challenge. At least I developed and grew as a person. I hope the results will satisfy not only my sponsors but also be interesting to read for both academics and project practitioners.
Acknowledgements

Someone once told me ‘everybody can do a PhD, it is just a matter of end result quality’ others call a PhD a marathon. I might say it is an ultramarathon or a few marathons, and not everybody would make it. Here, at the finish line, I owe many thanks for making it to countless people including sponsors, supervisors, colleagues, case contacts, friends and family.

First of all, I want to thank my supervisor Per Svejvig for inviting me on this journey and for the much good advice along the process and for the fruitful discussions we have had! In addition, it has been amazing to be involved in the entire activities surround the PhD. To my co-supervisor Peter Danholt for support and for challenging my business school thinking, you saw and alluded to perspectives that took me ages to realize, many thanks. For my stay abroad, I am very grateful to Catherine P. Killen at the University of Technology Sydney, for the academic collaboration, and also for welcoming me down under.

I owe many thanks to IT Vest for sponsoring the Centre for IT Project Management and Innovation at Aarhus University, who funded my PhD project and to rethinkIMPACTS 2017 for co-sponsoring research activities and international collaboration, thank you! Thanks to the IS research group, the project management colleagues, the INEIS section and to opponents at the PhD presentations, thank you for giving me a hard time, I grew stronger. Also thanks all the other wonderful colleagues at the department of Management. To all the staff on Experience Economy, thanks for providing an amazing environment and for welcoming me onboard – I enjoyed teaching those classes enormously! Also, thanks to the evaluation committee for taking an interest in my research.

I owe many thanks to Louise and Hans-Peter from rethinkIMPACTS for all the friendly advice after joining the research on Aarhus 2017. Collaborating with Louise at times felt like having a third supervisor, and for that I felt very privileged. Aarhus 2017 had more depth than I ever imagined, and it ‘took over’ my entire PhD, but it was good so. Thanks to René Bargisen for being an extraordinary contact with the project Campus Bindslevs Plads/Rethink Læring and to Henrik Sell and the crew from Naturhistorisk Museum for their openness, and for bearing with me on the lack of knowledge on biology concerning the project Rethink Urban Habitats. However, the experiences and what I learned about biodiversity has left me amazed and changed
forever. To all the individuals from Aarhus 2017 and the two project who took the time to sit down and create new knowledge with me, thank you!

Thanks to my office mate, partner in crime, already PhD, and assistant professor Peter Andersen, for all the good times, political discussions, and of course for great talks on research. For all the fun and serious talks many thanks to the mob previously placed in the bunker aka the PhDs. I am especially grateful for all the joyful times in the basement at the other end of the tunnel beneath Ringgaden and other dodgy places like Memphis and the Stammtisch. In order of appearance (I think); Oana, Sylvie, Anna, Alex, Sarah, Tymen, Henrike, Giacomo, Billy, Kenneth, Christina, and many more – Thank you! Similarly, thanks for the heaps of fun I had down under with the wonderful bunch of PhDs at UTS.

Thanks to my friends, who listened to my complaints about the hardships and supported me throughout the endeavor. Some provided the doctoral inspirations like Peter who I have known since kindergarten, others were questioning almost everything about the university, Joachim that goes for you. Finally, I wish to thank my family. To my parents, without the support and understanding on your part this would not have been possible. A very special thanks to my brother Niklas, you took the time to support me even though you have plenty on your plate, but you make me strive – I dedicate this dissertation to you.

Markus Laursen, May 2017
Summary

The project-based society is more and more important to consider, but our theoretical assumptions about projects do not always hold up in practice. Projects, programs and project portfolios are ever more complex and projects are notoriously known for failing or not realizing expected value. This reason could be a too narrow view of project contributions and the value projects create. In general, it is crucial for organizations to create value, but how do project-based organizations value? In this dissertating an inquiry of project value creation is presented based on two projects that are part of the program for the European Capital of Culture ‘Aarhus 2017’ and its program management.

The inquiry was guided by the overall research question: "How is project value creation conceptualized and project value created?". It was conducted with an explorative design in the form of a case study based on qualitative methods. Specifically, it followed an 'Engaged scholarship' approach, where the research is conducted in cooperation with practitioners, inviting the practitioners into the research process. This is expressed in part through interviews, but primarily through the use of workshops as a method of data collection. The study contributes to a formative evaluation of Aarhus in 2017, carried out by rethinkIMPACTS 2017. The two projects under study are Rethink Urban Habitats at the Natural History Museum Aarhus and Rethink Learning that is part of the project Campus Bindslev’s Square taking place in Silkeborg in a partnership between seven cultural and learning institutions.

The results of the inquiry relates to different sectors, temporality and levels of organizing. The case is set in a semi-public context and therefore draws on both value types from private and public organizations. Project value creation takes place partly during the project, and partly subsequently, where the value of a product, physical or intangible, is captured. The primary focus of the inquiry was projects but also program and project portfolio management, while the EU governance of the Capital of Culture created some challenges for creating project value. An initial literature review indicates that research focusing on project value creation is a joint effort with contributions from several fields of research that focus on projects and success, benefit management, and management of value.

The empirical part of the study indicates that incentives are problematic in relation to European Capitals of Culture; in the bidding phase applicants must excite and show solid application. It
can lead to the application promising more than can be achieved, which can easily lead to
disappointments and criticism. Moreover, it is a challenge to enter into a de facto contract with
the EU on a cultural program more than four years before, it will take place.

The study of the program organization, the Aarhus 2017 secretariat, and how they orchestrated
the ECoC program has led to three themes for value creation; cooperation, coordination, and
perception. Value is a perceived concept, and thus it is possible to influence it – even to
manipulating our perceptions. The secretariat has sought to spread a positive message through
the narrative of Aarhus in 2017. A positive narrative was meant to lead to increased public
participation and hopefully positive experiences during the course of 2017, leading to significant
impacts and a lasting legacy. Understandings of value creation were related to theory from
entrepreneurship on effectuation, which assisted bring into focus the concept of emergent value.

In addition, the analysis provided input to understand the projects as so-called value
constellations that are in contrast to the value chain for traditional organizations. Here, the focus
is on how value is created together, and this has given rise to formulate a model for project value
creation. The project generates value propositions that are subsequently valued by stakeholders
and finally the value is realized between the creators of the value propositions and potentially
also new actors. The value-creation activities are explicated by; developing infrastructure for
example establishing new relationships, creating knowledge, changing mental models, and by
focusing on the user of the value of propositions during the project. Thus, there is value from the
use of the project value proposition for those involved in the project and new stakeholders as
well as value of the project execution for those involved e.g. in terms of learning.

In total, this dissertation contributes to understanding project value creation and how context can
support or hamper value creation. The perspective on project value is often rather narrow and
highlighting value for commercial organizations, but this study indicates that it is a concept with
wide application. By using effectuation and service-dominant logic the inquiry shows how value
can be seen in new contexts beyond traditional project management, focusing on the emergent,
on learning, and on creating value together through combining different competences.
Resumé


Den empiriske del af undersøgelsen indikerer, at der er en problematik incitament-struktur for Europæiske Kulturhovedstæder, der i budfasen skal begejstre og vise en solid ansøgning. Det kan lede til at ansøgningen lover mere end der kan realiseres, hvilket kan lede til skuffelser og kritik. Ligeledes er det en udfordring at indgå en de facto kontrakt med EU om et kulturprogram over fire år inden, det skal finde sted.


Derudover har analysen givet input til at forstå projekter som såkaldte værdikonstellationer, der står som modsvar til de traditionelle organisationers værdikæde. Her er fokus på hvordan værdi er skabes i fællesskab, og det har givet anledning til at foreslå en model for projekters værdiskabelse. Selve projektet genererer værditilbud, som efterfølgende vurderes af aktører og sidst bliver værdien realiseret mellem skaberne af værditilbuddet og eventuelle nye aktører. I projektet er de værdiskabende aktiviteter ekspliceret ved; at der udvikles infrastruktur for eksempel nye relationer, der skabes ny viden, mentale modeller forandres og der fokuseres på brugeren af værditilbuddet i projektgennemførslen. Således er der værdi ved brug af projektets produkt både for de involverede i projektet og nye interessenter samt værdi af projektgennemførslen i form af læring. Modellen er til dels baseret på service-dominant logik.

Samlet bidrager afhandlingen til at forstå projekters værdiskabelse og hvordan konteksten kan understøtte eller være til hinder for at skabe værdi. Der anlægges ofte et ret nøvært fokus på værdi for projekter, hvor værdi for kommercielle organisationer fremhæves. Som denne undersøgelse peger på, er værdi et begreb, der kan anvendes bredt. Ved at benytte effectuation og service-dominant logik vises det hvordan værdiskabelse kan anskues i nye sammenhænge ud over traditionel projektledelse, hvor fokus er på det emergente, på læring og på at værdi med fordel skabes ved at kombinere forskellige kompetencer.
# Table of contents

1  Introduction ............................................................................................................................. 1
  1.1  Research aim .................................................................................................................... 6
  1.2  Dissertation structure ...................................................................................................... 9

2  Theoretical positioning .......................................................................................................... 13
  2.1  Project value creation ..................................................................................................... 13
  2.2  Service-dominant logic .................................................................................................. 19

3  Methodology .......................................................................................................................... 23
  3.1  Philosophical stance ....................................................................................................... 23
  3.2  Research process and designing ..................................................................................... 28
  3.3  Data collection methods ................................................................................................. 35
  3.4  Data analysis methods .................................................................................................... 41
  3.5  Evaluating pragmatist research ...................................................................................... 43
  3.6  Reflections on the research process ............................................................................... 46

4  Empirical setting .................................................................................................................... 49
  4.1  Biodiversity .................................................................................................................... 49
  4.2  Campus ........................................................................................................................... 51
  4.3  Aarhus 2017 ................................................................................................................... 53

5  The four research papers ........................................................................................................ 59
  5.1  Summarizing findings .................................................................................................... 63

6  Discussion and conclusion..................................................................................................... 65
  6.1  Discussion of results and contributions .......................................................................... 65
  6.2  Implications and future research .................................................................................... 68
  6.3  Limitations ..................................................................................................................... 70
  6.4  Concluding remarks ....................................................................................................... 71

xii
Epilog ............................................................................................................................................ 73
References ..................................................................................................................................... 75
Appendices .................................................................................................................................... 91
  Appendix A ................................................................. 91
  Appendix B ................................................................. 93
  Appendix C ................................................................. 99
Paper 1: Taking stock of project value creation: A structured literature review with future directions for research and practice ................................................................. 101
Paper 2: From applicant to designated European Capital of Culture ........................................... 115
Paper 3: Programming for holistic value creation: Collaboration, coordination and perception 139
Paper 4: Project networks as constellations for value creation ................................................... 169
Declarations of co-authorship ..................................................................................................... 199
List of figures

Figure 1. Case setting ...................................................................................................................... 6
Figure 2. Conceptual model of inquiry ........................................................................................... 8
Figure 3. Value creation across multiple levels of organizing ...................................................... 10
Figure 4. Research process ........................................................................................................... 29
Figure 5. Example of poster from program event April, 2015 ..................................................... 32
Figure 6. Documenting the workshop poster ................................................................................ 38
Figure 7. Mood picture from the opening event ........................................................................... 47
Figure 8. Biodiversity project overview ....................................................................................... 50
Figure 9. Campus project overview .............................................................................................. 52
Figure 10. Timeline for Aarhus 2017 ........................................................................................... 56
Figure 11. Towards a model on the project value creation process .............................................. 67
Figure 12. Land art by Katharina Grosse (30 May, 2017) ............................................................. 73

List of tables

Table 1. Research questions ............................................................................................................ 7
Table 2. Definitions of key concepts ............................................................................................. 15
Table 3. Axioms in S-D logic ....................................................................................................... 20
Table 4. Comparing pragmatism to other stances ......................................................................... 26
Table 5. Details about case organizations ..................................................................................... 33
Table 6. Overview of empirical data ............................................................................................. 40
Table 7. Generic quality standards for research ............................................................................ 44
Table 8. Meanings of Aarhus 2017 ............................................................................................... 53
Table 9. Overview of contributions by each paper ....................................................................... 63
1 Introduction

In this introduction, I will present the purpose and background for the research project comprising this dissertation and hereby provide the reader with the necessary background information on the link between the four papers and the overall research approach. Overall, this dissertation explores *projects* as a means for value creation, which is addressed by conceptualizing project value creation and studying how project value creation takes place in practice.

Creating value is central to what organizations do – including project organizations (Morris, 2013); moreover, value creation has been reinforced in project management research over the past years (Ahola, Laitinen, Kujala, & Wikström, 2008; Andersen, 2014; Laursen & Svejvig, 2016; Smyrk & Zwikael, 2011; Winter, Smith, Morris, & Cicmil, 2006; Winter & Szczepanek, 2008). It was one of five suggested directions for future research proposed by scholars and practitioners in a network that was rethinking project management (Winter, Smith, Morris, et al., 2006). In business projects, customer value was suggested as an enhancement to the primary focus on the product (project output) (Winter, Andersen, Elvin, & Levene, 2006; Winter & Szczepanek, 2008). However, value creation is not limited to either business projects or the focus on customer value; value may be for both current stakeholders and future stakeholders and both for-profit and not-for-profit sectors. Value creation is a term with multiple meanings (Lepak, Smith, & Taylor, 2007); I focus on value creation as a process, and projects constitute the line of activities that together create value.

At the outset one might ask, why study project value creation? To answer this question, let us first take a few steps back. I will begin with the increasing number of projects and work organized as projects in society, which Midler (1995) coined ‘projectification.’ There is general agreement on an increasing trend of investments for projects and the share of global GDP organized as projects (Flyvbjerg, 2014; Lundin et al., 2015; Schoper, Gemünden, & Nguyen, 2016). Despite the lack of consensus on a figure, global spending or the project economy is anticipated to be a double digit figure in trillions of dollars. It may be inferred that projects are ever more important for society, and the demand for knowing more about ‘what do we get’ is also rising and becoming increasingly relevant. Investors have always wanted to know if they are
getting what they pay for, and this has been operationalized through evaluation of project success based on the so-called iron triangle that focuses on the project meeting the deadline (time), achieving budgeted costs, and ensuring quality.

The increasing project economy is a bit of a puzzle though; projects have been accused of failing notoriously or not delivering the expected value (PMI, 2016; Standish Group, 1994). Why keep investing in projects if one should expect it to be a bad investment? This rhetorical question leads to the so-called Cobb’s Paradox: “We know why projects fail; we know how to prevent their failure—so why do they still fail?” (Cobb, 1996). Even though Martin Cobb said this at The Standish Group’s CHAOS University in 1995, performance is still poor on the three iron triangle dimensions according to the Project Management Institute (PMI, 2016). The situation points towards a conceptualization of success that does not capture all relevant aspects, and in the literature the focus has already shifted from iron triangle models to more comprehensive models (e.g. Atkinson, 1999). In fact, in project management literature the general trend has been a shift from project success studies to studies of benefits and value (Laursen & Svejvig, 2016). A holistic approach to the value that the project creates may be one way to provide a better explanation for why projects are sensible investments, and we might expect that models developed in accordance with the world as experienced by practitioners to be more relevant than an oversimplified model of success. Some of the most recent works by scholars have focused on project and value creation exploring the front-end of projects and networks (Artto, Ahola, & Vartiainen, 2016; Matinheikki, Artto, Peltokorpi, & Rajala, 2016) and in 2016 a special issue on project benefits was released (Zwikael, 2016). Despite the focus on value, little attention has been given to explain how projects create value. This lack of attention presents the outline of a research gap, but I also find reason to problematize existing perspectives and concepts in project management research (Alvesson & Sandberg, 2011), specifically value and success. Some projects might be failures by traditional measures, but applying a holistic evaluation of their value creation might provide a different picture, e.g., considering learning and new capabilities generated by the project.

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1 The Chaos reports that the Standish Group publishes on project performance have been heavily criticized for being too simple and for not being open about methods and data (e.g. Eveleens & Verhoef, 2010). These reports serve as a good example of a simple conceptualization of project success, and the numbers are often referred to. Thus, I do not mean to endorse the Standish Group, but I acknowledge that their reports now include value as a dimension of success.
Projects serve as the frame in which the phenomenon of interest takes place – value creation. It should be stressed that this dissertation is not limited to focusing on a single project but rather focusing on projects and their context – thus the management of projects (Morris, 1994). It follows that projects are considered as being interconnected with the environment (Engwall, 2003), and the focus on multiple projects implies that this dissertation is not limited to project management, but also includes elements from the program (Lycett, Rassau, & Danson, 2004), project portfolio management (Martinsuo, 2013) and governance (Müller, Zhai, Wang, & Shao, 2016). This is in acknowledgement of the need for broad conceptualizations of projects and programs (Winter, Smith, Morris, et al., 2006), as suggested by rethinking project management (RPM) scholars.

RPM is often linked to a UK research network and the resulting research agenda that it presented (Winter, Smith, Morris, et al., 2006). The RPM network was a government-funded research network based in the UK but with both international scholars and practitioners participating. The network had seven meetings from early 2004 to early 2006. The academic outcomes were presented in a seminal issue in the International Journal of Project Management in 2006 (Maylor, 2006) and in 2016 a 10-year follow-up was published by the International Journal of Managing Projects in Business (Walker, 2016). RPM thinking is traced back further than the network (Svejvig & Andersen, 2015), and the thoughts coincide with other concepts such as the Scandinavian School of project management (Jacobsson, Lundin, & Söderholm, 2016).

The rethinking agenda consisted of five suggested directions for future research based on a current state towards a new state. They are: D1) From the lifecycle model of projects and project management (PM) towards theories of the complexity of projects and PM, D2) from projects as instrumental processes towards projects as social processes, D3) from product creation as the prime focus towards value creation as the prime focus, D4) from narrow conceptualization of projects towards broader conceptualization of projects, D5) from practitioners as trained technicians towards practitioners as reflective practitioners (Winter, Andersen, et al., 2006). This dissertation contributes primarily to the research direction on value creation, but it also draws upon the broader conceptualization of projects. The authors exemplify the need for new research to “illuminate the strategic selection (and non-selection) of projects and programmes in organisations, recognising different forms of value, and the need for new models of value
creation beyond the conventional ‘value chain’ type representations of production and manufacturing” (Winter, Andersen, et al., 2006, p. 644). Furthermore, they highlight the typical question of value to whom? I say typical because almost every individual I have spoken to about my doctoral research has asked me just that: value to whom? My answer has always been that I did not define it a priori.

The considerations underpinning direction three are also addressed by Winter, Andersen, et al. (2006), who suggest regarding business projects as value-creating systems by focusing on the customer’s customers. For explanation purposes, we could also call it a focus on the second link, as the focus is no longer on the customer receiving a product as an output of a project. In a value-creating approach, the focus is on how a customer can use the product to create value for his or her customers, for example a user, i.e., the second link. Benefits management research (Ward & Daniel, 2012) is also an underlying perspective; albeit rather prescriptive, it emphasizes the need for problematizing the existing concepts and approaches.

The focus on value creation implies a focus on the concept of value, which is a complex concept. Value is often reduced to commercial value in private organizations (Ward & Daniel, 2012), while public organizations tend to address value much more broadly (Moore, 2000; Pang, Lee, & DeLone, 2014), as they are expected to deliver public services with increasing expectations for the output (Cole & Parston, 2006). However, focusing narrowly on commercial value may lead to worse performance as reported for project portfolios (Cooper, Edgett, & Kleinschmidt, 2000), and outside the business sector, many projects are executed to create value that is not commercial, but this perspective is often missing in research. In project portfolio management, research into non-for-profit projects are materializing (Ang, Killen, & Sankaran, 2015a; Ang, Killen, & Sankaran, 2015b). Non-profit would also include, for example, state and municipal projects without commercial interest. The absence of commercial interests has an extra dimension, as it may challenge the traditional understanding of the time value of money by bringing the output of a project to the market (Turner, Huemann, Anbari, & Bredillet, 2010). Traditional cost-benefit analysis often implies market-driven thinking, but the non-commercial value of perceived intangible outcomes that are the focus of this dissertation may force new thoughts to emerge. For some projects like the Sydney Opera House, one might even expect that
the value has increased long after what a commercial cost-benefit analysis would cover. Synergies and side effects have emerged and in this way increased the value over time.

Models for project value creation may also serve as business models for project-based firms (Artto & Kujala, 2008; Wikström, Artto, Kujala, & Söderlund, 2010), and in this way bring the project level value creation to the level of the entire organization, e.g., the firm. But as long as the models for value creation are scarce, then project-based firms are left in the dark. I state this as a side note, but projectification (Maylor, Brady, Cooke-Davies, & Hodgson, 2006; Midler, 1995; Packendorff & Lindgren, 2014) may make this perspective increasingly relevant over time in order to understand the business of projects.

In strategic management, the value chain (Porter, 1985) was previously an established way of perceiving value creation at the firm level, however, through the 1990s and 2000s new models were presented such as value constellations (Normann & Ramirez, 1993, 1998), value configurations (Stabell & Fjeldstad, 1998) and the value network (Allee, 2003). Thus, in other fields new models have followed the development of society, but they have neither diffused into project management nor served as inspiration to develop commonly accepted models for creating project value. Models for benefit management have conceptually modelled prescriptive mechanisms for benefits (e.g. Bradley, 2010; Ward, Taylor, & Bond, 1996), but the perspective has been rather traditional and focused on financial and quantifiable benefits (Laursen & Svejvig, 2016). In marketing research, value creation and especially co-creation have been promoted for over a decade with the emergence of Service-Dominant logic (S-D logic) (Lusch & Vargo, 2014; Vargo & Lusch, 2004). This theoretical background served as inspiration for a model for construction projects (Razmdoost & Smyth, 2015), yet it was presented at a conference and not published in a journal widely known to the project management community.

My study of value creation was an explorative effort using qualitative methods (Stake, 1995). The study was set in Aarhus, Denmark, where a unique phenomenon presented itself, and I took the opportunity to use projects belonging to the European Capital of Culture (ECoC) as the setting for studying project value creation. I wanted to focus on non-commercial types of value, and a phenomenon rooted in culture proved to have few barriers when conducting this study.
Aarhus, Denmark and the surrounding region, is the host of an ECoC in 2017, i.e., at the time of writing events are taking place. The ECoC is a yearlong celebration of European culture (European Commission, 2017), which for Aarhus is 2017 and also for Pafos, Cyprus who is the other ECoC in 2017. It was first started in 1985 and still today it is governed and supported by the European Commission by rotating through EU countries, where cities bid for the role of host. I studied two of the projects that have been part of the ECoC as illustrated in Figure 1, and I studied the organization in charge of Aarhus 2017. The two projects are Campus Bindslev’s Square (Campus) in the Municipality of Silkeborg and Rethink Urban Habitats (Biodiversity) at the Natural History Museum Aarhus.

**Figure 1. Case setting**

The study reported in this dissertation contributes to a research project called rethinkIMPACTS 2017 (RI2017), which is a strategic partnership between Aarhus 2017 and Aarhus University. It is a research-based formative evaluation of the ECoC that covers the time from 2014 and shutting down activities in 2018, after the year of cultural events in 2017. This evaluation combines studies, like the ones reported in this dissertation, to cover various perspectives of the ECoC and evaluation activities within the project itself.

### 1.1 Research aim

The overall aim for initiating this study was to contribute to RPM research on value creation. Specifically, I had a desire to study and describe the process of value creation in projects, and I had an underlying wish to formulate a model on project value creation. It was the aim from the beginning to gain a deeper understanding of the interconnectedness of management disciplines related to project management when focusing on value creation such as strategic management and project appraisal in portfolio management.
These aims and wishes led to the formulation of an overall research question that guided the research process: How is project value creation conceptualized and how is project value created? From the overall research question, I developed a set of research questions and each of the papers primarily addresses one of the research questions as outlined in Table 1.

Research question 1 concerns the conceptualization of project value creation, for which the literature review was particularly suitable. Research question 2 is addressed by papers 2 and 3, where the focus is on the Aarhus 2017 program organization from the beginning until 2016. Research question 3 is answered in paper 4 in which two projects are studied as constellations for creating project value.

Table 1. Research questions

<table>
<thead>
<tr>
<th>Overall research question:</th>
<th>How is project value creation conceptualized and project value created?</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1: How is value creation conceptualized in project contexts?</td>
<td>Paper 1 conceptualizes project value creation through a review of the literature.</td>
</tr>
<tr>
<td>RQ2: How is project value creation practiced in public organizations?</td>
<td>Paper 2 concerns the effect of transforming the organizational setup from initiation project to a program highlighting the effects for stakeholders. Paper 3 reports on the development activities of the program organization in creating value.</td>
</tr>
<tr>
<td>RQ3: How is value created in value constellations?</td>
<td>Paper 4 focus on value creation at the project level in two projects that involve multiple partners that each forms a project network.</td>
</tr>
</tbody>
</table>

Fundamentally, this study will contribute to gaining an understanding of how projects create value, similarly to how the value chain provided an understanding of firms, thus the organizational level. Therefore, it was an underlying aim to present a model of value creation at the project level, but with the understanding that no project can be taken out of context (Engwall, 2003) and thus other elements such as other projects and new stakeholders are also considered and included.

Being part of the RI2017 project has had an influence on the aims of this study, as the original aims of understanding project value creation through exploration and descriptions was
supplemented by giving feedback to projects as part of the formative evaluation, i.e., Aarhus is never going to be hosting the ECoC again, which emphasizes the importance of a formative evaluation in contrast to only conducting a summative evaluation. A summative evaluation is still relevant for capturing learning from the entire course of action, but it may never be employed in Aarhus again. With the formative evaluation, the projects and the people behind the program may improve during the course of action. The feedback dimension given by this evaluation added an extra dimension to the engaged empirical study that was not planned at the outset.

The influence to the inquiry through the aims of a formative evaluation can be illustrated using the model on ‘any research’ developed by Checkland (1985) also referred to as FMA model (West & Stansfield, 2001). At the conceptual level Figure 2 illustrates the inquiry presented in this dissertation (adapted from Checkland, 1985, Fig. 1.1):

**Figure 2. Conceptual model of inquiry**

![Conceptual model of inquiry](image)

The formative evaluation strengthened the focus on the learning for Aarhus 2017 and the project in the Aarhus 2017 program. This learning is distinguished from the learning for the conceptual framework that is traditionally emphasized through theorizing. The model in Figure 2 depicts a linear process of inquiry, which was not the case, but for illustration of the interaction between elements, I opted for simplicity. The research aim and research question have been presented in
this subsection, and to remove potential misconceptions, I will elaborate were the remainder of the model and the connection to the chapters in the dissertation. The Conceptual framework, labelled F, is presented in Chapter 2, called Theoretical positioning. I apply theory on project value creation combined with marketing theory on service-dominant logic as well as theory from entrepreneurship on effectuation to move the theorizing in the dissertation forward. The methodology, M, is presented in Chapter 3 where the reader will learn the details on the collaborative methods I adopted for this inquiry, as well as how and when I applied the conceptual framework. The area of concern, A, here it is the case Aarhus 2017 from the perspective of two projects that are part of the Aarhus 2017 program. Hence, both projects and program are studied, as presented in Chapter 4. Finally, there is learning in the model – for both F, M and A. We might also label the learning the contribution to each of those areas that collectively comprise the contribution of the dissertation (Mathiassen, Chiasson, & Germonprez, 2012). Findings and contributions is addressed in each of the papers, primarily related to learnings about the area of concern and the conceptual framework, thus A and F. Learning on M, is addressed in chapter 3 in reflections on the process. Having introduced the conceptual dimension, I will present more details on dissertation in the next section.

1.2 Dissertation structure

This dissertation is divided into a cover and a collection of four papers, and in the cover, I present the connection between the four papers by elaborating on the justification and background. This means I shall elaborate on the theories underpinning my research, my philosophical stance, the employed research methods, and as a final point an overall discussion and conclusion is presented. Thus, the cover provides background information on the entire study and details not included in each paper due to space limitations, as well as articulating the overall contribution.

The cover comprises six chapters including this introduction, which are followed by the appendices, after which the four papers are placed. The next chapter presents the theoretical positioning of the dissertation which first outlines the area of concern, project value creation and thereafter an overview of S-D logic and the resource-based view. Following that, the research methodology is discussed through an account of my philosophical stance and the research methods I have employed. The empirical context for the case study is described in chapter 4 and
subsequently in chapter 5 the four papers are presented in brief. Lastly, in chapter 6 the discussion and conclusion present overall contribution, and also address the implications, suggestions for future research and limitations of my research.

Here, I also want to present the relation between the four papers revolving around Aarhus 2017 entailing multiple levels of organizing: project, program and project portfolio. In Figure 3, I show the focus of each of the four papers both empirically and the level of organizing. Paper 1 presents a structured literature review of project value creation, but it includes some literature that address the program and also portfolio level of organizing, and thus it explores all three levels. Paper 2 is an empirical study of Aarhus 2017 that addresses the change from a project to a program organization and thus it explores project and program levels. Paper 3 also address the program organization, Aarhus 2017, but with increased emphasis on the portfolio dimension of their organizing efforts, and hence, it covers program and portfolio levels. Paper 4 addresses specific projects in the program.

**Figure 3. Value creation across multiple levels of organizing**

The literature review establishes the foundation for the dissertation by providing a conceptualization of value creation as well as positioning value creation research in relation to prior research and research on project success and benefit management. Research on project value creation is still in a very early stage, but it has relevance across levels of organizing. Paper 2 is based on data from the Aarhus 2017 program organization, by focusing on the transformation from a project to a program organization. The paper reports on structural issues that influence value creation, and it reveals the importance of governance and the importance of
stakeholder perception. The paper highlights the coinciding interest of my research and that of RI2017 and it provides a foundation for one focus area in paper 3 on managing stakeholder perceptions at the program level. Paper 3 concerns a later stage, where many more projects were funded by the program organization, and both program and portfolio theories may be applied. I will address the program and portfolio discussion in the following chapter. Paper 4 is based on data from two specific projects, where both projects are carried out in a network meaning that multiple organizations contribute to the execution rather than an internal or dyadic form. Overall, the papers cover multiple levels of organizing across the case setting, and thus the study considers project value creation of not a single project but of projects with careful attention paid to their context.
2 Theoretical positioning

This dissertation rests on two types of theory: substantive theory and formal theory as labeled by Glaser and Strauss (1965) in a prequel to the publications on grounded theory. The section on methodology will elaborate on the inspiration from grounded theory methods. Substantive theory concerns a substantive area or substantive problem rather than abstractly defined variables and their interrelations (Becker, 1958). Project value creation is the specific substantive area in this dissertation. Formal theory is said to be based on substantive theory (Glaser & Strauss, 1965), and in this enquiry I employ theory on S-D logic (Lusch & Vargo, 2014) and the resource-based view (Wernerfelt, 1984). First, I will introduce the substantive theory and thereafter the formal theory underpinning the results and theorizing.

2.1 Project value creation

RPM has been an important factor in focusing on value and value creation in relation to projects, in addition to the many other impacts it has had on project management research (Walker & Lloyd-Walker, 2016). RPM was strongly reinforced by a network initiative in the UK, where scholars and practitioners met in workshops over two years (2004-2006) (Winter, Smith, Cooke-Davies, & Cicmil, 2006). Important academic outputs were five suggestions for future research and a special issue in the international Journal of Project Management in 2006. The development of RPM is captured by Svejvig and Andersen (2015), who conducted a literature review and documented the essence of rethinking and the classical perspective on project management. This dissertation is strongly focused on the key words associated with rethinking: learnability, multiplicity, temporarity, complexity, uncertainty and sociability (Svejvig & Andersen, 2015, p. 280).

Value and projects have also been studied from other positions, especially in a major research project funded by the Project Management Institute that focused on the value of project management (Thomas & Mullaly, 2009; Zhai, Xin, & Cheng, 2009). This perspective focuses on documenting better performance through employing project management methodologies, and not on how value is created. Another value related perspective is project success, which has been studied intensively (e.g. Andersen, Birchall, Jessen, & Money, 2006; Davis, 2014; Jugdev & Müller, 2005; Serra & Kunc, 2014), and often stakeholder value is considered the most important criterion for success. It seems that the focus on value is given more focus at the expense of
focusing on success (Laursen & Svejvig, 2016). However, even with the RPM initiative, we (the project management community) have not seen much research on value from a new perspective; much research is still traditional and fails to recognize broad perspectives or break with the prescriptive thinking of benefit dependency networks, for example (Ward & Daniel, 2012).

Value creation is a somewhat challenging phrase. Oxford’s Advanced Learner’s Dictionaries Online defines creation as “the act or process of making something that is new, or of causing something to exist that did not exist before” (OALD, 2016a) which is rather straightforward. Yet, when combined with value that has multiple definitions and more are possibly applicable to the meaning of value creation, then we have a non-trivial term. One meaning of value is “how much something is worth in money or other goods for which it can be exchanged” (OALD, 2016b) and another “the quality of being useful or important” (OALD, 2016b); both are subjective and relative to the beholder. This may suggest that value creation is two-fold: the creation of something and the perceived value of the created. Based on the dictionary definitions of value and creation, it seems reasonable to infer that value creation refers to a process.

The creation of value is central to organizations (Normann & Ramirez, 1993), and it has been described in different ways in the literature. Lepak et al. (2007) focused on the creation and later realization of value through use and exchange, while Love, Matthews, Simpson, Hill, and Olatunji (2014, p. 6) focused on value creation as a process of enabling resources through the application of capabilities (Barney, 1991). Value creation may be divided into two separate processes, at least in theory. The first process is the generation of the output, which is subject to an assessment of the use value and subsequently follows the value capture process, where the stakeholders capture the value – it may also be labelled the appropriation (Mizik & Jacobson, 2003; Wagner & Eggert, 2010) or realization (Gregor, Martin, Fernandez, Stern, & Vitale, 2006).

Value generation or production process is largely the same as the traditional pre-project and project execution phases. Value capture may take place throughout the project phases and it may continue for years after the original output was finished. Value capture in project management is mostly addressed in benefit realizations management (Bradley, 2010), yet in very classical and prescriptive ways. The notion that creating an output is no guarantee for value for the end user is recognized here, but drawing on research from other fields may inform value capture significantly (e.g. Bowman & Ambrosini, 2010; Lepak et al., 2007). Value capture is not a
straight forward process mainly focused on changing the behavior, but rather it is a political game that depends on information, bargaining power or other smartness to exploit the new situation (Bowman & Ambrosini, 2000).

Value creation is considered the overarching concept and it means that value is not fixed at any point and a project can lead to future value creation for years after the project is closed down. It may be during operations or through the realization of new use made possible by the project.

A similar concept to value creation is value management (Thiry, 2002). Value management is closely related to value analysis and along with value engineering were all developed in the construction industry. The methods are mainly focused on cutting costs, while maintaining intended use and benefits of a building or product, which is the hard side of value management. However, new developments show the application of value management methods for creative projects (Gillier, Hooge, & Piat, 2015) emphasizing the soft side of value management, which seemingly coincides with value creation research.

Table 2. Definitions of key concepts

<table>
<thead>
<tr>
<th>Concept</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>A temporary organization (Bakker, 2010; Packendorff, 1995) that enables value creation (Winter &amp; Szczepanek, 2008), and &quot;[t]hey differ from non-project organisations in that they all follow the same generic development sequence&quot; (Morris, 2013, p. 12).</td>
</tr>
<tr>
<td>Program</td>
<td>&quot;...a collection of change actions (projects and operational activities) purposefully grouped together to realize ... benefits&quot; (Thiry, 2010, p. 15).</td>
</tr>
<tr>
<td>Portfolio</td>
<td>&quot;...a group of projects that are carried out under the sponsorship and/or management of a particular organization. These projects must compete for scarce resources (people, finances, time, etc.) available from the sponsor...” (Archer &amp; Ghasemzadeh, 1999).</td>
</tr>
<tr>
<td>Value creation</td>
<td>Value creation is a process, where offerings are produced (Ramírez &amp; Wallin, 2000, p. 62) through enabling recourses (Love et al., 2014) and subsequently realized (Lepak et al., 2007).</td>
</tr>
<tr>
<td>Value</td>
<td>( \text{Value} = \frac{\text{Benefits}}{\text{Costs}} ) The Greek alpha sign (( \alpha )) is used instead of an equal sign (=) to signify that it is not a quantitative quotient between benefits and costs, but only a representation. Value is relative and viewed differently by different stakeholders (European Standard 12973-2000, 2000; Morris, 2013, p. 83; Quartermain, 2002 in Laursen &amp; Svejvig, 2016, p. 737).</td>
</tr>
<tr>
<td>Outcome / Change</td>
<td>Outcome is the resulting change in the organization derived from using the project’s output (Laursen &amp; Svejvig, 2016; Office of Government Commerce, 2009, pp. 21-22).</td>
</tr>
<tr>
<td>Impact</td>
<td>The long-term major changes “created by purposeful activity for certain goals” (Anttonen et al., 2016, p. 19) e.g. powerful effects of a program or single projects on society (OALD, 2017a).</td>
</tr>
<tr>
<td>Benefit</td>
<td>Benefit is the improvement resulting from a change (outcome) that is perceived as positive by one or more stakeholders (adapted from Bradley, 2010; Office of Government Commerce,</td>
</tr>
</tbody>
</table>
Concept | Explanation
--- | ---
Output | Output is product creation which means "the temporary production, development, or improvement of a physical product, system or facility – and monitored and controlled against specification (quality), cost and time" (Winter, Smith, Morris, et al., 2006, p. 642, and p. 737 in Laursen & Svejvig, 2016, p. 737).
Strategy | Project value creation is highly linked to strategic management, and strategy could be seen as the art of creating value (Normann & Ramirez, 1993, p. 65). The strategy is enacted through portfolio management, program management, and project management (Meskendahl, 2010; Winter & Szczepanek, 2008, and in Laursen & Svejvig, 2016, p. 737).

In extension to these definitions I will discuss concepts related to projects and value, as these are the very central topics of this dissertation, and especially value is not a trivial concept.

In addition to these definitions, I will discuss concepts related to projects and value, as these are the central topics of this dissertation, and especially value not being a trivial concept.

### 2.1.1 Temporary organizing

Project, program and project portfolio are three essential concepts in relation to the temporary endeavors that projects are. In 1995, projects were described as temporary organizations (Lundin & Söderholm, 1995; Packendorff, 1995) that had four key traits: time, task, team and transition, which is a very broad way to define a project, and colleagues to one of the original authors, Rolf Lundin, often says that he himself has encouraged the scholars of today to formulate a new definition. Thus far, I have experienced a move towards applying the term temporary organizing to projects. This informs us about the nature about projects, they are temporary (Bakker, 2010) and this trait is essential in defining the concept, and thus what distinguishes projects from other types of organizations. It is not my intention to go into a semantic discussion of temporality, but at least two objections can be made; one that the use of the word project in daily language also covers ongoing work with a specific focus, and two, that commercial organizations typically also operate only on a temporary basis too (Daepp, Hamilton, West, & Bettencourt, 2015). Thus, it is the intention of temporality that sets projects apart from what some call permanent organizations or semi-permanent. Morris (2013) put more emphasis on the intention by suggesting that projects are characterized by going through a development cycle that others do not. This is my inspiration for the definition in Table 2.
Program and project portfolio are both collections of projects, but the definitions, like those for projects, vary. Differences between the concepts have been discussed by researchers (e.g. Müller, 2009; Pellegrinelli, 2011; Young, Young, & Zapata, 2014), and overall from project to program to project portfolio it is an ever more strategic perspective, and the higher level includes the lower levels of organizing. It should be noted that projects and programs are associated with a purpose, while project portfolios are focused on resource constraints.

Program, or programme as used in British English, is not only a concept in relation to projects, but also in the arts and for cultural programs and several other contexts. The case context is in part a cultural programming organization, and therefore I looked into the definitions to identify potential differences between a program as a collection of projects and a cultural program. I found aid in a regular dictionary. Under the heading “order of events,” a program is “an organized order of performances or events,” e.g., “an exciting musical programme” (OALD, 2017b). Events may be regarded as a specific type of project (Bladen, Kennell, Abson, & Wilde, 2012) and the formulation “organized order” might infer some kind of purpose or related objectives (Müller, 2009; Thiry, 2010). Thus, the cultural program definition seems not to be in direct contradiction to the definition applied in relation to project management, but rather with a strong focus on the order, which is only natural as events have another dimension of facing pressure to meet the deadline, compared to projects in general.

There might also be an alignment with a project portfolio, as in some cases the cultural program is also organizing the funding of performances, which is partly the case of the ECoC. However, ECoC program organization is not the host for all projects, but rather this organization orchestrates the ECoC by setting an artistic vision and by co-funding projects that support this vision; the projects will be developed within many different organizations. In conclusion, the concept of the cultural program is not entirely aligned with either the program or project portfolio concept, but rather it is a mix of both. To cause less confusion for the reader, I will be referring to the cultural program as the program, but it will be informed by both program management and project portfolio management theory.

For this section, not only definitions from research were considered but also from the influential standards, APM, PMI and Axelos; the entire overview of definitions is placed in Appendix A.
2.1.2 Value

The concept of value also require some attention as it is a key concept in this dissertation, used in many different ways in different contexts (Ng & Smith, 2012). Value is derived from valuation (Vatin, 2013), which was coined by John Dewey in the 1930s (Dewey, 1939), and for value to be expressed someone must do the act of judging the value: valuing. Therefore, in the definition in Table 2, value is the result of valuing the benefits and costs and relating them to each other; an individual might ask is the benefit worth the cost or effort? From this discussion, I have already made clear that my definition does not include the plural form, values, which is referred to only as the concept of ‘beliefs that guide actions’ (Lencioni, 2002), and not multiple types of value. Thus, semantics matter and as seen value here is used as a noun, while using the word valuing for the verb form.

Even before Dewey published his work on valuation, it was clear that value is in the eye of the beholder as an old American quote says about gardening “[o]f course, there is no such thing as absolute value in this world. You can only estimate what a thing is worth to you” (Warner, 1871, p. 141). This perspective that value is subjective is still supported today (European Standard 12973-2000, 2000) and it should be added that it implies that value may differ over time, as stakeholders’ perceptions change.

Value is often divided into typologies such as for different purposes; Ouden (2012) divided value by level and perspective. Levels span from user through organization and ecosystem to society and perspective refers to economical, psychological, sociological and ecological value concepts. This provides a four by four model for innovation purposes. Another recent typology for project portfolios was suggested by Ang, Sankaran, and Killen (2016) who identified seven perspectives on value. The perspectives are not mutually exclusive but may inform our perception of value similarly to multiple perspectives on projects (Winter & Szczepanek, 2009). Value is not yet widely discussed in relation to projects, but in other fields such as strategic management (Allee, 2000) and arts management (Crossick & Kaszynska, 2016) and in the stream of research on valuation studies (e.g. Vatin, 2013).

Another important distinction is between commercial value and public value relating to the for-profit sector and the not-for-profit or public sector (Moore, 1995). Moore (1995, 2000) argues for the application of corporate strategy in new ways for creating public value, and despite the
increased complexity, public value is compared to shareholder value in commercial organizations. The additional complexity in the public sector is due to conflicting goals, e.g., cost cutting and expectations of better service levels over time (Cole & Parston, 2006; Moore, 2013). Hence, adopting management methods from the for-profit sector proves insufficient when managing public value (Moore, 2013). But public value might also be regarded by another perspective highlighting the discussion of long-term public interest, which is described by the question “What adds value to the public sphere?” (Benington, 2011, p. 31). This perspective might prove more relevant to the arts and a cultural setting that has ambitions for making long term impacts and creating a legacy for years to come (Aarhus 2017, 2015).

From the substantive theory focused on projects and value creation, I switch the focus to the other dimension of my theoretical foundation: formal theory. Formal theory was especially applied for theorizing and for bringing new perspectives to the management of projects.

### 2.2 Service-dominant logic

Before introducing S-D logic, I will address the important question of why I applied this theoretical framework and not another one. It is only fair to account for why I believe this theory does a better job explaining ‘what is going on’ in my data, and I will present that reasoning here, but leave the process to be elaborated in the methods section.

My research question is concerned with how value is created in project contexts. Projects are a type of process, and in my case setting, multiple stakeholders interact to create something they could not do on their own. Thus, it should be a framework focusing on this interaction and the means used for creating value. It turned out that the data showed the importance of learning and capabilities. I considered other options for example institutional theory (Scott, 2008) and actor network theory (Latour, 2005), but I deemed them to be more relevant for answering other research questions such as what types of value are within different industries and how actors behave in specific situations.

The formal theory is S-D logic (e.g. Lusch & Vargo, 2014; Vargo & Lusch, 2004) with underlying perspectives such as the resource-based view and from the field of entrepreneurship: effectuation. S-D logic is deeply founded on activating the resources in an organization (Wernerfelt, 1984) and in the pursuit of better offerings for the public, these theories formulated
for competitive advantage in for-profit sectors (Barney, 1991) may offer explanations for public sector organizations too. First, I elaborate on S-D logic and what it is and address the relevance to project studies, followed by a critique of S-D logic.

S-D logic is a new way of understanding markets, where no offerings are only goods – all goods are also a service. The reasoning is that goods hold no inherent value, as the value is in the use (Lusch & Vargo, 2014; Vargo & Lusch, 2004, 2008). S-D logic draws upon value constellations (Normann & Ramirez, 1993) among others and the theory is founded on ten fundamental premises, however the original authors shortened those ten to four axioms (Lusch & Vargo, 2014). Therefore, we focus on the four axioms as presented in Table 3.

Table 3. Axioms in S-D logic

<table>
<thead>
<tr>
<th>Axioms</th>
<th>Premise</th>
<th>Explanation/Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axiom 1</td>
<td>Service is the fundamental basis of exchange</td>
<td>The application of operant resources (knowledge skills), ‘service’ is the basis of all exchange. Service is exchanged for service.</td>
</tr>
<tr>
<td>Axiom 2</td>
<td>The customer is always a co-creator of value</td>
<td>Implies value creation is interactional</td>
</tr>
<tr>
<td>Axiom 3</td>
<td>All economic and social actors are resource integrators</td>
<td>Implies the context of value creation is networks of networks (resource-integrators).</td>
</tr>
<tr>
<td>Axiom 4</td>
<td>Value is always uniquely and phenomenological determined by the beneficiary</td>
<td>Value is idiosyncratic, experimental, contextual, and meaning laden.</td>
</tr>
</tbody>
</table>

As touched upon, service (*singular*) is the basis for exchange seen in Axiom 1 (Table 3) and service is the offering that all actors refer to. The reasoning is that the exchange is considered an application of operant resources. Operant resources could be knowledge and skills that may be applied to operand resources such as natural resources and also to other operant resources. In this way, service is exchanged for service. Axiom 2 elaborates on the interactional nature of value creation in S-D logic, similar to that of temporary organizing in value constellations. The customer may co-create value based on the value propositions of sellers. Axiom 3 elaborates on the second core activity that value creation takes place through resource integration among parties we would traditionally call buyers and sellers. Axiom 4 states that value has a subjective
nature and it is what the beneficiary experiences it to be. Hence value may differ across beneficiaries and over time for the individual beneficiary.

Fuentes and Smyth (2016) summarized limitations and critiques related to the applications of S-D logic specifically for projects and emphasized that S-D logic still needs to be operationalized at the project level. We add that in a project network, there might be no actual customer but only partners working together, and at other times the value proposition is free of economic transactions. Vargo and Clavier (2015) presented a comparison of S-D logic principles to the classical and RPM principles (Svejvig & Andersen, 2015; Winter, Smith, Morris, et al., 2006), and presented S-D logic as a further development of emergent views they labeled RPM (Svejvig & Andersen, 2015; Winter, Smith, Morris, et al., 2006). Vargo and Clavier (2015) presented an S-D logic and service-ecosystems approach to project management based on four principles: 1) where RPM focuses on the customer’s customer, the service-ecosystems approach calls for a continuous service flow and a phenomenological measure of success; 2) value is co-created in networks not dyads; 3) the management is not focused on reflective practitioners but resource integration focused on actor-to-actor; 4) the level of complexity is moved from multidisciplinary and focuses on social processes to the next level where institutionalization is recognized. Fuentes and Smyth (2016) suggested the adoption of Service Design for operationalizing S-D logic, yet their suggested model implies buyer–seller relationships that are not always applicable to project networks.

The resource-based view (RBV) of the firm (Wernerfelt, 1984) for competitive advantage (Barney, 1991) is an underlying foundation for S-D logic. RBV is mainly applied to for-profit sector organizations, and not the public sector, but it has proven to be relevant for public sector value creation (Pang et al., 2014). Similarly, applying the co-creation perspective of S-D logic, the RBV provides a good foundation for the creation of both commercial and public value. The value is created through organizational capabilities (Dosi, Nelson, & Winter, 2001), which in turn are based on the resources, i.e., the assets, competencies and knowledge of an organization (Ashurst, Doherty, & Peppard, 2008; Pang et al., 2014).

S-D logic continues to develop and one of the papers by Vargo and Lusch (2014) among others stresses the entrepreneurial dimensions of co-creating value through effectuation and the
importance of a market. I have already addressed that the market may not always be relevant for co-creation in the public sphere, but entrepreneurial thoughts about effectuation are entering project management (Nguyen, 2015). Effectuation embraces the emergent nature of something in development, and the unique dimension of a project is pointing straight to some degree of development activities. A project may essentially disrupt a market or create new markets through the product output (d'Aveni & Gunther, 1995). It has been suggested that entrepreneurship is falsely placed in management, and that it should be a field of its own, as management concerns managing the existing, while entrepreneurship is the development of something new. Here effectuation is a key concept that allows for creating something unknown, and classical causal outcomes are not considered (Sarasvathy & Venkataraman, 2011). This argument is an extension of Sarasvathy’s logics for effectuation presented in 2001, that inverted the traditional causal logics for decision-making (Sarasvathy, 2001). Effectuation logic is primarily based on four principles 1) being driven by means, 2) focused on affordable loss, 3) employ partnering for tackling uncertainty, and 4) the unexpected is considered as a new opportunity (Sarasvathy, 2001). It was also the course of a model that has received heavy criticism for not living up to common standards for theorizing (e.g. Arend, Sarooghi, & Burkemper, 2015), which I have noted, but it is less relevant as I focus on the underlying logics.
3 Methodology

This section of the dissertation will elaborate on philosophical stance, research design and employed methods for collecting and analyzing data as well as evaluating research. I also present my reflections on conducting the PhD study presented in this dissertation.

The overall research question was the main internal motivation for initiating this study. The research is an exploratory effort that will provide conceptualizations and descriptions. The overall research question reflects the immaturity of the field project value creation, where some concepts (e.g., value capture) are not yet well defined and some need further elaboration and description. This type of research is well in line with Flyvbjerg (2005), as he argues that the social sciences should direct their attention at science that matters and is essential to social and economic development in society rather than striving to emulate the same logic and methods applied in the hard sciences. Before going into detail on the employed research methods I shall account for my stance on philosophy of science that lays the foundation for the research methods.

3.1 Philosophical stance

The stance in regards to philosophy of science is essential, as it defines the way a researcher approaches concepts such as truth, reality, and subjectivity, and thus usually this account covers at least the researcher’s assumptions about ontology and epistemology (Guba, 1990). In this way the stance on philosophy of science should show a fit with the entire research design, which elucidates how the results were achieved.

My dissertation reports on a qualitative inquiry that focuses on exploring a new research stream and at the same time it aims at contributing to a formative evaluation. Thus, it is a research project calling for engaged research, and it has interpretivist elements, but overall my assumptions and stance belong to a pragmatist philosophy of science. Next, I will elaborate on the origin of pragmatism and subsequently clarify my position on pragmatism and the influence it has on my research.

3.1.1 Origins of pragmatism

Pragmatism is of American origin, emerging around the 1870s, mainly through the work of Charles Sanders Peirce and William James and also John Dewey (Bieta, 2010; Maxcy, 2003;
van de Ven, 2007). The overall idea was to join rationalism and empiricism by showing how knowing and doing are part of the same process (van de Ven, 2007). In this way, pragmatism rejects the basis for ontological and epistemological positions and it does not adhere to the dichotomy of positivism and interpretivism (Maxcy, 2003).

Peirce developed the pragmatic maxim (Peirce, 1992/1878b) establishing that the meaning of a concept or idea can be derived from the practical consequences that seem to result from the truthfulness of that concept. This philosophical approach of Pierce was subsequently altered and elaborated upon by James in his seminal lectures on pragmatism (James, 1907). In his lectures, James presented two distinct human temperaments that bias our worldview. These are the tender-minded (rationalist) and the tough-minded (empiricist) temperaments. As James put it, pragmatism can serve as a mediator between the two temperaments. Following this development, within the pragmatic paradigm Dewey coined instrumentalism, i.e., the view that theory is a mean to achieve an end (Dewey, 2008/1925).

Pragmatism developed through the late 19th century and the early 20th century, after which it did not receive much attention until the 1970s. Then, under the influence of Richard Rorty and Hilary Putnam, the prior post-Kantian era (which was also influenced by Darwinism) evolved in the direction of neo-pragmatism influenced by postmodernism, having language and not experience at the center of attention (Webb, 2007, 2012). It is perhaps more correct to use the plural pragmatisms as suggested by Webb (2007) – pragmatism is a collection of similar stances, and even the triumvirate of Peirce, James and Dewey did not like to be addressed as pragmatists (Webb, 2012). Pragmatism overlaps critical theory, which is also an approach to overcoming the challenges of purist positions on positivism and interpretivism. But pragmatism is focused on solving practical problems for humans finding themselves in ‘indeterminate situations.’ Thus, the focus is not finding the real and objective Truth (capital T) but on finding relevant solutions to problems (Martela, 2015).

Pragmatism is closely related to abduction and abductive reasoning (Peirce, 1992/1878a), which was introduced by Peirce around the same time as the formulation of pragmatism (Kovács & Spens, 2005). Abduction means systematically exploring surprising findings by formulating hypotheses and collecting data to explore these hypotheses. Peirce first used the word hypothesis for abduction. Subsequently, he claimed that there had been an error in the translation of
Aristotle’s work to the word abduction, as the concept rightly should have been labelled retroduction (Peirce, 1931). Since then, some have distinguished between abduction and retroduction (Danermark, Ekstrom, & Jakobsen, 2001). To complicate matters even further, over time the word abduction has been applied with a somewhat different meaning, for example for mixed methods studies combining induction and deduction (Ivankova, Creswell, & Stick, 2006).

### 3.1.2 Ontology

Pragmatism seeks to transcend the dichotomy of rationalism and empiricism, similarly to Kant, who was an inspiration for Peirce. Kant’s view on metaphysics is that we cannot know things ‘das Ding an sich’. This is also seen in pragmatism that “[r]ecognizes the existence and importance of the natural or physical world as well as the emergent social and psychological world that includes language, culture, human institutions, and subjective thoughts” (Johnson & Onwuegbuzie, 2004, p. 18).

The social world means that we experience and sense the physical world, and things are defined by our experience with them, which resembles Kant’s ‘das Ding für uns.’ Dewey regards human beings as part of the world, and thus there is no gap between the researcher and the object of study. To know the world we must interact with it, to gain knowledge about our actions and the ensuing consequences, but there is a gap in terms of time and we never know what the future will hold (Biesta, 2010).

### 3.1.3 Epistemology

van de Ven (2007) argues that Dewey’s and other pragmatists’ epistemology can be understood to be subjectivist, as they see knowledge as truthful only to the extent that it is successful in guiding action. Richard Rorty followed the subjective stance of Dewey and employed a rather relativistic view of pragmatism (van de Ven, 2007). Contrary to that are the views of Rescher (Rescher, 2003), who employs a rather rationalist approach, and there has been a dispute especially between the well-known Hilary Putnam and Rorty on realism and relativism (Forster, 1992).

Another of the 22 characteristics suggested by Johnson and Onwuegbuzie (2004) is that pragmatism “[e]ndorses eclecticism and pluralism (e.g., different, even conflicting, theories and perspectives can be useful...” (2004, p. 18), highlighting the instrumental perspective of Dewey.
Thus what we know about things is based on our experience, which might be different, and it might change. Dewey argues for not using the term knowledge, but rather warranted assertions, recognizing that what we ‘know’ is fallible, and Martela (2015) labels pragmatism as fallible inquiry for these reasons. Dewey acknowledges that warranted assertions are subjective, but as long as we recognize this, it is not a problem (Biesta, 2010).

Martela (2015) also presents a comparison of methodologies. He is one of few to position pragmatism alongside the other and more well-known paradigms, the positions on ontology and epistemology (see Table 4). I note that Martela does not present a distinction between the realist and relativist branch of pragmatism, but I agree to the overall characteristics.

Table 4. Comparing pragmatism to other stances

<table>
<thead>
<tr>
<th></th>
<th>Positivism</th>
<th>Critical realism</th>
<th>Constructivism</th>
<th>Pragmatism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontology</strong></td>
<td>Realism</td>
<td>Realism</td>
<td>Constructivism</td>
<td>Experimentalism</td>
</tr>
<tr>
<td><strong>Epistemology</strong></td>
<td>Correspondence</td>
<td>Interpretive relativity</td>
<td>Interpretive relativity</td>
<td>Fallibilistic instrumentalism</td>
</tr>
<tr>
<td><strong>Aim</strong></td>
<td>True and accurate theories</td>
<td>As accurate theories a possible</td>
<td>Understanding different perspectives</td>
<td>Warranted guidance</td>
</tr>
</tbody>
</table>

This table builds on Martela (2015, p. 12).

Wording is always difficult, but experimentalism seeks to capture that knowledge is what we experience it to be, but that we cannot access the real world we must take a fallible stance. After this introduction to pragmatism I shall account for my own stance on pragmatism.

3.1.4 My approach to pragmatism

As a researcher, I see my main objective as solving important practical problems through the application of theory and positively impacting the organizations that I work with: “to a pragmatist, the mandate of science is not to find truth or reality, the existence of which are perpetually in dispute, but to facilitate human problem-solving” (Powell, 2001, p. 884). In order to do so, I have mainly applied methods of the typical interpretivist scientist (observations and interviews), as I see an adequate understanding of the studied phenomenon as a prerequisite for conducting relevant research. As pointed out by Goldkuhl, both pragmatist and interpretivist elements can be mixed (2012). My choice of methods is in line with my relativistic perspective on pragmatism, similar to the perspective of influential thinkers such as Rorty and Dewey.
Relativistic here means that we all have different and constructed perceptions. “Dewey’s constructivism is a transactional constructivism, a constructivism that holds that knowledge is at the very same time constructed and real.” (Biesta, 2010, p. 111). The point of knowledge being both constructed and real at the same time is essential; it is the acknowledgement of differences of perspective on reality and not all covering Truth (capital T). This perspective is embodied by the saying “perception is reality” from US politics in the 1980s, which I learned during my research. It is the recognition that facts (in a realist stance) may not always matter; perceptions can be created independently and they will be the reality for some.

As pointed out by Johnson and Onwuegbuzie (2004), there is a difference between the physical world and the social world. Meaning that the physical world, for example a tree, is what it is, and we can only access it by sensing it. The sensing is individual, thus we perceive the physical world differently and our knowledge of a tree is perceived through social construction. The social world, for example an organization, is only a social construction, and it is not rooted in the physical world. Thus, the organization as a phenomenon changes entirely according to perceptions, whereas a century old tree probably stayed the same irrespectively of how we perceive it, even though, of course a tree is influenced by human actions in the ecosystem.

3.1.5 Influence of pragmatism on research

Pragmatism is closely related to an abductive research approach (van de Ven, 2007), where an anomaly or breakdown serves well as the beginning. The anomaly that I focus on is the puzzle outlined in the introduction – the failure rates of projects, but increasing project investments.

My research will not produce either an all covering Truth, but rather many small truths that make up warranted assertions (Martela, 2015). However, in order not to confuse the reader, I will still use the word knowledge and regard it to be fallible by nature.

Dewey was the father of instrumentalism, but valuation is also part of his legacy, and the instrumental perspective in use value is clear, e.g. in studies on valuation (Helgesson & Muniesa, 2013) and the importance of use value, for example in S-D logic. This is also is accordance with the zeitgeist experienced in Denmark at the moment – there is always an instrumental reason for doing something, and it will be valuable for you in the future to do this or that. By nature the instrumental perspective rejects the notion things or actions have inherent value, as value is the
result of valuing (Helgesson & Muniesa, 2013; Vatin, 2013). This suggests that valuation should be an integrated part of value creation. The instrumental nature of value impedes the discussion of instrumental versus inherent value that has been raised in the pub sector (Benington, 2011). Another option is that if value is instrumental in nature and never intrinsic as discussed by Dewey (Dewey, 1939; Mitchell, 1945), that may force us to rethink definitions and concepts. It could be suggested that the thinking of future generations is not a matter of intrinsic value, but a matter of planning for future instrumental value. Thus, supporting the illusion of intrinsic value that Dewey proposed (Dewey, 1939).

Our perceptions are our reality, we have no other way to judge than with all of our senses and our perceptions of the sensory input. This is different from most assumptions about commercial value in projects, where a figure can be calculated. But that figure is based on a number of assumptions given by human beings.

### 3.2 Research process and designing

Having introduced my philosophical stance, I will present the research process and the overall design of the study. The next section presents the selection of the case.

The process started with the formulation of a project proposal for the PhD grant, which served as the foundation for beginning PhD study. As introduced, the foundation is the anomaly of projects and increasing project investments, and I wished to know more about value and benefits. These thoughts formed the overall research question and how it would be possible to study value creation, and what I actually wanted to do. To study how projects create value is rather abstract and many research designs could accomplish that.

No cases were agreed on a priori, but I was planning to study both a public and a private setting, in the hope that the public setting would show what I figured was missing in a commercial project setting. To structure the design of the study I applied a framework research design by Maxwell (2013) also relying on other sources for qualitative research (Creswell, 2013; Myers, 2009). The exploratory aim of studying how value is created in project contexts indicated that qualitative methods were most likely most relevant (Edmondson & McManus, 2007).

The research design suggested by Maxwell (2013) has five elements: Goals, methods, conceptual framework, validity, and research questions. I have already presented goals, the conceptual
framework and the research questions. In this chapter I will discuss methods and quality follows in this chapter. The study has a conceptual part and an empirical part, as reflected in the research questions.

It has been a process with many overlaps, but analytically I have sought to distinguish between the literature study, the design, data collection and data analysis for reporting the methods and an illustration of the process is presented in Figure 4. I initiated the inquiry with the conceptual part by studying the literature doing structured review (Tranfield, Denyer, & Smart, 2003; Webster & Watson, 2002) to conceptualize project value creation and to potentially discover new literature focusing on this topic. Meanwhile, I was still in the process of designing the details of the empirical part, as seen in the parallel boxes in Figure 4. The research process at large is presented in the upper part of the figure, while the details of the data collection are presented in the lower part, marked in blue.

Despite the wish for studying projects, it was always important to consider the context (Engwall, 2003) and therefore, the mother or base organization was likely to be the first point of contact. This turned out to be the case for Aarhus 2017, and only later would the projects materialize. Thus I first understood the organization before engaging with the projects, as Aarhus 2017 was an unknown organization and concept to me, thus it seemed like a meaningful progression. Despite living in Aarhus for several years prior to initiating this study, I had little knowledge about the ECoC that was under way and also I had little insight concerning Aarhus municipality and the Central Denmark Region as organizations.

Figure 4. Research process
The data was collected first with the program organization, where I also draw upon longitudinal interview data collected by ri2017, framed in the by the punctured line. The first interviews led to a preliminary analysis that was used in the process of designing further details of the inquiry. Thereafter, the primary data collection took place at both the project and program level, which led to the primary part of the analysis taking place after the collection. After the primary analysis I went back to the projects and conducted follow-up interviews for clearing up questions, getting further insights into specific issues through a dialogue. During the data collection I was taking part in various activities outside the empirical setting, where I would explore possible formal theory to be applied e.g. I was at the 2015 IRNOP doctoral workshop. I was on a Nordic PhD course on temporary organizing hosted by Markus Hällgren, Marcus Lindahl and Jonas Söderlund in September 2015. I got a good deal of external feedback in the process on the theoretical perspectives. This fostered a good basis for writing the papers 3 and 4, while paper 2 was written based on data from the first part of the inquiry. During the entire process I have made notes in a notebook, where I would write memos, discuss with myself, and store all sorts of research notes for later use, which was very useful. It should be visible in Figure 4 that the process was not straightforward from, but rather a combination of moving between theory, data collection and also data analysis.

I labeled the research process systematic combining (Dubois & Gadde, 2014), which is similar to abduction. Initially, I went into the field with a few concepts from the conceptual part that I used as sensitizing concepts (Patton, 2002, p. 456), for example the concept value capture inspired more exploration of the post project activities for creating value. Later, I applied formal theory for theorizing, and in this way it was a process of combining data and theory. It was not pure abductive reasoning in the sense Peirce described (Peirce, 1992/1878a) and which Charmaz (2014) also suggests. I did follow-up on surprising preliminary findings, but the case did not entirely allow for systematically following up with more data collection. To do so would have required an additional project to be studied. Instead, I applied the combining methods to gain rich insights from my data, through multiple rounds of collection within the case. Furthermore, I employed the combination method to apply S-D logic in the process–as the literature on project value creation shows a poor track record in applying formal theory (Laursen & Svejvig, 2016).
3.2.1 Studying a case

I use the word case, as the study was planned and executed as a study of a delimited phenomenon in a specific context i.e. a case study (Flyvbjerg, 2011; Stake, 1995). In this sense I regard the case as the phenomenon I studied, and not the methods or research strategy. My interest was to study value creation in relation to projects, thus what Stake labels an instrumental case study (Stake, 1995). The ECoC provided an opportunity to study exactly that, and the ECoC is a rather delimited phenomenon, so therefore I use the label case study to describe the object of study. The case is the ECoC as a whole, and using Yin’s terms the projects are embedded units in a single case design (Yin, 2014). The single case design has been subject to criticism over time (Eisenhardt, 1989; Yin, 2014), but recently it has been praised for providing good opportunities for interesting research among others through their thick descriptions (Bartunek, Rynes, & Ireland, 2006; Dubois & Gadde, 2014; Suddaby, 2006).

It is suggested that the case is studied intensely, adopting multiple types of data collection. Overall, I employed engaged research methods, inspired by engaged scholarship (van de Ven, 2007). Engaged scholarship may overlap with action research; however, I was not interested in the effect of an intervention through the usual two cycles (Myers, 2009) and, therefore, I did not focus on interventions. Rather I focused on staying close to my inquiry into practice. Theory has been accused of being too far away from practice as often theory is based on rationalist assumptions (Sandberg & Tsoukas, 2011), the latter has been the case for the field of project management, though it seems the field is changing (Biedenbach & Müller, 2011; Bredillet, 2010; Smyth & Morris, 2007). A rich single case study is thus in line with the latest research in the overarching field project management in which project value creation belong.

3.2.2 Case selection

The overall frame for the study reported in this dissertation is the ECoC Aarhus 2017, but projects are my main research interest. This is also reflected in the research design, and timing also did not allow for the opportunity for studying the entire year of cultural events during the year 2017. But why did I select Aarhus 2017 as the case and projects in that program to be the object of study?

I was planning on studying multiple cases to explore project value creation in different types of organizational contexts. From a commercial perspective, it might be considered extreme, or
maximum variation sampling, to study an organization focused on public value and not profits (Coyne, 1997; Patton, 2002). I was not sure whether to expect similar results or very different ways that public and private sector organizations create value, but it might have been interesting. Aarhus 2017 was a good fit for studying the public case, i.e., a phenomenon focused on creating public value (Cole & Parston, 2006; Moore, 1995). But, there was also a fit of purpose that I could not ignore. Aarhus 2017 had the slogan ‘Rethink,’ which was subsequently changed to ‘Let’s rethink,’ and my study originates from rethinking project management seeking to advance theory and practice. There is always purpose behind the sampling, as claimed by Patton (2002), and the purpose for my sampling was an interest in the very specific phenomenon that Aarhus 2017 offered (Sandelowski, 1995). The complexity and depth of Aarhus 2017 surprised and enthused me, which is why I did not study further cases, and the research questions were adapted accordingly at a rather early stage.

My perspective was on the management of projects (Morris, 1994), thus the study was designed to cover both project management and program management. While the program level organization was given by the case, the projects had to be sampled from the project in the ECoC program. The projects were sampled from the Aarhus 2017 pool of strategic projects that were initially funded in 2014 and most of them again in 2015 for three years. The sampling of projects was based on purposeful sampling (Sandelowski, 1995), informed by the conceptual study of literature and the initial data collection at the program level.

The search took place during a public event over several days, where all 65 funded projects were on display with a short description, Figure 5 exemplifies a poster with the projects description. I had also informed myself beforehand through the funding overviews provided in 2014 and 2015. I went on multiple occasions to get to talk
to individuals associated with approximately 10 projects that I had deemed relevant based on descriptions prior to the event. At the event I passed by all stands to read the promotional description at the event. I employed three basic sampling criteria: 1) that the projects had to involve other organizations or stakeholders in the value creation process than the project owner’s organization; 2) in line with the research goals, the project had to focus on creating public value; and 3) for practical reasons the projects had to have primary activities beginning no later than the second quarter of 2015. The third criterion imposed significant limitations on research collaboration, as many were not developing their projects until later than that, and others were mainly focused on a few events with no project activities in between. I deemed these projects to be too much effort for it to be worthwhile to study them. My wish had been to study at least three projects in order to look into the possibility for different types of value creation at the project level, but only a handful of projects passed all three criteria, and some project creators were not interested in collaborating at the time. Therefore, ultimately only two projects were selected. A positive aspect of this was that it allowed for more interaction than expected beforehand.

3.2.3 Case details in brief

The projects selected as a result of the sampling were the Campus and Biodiversity projects that I already introduced. In Table 5, I outline a few details about the projects and the program as the status was at the end of 2016. It is clear that Campus entails a larger monetary investment than Biodiversity due to the construction of a building as one of the subprojects.

**Table 5. Details about case organizations**

<table>
<thead>
<tr>
<th>Project dimensions</th>
<th>Aarhus 2017</th>
<th>Campus project</th>
<th>Biodiversity project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>~ €60 million</td>
<td>~ €4 million</td>
<td>~ €1,3 million</td>
</tr>
<tr>
<td>Purpose</td>
<td>Plan and arrange the hosting of the ECoC 2017 in Aarhus</td>
<td>Change employee mindsets and improve pupil and student enjoyment by constructing facilities</td>
<td>Increase biodiversity by spreading joy and change thinking about nature</td>
</tr>
<tr>
<td>Subprojects</td>
<td>Funding +350</td>
<td>Four</td>
<td>Four</td>
</tr>
<tr>
<td>Sector</td>
<td>Public and private</td>
<td>Public and private</td>
<td>Public</td>
</tr>
<tr>
<td>Organizing</td>
<td>Commercially operated foundation since Nov. 2012</td>
<td>Committed partnership among seven organizations</td>
<td>One party acting as facilitator for all other network participants</td>
</tr>
</tbody>
</table>
Both projects have an underlying purpose of not only creating artifacts or changing processes, but to change the mindsets of people. Campus is primarily focused on involved partners, meaning employees, pupils, and their families, while Biodiversity seeks to change the mindset of the general public to become aware of biodiversity, starting by changing the mindset of partners and other relevant parties in urban planning. Campus is organized by a project group consisting of managers from each of the seven partners. Biodiversity is organized from one organization, in need of collaboration with other organizations, and each subproject has its own stakeholders. The program organization is a commercial foundation operated as a semi-temporary organization with the sole purpose of ‘delivering’ the European Capital of Culture resembling the promise given in 2012 in the bid book (a business case like document) delivered to the EU (Aarhus 2017, 2012).

3.2.4 Developing the conceptual framework

The theoretical positioning, Chapter 2, serves as the conceptual framework in the dissertation. The substantive and formal theory developed in two different tempi, of course related to the process of first doing a literature review and because I had prior knowledge related to benefits management (Bradley, 2010; Ward & Daniel, 2012). I developed this knowledge through study of the literature, but the literature review also revealed new literature for me, and I was surprised by the country specific terminology related to value and benefit. This finding was left out in the final version of paper 1.

I entered the research project undecided in terms of formal theory, but I was looking for a framework that could entertain the phenomenon of value creation in project contexts. I listened to professors making suggestions, and several suggested service science or S-D logic directly. I myself was not convinced at first, but after applying it to my overall case setting I realized that it made sense to put it in vague terms. ‘Why does it make sense?’ The devil’s advocate would ask.

It was during a PhD course on theory for research that it was first brought up, and I ended up testing the waters during the summer of 2015 at a doctoral workshop. I received feedback from Hedley Smyth, who himself applies S-D logic to project studies (e.g. Razmdoost & Smyth, 2015; Smyth, 2014). I had already before that been looking into the resource-based view (Wernerfelt, 1984), but I was not convincing myself despite other scholars have produced solid work with it (e.g. Ashurst et al., 2008). Similarly, I did not choose knowledge management either, as it would
limit the scope of value too much, thus it seemed to not fit as well as S-D logic in my research design. Another idea was a focus on the political power game that would surely have produced interesting findings, but not shed new light on how value is created. Valuation studies (Vatin, 2013) as well as culture and arts management (Throsby, 2003) were also on my radar, in the end I incorporated valuation into my substantive theory, and I found that arts management did not explain what was going on in my data or answer my research question. In the end, it was the data and the goals that ruled the decision.

### 3.3 Data collection methods

The data collection methods are reported separately from the data analysis methods even though this project has been a messy process of abductive inquiry (Dubois & Gadde, 2002). The data collection can be largely divided into two types the data collected for the literature review and the data for the empirical inquiry into Aarhus 2017 and the two projects.

The data for the literature review were collected in two separate searches, where what was learned from the first search and write-up went into making a better second literature search with relevance to the field. The first search was executed in March 2014, and the second in July 2014. The literature sampling followed a combined approach of a structured search (Tranfield et al., 2003) as the main method along with an unstructured search based on prior knowledge of the field of project value creation. The specific methods for sampling literature and searching in databases and project management are described in detail in paper 1.

The inquiry into Aarhus 2017 and projects employed multiple ways of data collection, to study the case from multiple perspectives. More data is more experience and with that the intention to produce more relevant research results for both theory and practice. The two primary collection techniques were semi-structured interviews and observation, but I also conducted a research workshop\(^2\) and I collected secondary data from multiple sources. The case has a long history, but much was also happening during the research.

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3.3.1 Interview data

Interviews were employed as a method to gain access to some of the influential actors in the case, and it allowed me to gain insight into their perceptions and rationales (Brinkmann & Tanggaard, 2010). The collection of interview data began in November 2014 with the first interview in the Aarhus 2017 organization to gain insights into the entire phenomenon. This collection of data was partly spread out and continued into 2015 and the primary collection was finished by November 2015.

The first interview in November 2014 was rather unstructured and provided mostly an intro into Aarhus 2017 and the ECoC as a research phenomenon. The following two interviews were semi-structured (Kvale & Brinkmann, 2009), but open to deviate from the suggested interview guide, and I did go into new areas unknown to me before entering these interviews. The interview guide was developed for each interview, and also for the final three in the program organization. These interviews were with the managers of the organization, thus professionals and good in making statements, and I had to expect them to have an interest in portraying their organization as picture perfect. This is a trait of the expert interviews, a sub type of the semi-structure interview (Flick, 2009; Richards, 1996), and as suggested I was extra cautious about their statements and disguised statements that would misdirect me. Most interviews with the project were also with high profile individuals, and I followed a similar cautious approach for these interviews. The interview guides were prepared with some wiggle room, and I was open to interesting topics that an interviewee would get into. The interview guides were based on elaborating the research questions with supporting questions, making two conceptual levels of questions. But, these are still questions that would not be suitable for asking the interviewee directly. The questions in the interview guide make up a third conceptual level and the questions each have a different purpose e.g. opening, confronting and curious (Kvale & Brinkmann, 2009). I deliberately used opening questions, and many questions based in curiosity, and very few confronting questions. Little theory guided the questions I asked in the interviews, but the data collection was not theory free (Charmaz, 2014). Examples of interview guides are provided in Appendix B. One example from each project and the program organization is shown. For Aarhus 2017 the interview guides were very different as the interviews with the four managers were focused on each of their domains. In contrast, in the two projects the interviews were conducted among groups that shared similar
roles in the project, and therefore these interview guides were rather similar e.g. the seven managers in Campus were rather similar.

Each interview was always followed by a minimum of 10 minutes of field notes about the interview (Kvale & Brinkmann, 2009), for example concerning managers painting a picture perfect. Given the pragmatic stance, it might seem less relevant that the portrait is prettier than the everyday as long as the results at the end produce good and useful recommendations. However, besides the critical role of a researcher, the results and potential recommendations will be judged by their applicability in practice, and a picture perfect result might not prove to be a good point of departure for recommendations.

The interviews were all recorded for the subsequent transcription, a task that might seem trivial but it is essential for the research and data analysis (Kvale & Brinkmann, 2009; Lapadat & Lindsay, 1999; Wellard & McKenna, 2001). The recorder has an influence on what the interviewee is willing to say, which was especially evident with some interviewees who would be very talkative off the record, but on record so professional that it was difficult to make the interview really interesting from a research point of view meaning that it was difficult to catch them off guard.

Various methods were applied for sampling the interviewees among the three different units in the study. They ranged from full coverage in Biodiversity to a combination of selected sampling and snowballing in Campus and Aarhus 2017, based on the role in the organization to secure relevant knowledge from the job and sufficient experience (Patton, 2002).

### 3.3.2 Workshops and observations

For gaining insights beyond the practitioners involved in the project under study, especially for the conceptualization of value. I conducted one research workshop and I participated in several others conducted by the RI2017 project (Spradley, 1980), with which I was affiliated. Due to this affiliation, I had access to the results of all their workshops, but I could also use the workshops as opportunities to observe and get deep insights into Aarhus 2017. The first set of workshops on impacts and effects had convenient timing for me, as they were conducted in May 2014, only a few months after I started my study in February 2014. I participated in four workshops with around 50 participants each during that set, as well as one in 2015 on municipal collaboration.
and one in 2016 on project value. The one on municipal collaboration had around 20 participants and the one on project value about 50 participants. In addition, I conducted a workshop in 2015 for conceptualizing project value in a cultural setting, and it had around 20 participants. All the workshops had participants from various cultural projects and actors as well as from civil servants in the municipality of Aarhus as well as from the municipalities in the surrounding region and from the Central Denmark Region. These workshops have been a great way to get into discussions with practitioners in the cultural sphere, and to get insights through small talk.

The research workshop followed the engaged approach that I adopted for this study (Heron, 1996; van de Ven, 2007). I implemented a similar procedure as the first four workshops I participated in, where the participants are asked first broad questions and then narrowing down the focus through two cycles of round table discussions and documentation on posters. An example of poster documentation is presented in Figure 6. I as the researcher circled across tables for getting the essence of the discussions across tables. The workshops all lasted around two and a half to three hours.

Figure 6. Documenting the workshop poster

Besides the workshop participation (Spradley, 1980), I was in the field taking part in events by the projects and also Aarhus 2017. With the Biodiversity project I went on a walking tour through the local botanical garden for the purpose of hearing bird calls and through the old
railway goods yard that has lain fallow for decades now giving living spaces to many rare species. These instances followed a level of active participation (Spradley, 1980, pp. 60-61), where I would do what others are doing to understand how their participation was valuable to them. With the Campus project I participated in one project meeting and on the day of their learning laboratory, piloting new ways of teaching and learning. On both occasions I was mainly acting as a passive observer (Spradley, 1980, p. 59), due to the nature of the activities; I was neither part of the project team nor in the age group of high school students or a few years younger. In addition, I held a few meetings with the participants in the two projects, and one with a representative from the program involved in monitoring with the RI2017 team.

As Aarhus 2017 is very topical I have been bombarded with impressions whenever I was presenting my research topic in academic or casual environments as well as when taking a walk through the city center where I live. I have lived my research, and even when I was on exchange in Sydney, Australia, my research was in the luggage. One evening I was at a function with the partner of a cultural director of a concept with relations to Aarhus, which was a nice opportunity for an external perspective. But after some talking, this person called their partner and gave me the phone, and I was suddenly talking to the director of an important cultural institution, who could give me some background information on the Aarhus 2017 program process from the project perspective. I have also pursued some of it myself through social media, where I am a follower of Aarhus 2017 on Facebook. It seemed insufficient asking how often and what do you publish on that social media platform, when I could see for myself. I am indeed part of the world of the researched.

### 3.3.3 Documents and media

The documents collected for this study are wide ranging, and serve primarily as background information. I distinguish between internal documents not publicly available and external documents available either in print or online and I add hereto features on TV and radio. Documents served as background information, but some were also considered so important that they became alive (Prior, 2008); the best example is probably the bid book that is daily language for the proposal from Aarhus to the European Commission.

The collection of documents was examined according to strategies similar to the literature review in paper 1, a structured keyword search (Tranfield et al., 2003) in the media Danish database.
Infomedia, where all publications from newspapers, television, etc. are archived. The searches were based on project name and cross checked with project manager and the name of the organization. For articles in international media, unstructured search was applied, and with the help of existing overviews about 100 articles were found on Aarhus 2017 during 2016. Few international articles were cited in Danish media before 2016, and I deemed it not worth the effort to make intense search for more background information through that source.

Documents from the projects were obtained upon request, without hesitation. Documents available online were collected at the beginning of the study and ongoing from there. Documents include strategy documents, press releases, reports, books, presentations, project budgets, funding applications, meeting minutes and other types. For Aarhus 2017 I was assisted by the staff of the RI2017 project, who kept me updated on new publications by Aarhus 2017.

3.3.4 Overview of empirical data
The empirical data comprise a wide range of types and are spread across multiple organizations, so therefore I provide an overview in Table 6 of the collected data and their type.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Program organization – Aarhus 2017</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>11</td>
<td>CEO, program director, program employees</td>
</tr>
<tr>
<td>Observations</td>
<td>2</td>
<td>Publicity events</td>
</tr>
<tr>
<td>Research workshop</td>
<td>7</td>
<td>Research workshop</td>
</tr>
<tr>
<td>Internal documents</td>
<td>800 pages</td>
<td>Proposals, strategic plans, reports, press releases</td>
</tr>
<tr>
<td>External documents</td>
<td>+200 pages</td>
<td>Newspaper articles, external reports</td>
</tr>
<tr>
<td><strong>Rethink Urban Habitats – Biodiversity project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>4</td>
<td>Project manager, vice-director</td>
</tr>
<tr>
<td>Observations</td>
<td>4</td>
<td>City walks, display of output</td>
</tr>
<tr>
<td>Internal documents</td>
<td>100 pages</td>
<td>Emails, project descriptions and plans</td>
</tr>
<tr>
<td>External documents</td>
<td>350 pages</td>
<td>Publications, newspaper articles, TV appearances</td>
</tr>
<tr>
<td><strong>Campus Bindslev’s Square – Campus project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>16</td>
<td>Project manager, partner managers</td>
</tr>
<tr>
<td>Observations</td>
<td>2</td>
<td>Workshops, project meeting</td>
</tr>
<tr>
<td>Internal documents</td>
<td>380 pages</td>
<td>Meeting minutes, presentations</td>
</tr>
</tbody>
</table>
As seen in Table 6, the two cases are dissimilar in terms of conducted interviews, as the nature of the two projects is different. This proved not to be an issue, as the data from the two projects were treated as one case in the data analysis.

3.4 Data analysis methods

Between the interview situation taking place and the coding of text, the recorded interviews had to be transcribed. The process of transcription is not entirely straightforward and issues have been raised that the researcher should be aware of (Duranti, 2006; Lapadat, 2000). Furthermore, the transcription phase is not merely turning audio into visual text, it is also part of the analysis (Kvale & Brinkmann, 2009). However, I knew that time could spent on other activities having someone else do the transcription, thus I tested if listening to an interview before coding made any difference to the coding, and it did. Therefore, I hired a competent transcriber and provided a detailed guide for how to do the transcribing (Kvale & Brinkmann, 2009), and at the end I personally checked the quality of each file before coding the text. The purpose of my research and the aim to perform an analysis inspired by grounded theory (Charmaz, 2014) gave few special requirements for the transcriptions. It does require some degree of meaning in each sentence, still with a need to stay close to word-for-word transcribing, to maintain meaning of the interviewee. Another type of analysis such as phenomenological analysis would require much more attention to, for example, pauses made by the interviewee, which in turn is a potential source of error, especially with more than one transcriber. I was not exposed to this pitfall with my focus on meaning of the sentences.

I applied computer aided coding using the qualitative data analysis software package NVivo 10/11 (Bazeley & Jackson, 2013), and updated to the latest version in September 2016. I chose NVivo mainly for pragmatic reasons, as it was available at my institution. I used it for both the conceptual part and the empirical part of the study. The reasoning was the overview using

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>External documents</td>
<td>150</td>
<td>Public statements, newspaper articles</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Internal documents</td>
<td>1380</td>
<td></td>
</tr>
<tr>
<td>External documents</td>
<td>+700</td>
<td></td>
</tr>
<tr>
<td>Research workshops</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
software and potential time savings as well as the option for coding audio and video data material, which is not possible in print.

The data analysis was spread across multiple phases, starting with the ongoing analysis during interviews and the note taking immediately afterwards. Field notes taken during and immediately after observation also belong to this phase. The next phase is taking notes during listening to and transcription of interviews. This phase was accompanied by memo writing about ideas for potential concepts to be explored further in interviews, and throughout the study I continued to write memos that over time were increasingly focused on potential theorizing. This phase led to both more interviews and to coding in the following phase. The memos allowed for development in the interview guides, especially for the project level where the data collection was broken into clusters. The phase of coding included both open coding and categorization of findings into themes. The final phase is theorizing and write-up for reporting the results. I will elaborate on the coding process in the following.

3.4.1 Coding

The method for coding the data follows primarily that of grounded theory based on Charmaz (2014), who considers grounded theory to be an abductive method (p. 201). Furthermore, Charmaz is no hardliner on the absence of prior knowledge or that grounded theory coding has only one way. Rather the emphasis is on transparency of methods, that inferences are to be grounded in data, and the importance of collecting more data to explore new ideas and hypotheses.

The coding primarily took place after a whole set of interviews has been conducted, even though Charmaz suggests coding to be an ongoing process (Charmaz, 2014). Instead, I listened to the recorded interviews again and took notes and wrote memos on ideas to be explored in future interviews. In general, the phenomenon and case that I study is challenging in terms of adding more cases or units. Therefore, I studied the case through secondary data and observation before engaging in interviews, and that gave an extra dimension to the abductive reasoning (Dubois & Gadde, 2014).

For the open coding the data were separated into two sets, one from projects and one from the program. The program data was analyzed first and coded on a line by line basis (Charmaz,
2014), constantly comparing to existing codes. I abandoned the strict line by line principle for the project data, as one line was at times too short to identify what was going on, and thereby making it overly troublesome to find a suitable gerund to use as code. The project data therefore has fewer codes per interview. For the project data 441 unique codes were generated and for the program level the number is 270. The coding was a constant comparison process.

Codes were given as gerunds to actions and processes, and to support that I had probed for examples of daily life activities of the interviewees during interviewing (Charmaz, 2014). In addition, informants’ reflections, sense making and justification of actions expressed during the interviews were coded using appropriate themes, as these would rarely be expressing project actions. Paper 4 provides an example of text, open codes and categories.

Categorizing was initiated from the most populated open codes through to the least populated where only one reference was made to that code. The initial part was carried out using post-its and a whiteboard in a brainstorming-like exercise, where each category would be described and the open codes assigned to a category. The 441 unique open codes at the project level resulted in 11 categories, and the 270 codes at the program level were recoded into 8 categories. I show examples of transcript, codes and categories in paper 4. Some theoretical constructs are present at this level, grounded in the data and my ideas throughout the research process. I present an example of how codes and categories fit together in paper 4.

3.5 Evaluating pragmatist research

Evaluation criteria in qualitative research is a much debated topic (Maxwell, 2013) that follows the philosophical stance of the researcher. Thus, positivists seek rigor and validity, which the constructivists abandoned due to the ‘real world’ notion of validity. Instead, constructivists have argued for other criteria such as trustworthiness, authenticity and quality (Lincoln, 1995). Others, e.g. critical realists, have been re-conceptualizing validity to rather concern credibility of the research, i.e. “of a description, conclusion, explanation, interpretation or other sort of account.” (Maxwell, 2013, p. 122). The concepts are under constant development, but the discussion is still rather focused on the dichotomy of realism and interpretivism (Lincoln, Lynham, & Guba, 2011). Research that is founded in a pragmatic stance does not fit this dichotomous discussion.
The essential verdict for inquiry adhering to Deweyian pragmatism or instrumentalism is through answering: “Will it help organizational actors better achieve their aspirations and overcome their challenges?” (Martela, 2015, p. 14). Similarly for research, few studies have taken up pragmatism for discussing quality criteria for qualitative studies in a structured manner. Such a discussion takes place within mixed methods research, as this type of study has a natural link to pragmatism. Mixed methods studies are neither entirely positivistic nor constructivist but rather need a non-dogmatic philosophical stance bridging research methods, which pragmatism offers (Biesta, 2010). Both paradigmatic stances and evaluation frameworks for mixed methods research have received a fair bit of attention (Dellinger & Leech, 2007; O’Cathain, 2010). It is less clear how to evaluate qualitative research that does not belong to the interpretivist tradition, but in light of the discussion on qualitative research standards, Howe and Eisenhart (1990) suggested a set of evaluation standards that transcended the paradigmatic stance and methods, and thus was applicable to both qualitative and quantitative research. Furthermore, the quality of a study has to be evaluated against the contribution it makes to advancing our understanding of important questions. Creswell (2013) labels it as a methodological perspective to evaluating qualitative research, and despite less attention to this perspective it follows the line of thought in pragmatism of not being defined by research methods.

The perspective is operationalized through five standards that are presented in Table 7, where I present the headline of each standard and a brief accompanying explanation (Howe & Eisenhart, 1990). Similar to the explanations presented in Creswell (2013), I have adapted the explanations to be neutral regarding the area of concern.

**Table 7. Generic quality standards for research**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fit between research questions and data collection and analysis techniques</td>
<td>Ideally research and data collection should be driven by the research questions and not vice versa. The world is not ideal, but research driven by research methodology should be minimized.</td>
</tr>
<tr>
<td>The effective application of specific data collection and analysis techniques</td>
<td>Researchers should adhere to relevant guidelines for their chosen methods, but still be ‘alive’ and use their experience as methods change over time (Strauss, 1987).</td>
</tr>
<tr>
<td>Alertness to and coherence of background assumptions</td>
<td>Studies are judged in relation to existing literature, and the knowledge of prior literature should guide formulation of research questions. Similar to making background assumptions clear in qualitative research subjectivity should be explicated to clarify its influence and not obscure.</td>
</tr>
<tr>
<td>Standard</td>
<td>Explanation</td>
</tr>
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<td>---------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Overall warrant</td>
<td>This standard goes beyond the first three standards and thus can include perspectives from outside the area of concern and evaluating arguments. Theoretical triangulation (Denzin, 1989) and also discussion of disconfirming evidence and explanations (Erickson, 1986) are two specific suggestions for ensuring the overall warrant,</td>
</tr>
<tr>
<td>Value constraints</td>
<td>The potential value of research is constrained by external and internal factors. External is the ‘so what’ question, emphasizing that the research must inform and improve practice in the area of concern. Internal factors are the ethics setting boundaries for what studies researchers can actually conduct. Can data be gathered (confidentiality), and whether the data is truthful is particularly relevant to the qualitative researcher.</td>
</tr>
</tbody>
</table>

I have already touched upon how my study adheres to these standards in various sections of the dissertation. Still, I will present the arguments for the quality of the study here, or make a brief summary of longer arguments placed elsewhere.

The first standard is to try to avoid being biased towards ideas and a research problem that fits my prior experience and interests. I do hold prior knowledge on especially benefits management—an area that is part of this dissertation’s area of concern. But I did develop the overall research question before addressing the relevant methods for providing the answers.

The competent application of methods, the second standard, is particularly addressed in the previous sections 3.3 and 3.4. It should be clear that I have followed relevant guidelines from the beginning to the end of the study. From my experience throughout the project, the methods I applied were not traditional for inquiries in project management or even management, but I still found it relevant for follow these guidelines. The same two sections (3.3 and 3.4) provide insights into the subjectivity in the third standard. Prior literature was considered to a great extent, both in the beginning when formulating the research question and in making slight changes to the focus after the conceptual part; e.g., the focus on value capture was decided upon during the literature review, and implemented in the study of the case organizations.

The fourth standard is engagement in theoretical triangulation, which is a fundamental part of the conceptual framework by joining substantive and formal theory. I find it more difficult to discuss disconfirming data, as the data speaks what it does and the themes and the theorizing were modelled in accordance.
Lastly, I address the constraints on the potential value that the study may create. During the process I encountered the ‘so what’ question, and therefore I address it in detail in the introduction of the dissertation. The internal constraint is considered in the research design, as multiple research designs might have informed the overall research question. The nature of the case makes it impossible to anonymize it, but the slight downside was by far matched by the possibilities provided by the case, in terms of publicity, newspaper articles, and the possibility to follow their actions on a daily basis on social media.

To sum up, the study largely adheres to the five standards, but it is not perfect, and I could have used either checklists or criteria for case studies or grounded theory that was the main inspiration for the analysis of the data. I chose a framework for the entire dissertation, but thinking about the quality in a more structured way than adhering to general standards might have led to even better contributions.

I will continue this line of thought and introduce the next section, which is concerned with general reflections on conducting the study that I report in this dissertation.

3.6 Reflections on the research process

Learning is part of the process, nevertheless I have found it difficult not to get upset with realizing things later than what seemed possible, as it would have saved much time to just do things “right” the first time. However, I have accepted this as part of realizing that the PhD is not just a piece of research, but in fact the development as a researcher. One becomes more experienced, and better equipped to evaluate advice and realize connections between theories and data sooner.

The research project was first designed to incorporate both for-profit and non-profit organizations, in order to understand different contexts for project value creation. Had I focused on the ECoC from the very beginning the literature study could have been more focused than what it was, and it might have enabled me to go even deeper into the concepts around public and cultural value. This might have opened for an approach less based on instrumental value, but on intrinsic value that I had expected would be more outspoken before entering the field. In continuation of cultural value, focusing more on the valuation process (Dewey, 1939; Helgesson & Muniesa, 2013) would have been an very interesting angle that would open up the discussion.
about how and what we value as individuals. Studying this would be a step towards validating the model I suggest in paper 4 on how value is created in relation to projects.

At times it has been difficult not to defend Aarhus 2017 and not to get overly enthusiastic about it, because it is a very exciting phenomenon. Being very close to the people involved in the development, I have had the feeling of understanding better than most people what it was all about.

I was writing up the dissertation cover while the last preparations for the ECoC opening took place in January 2017, and on January 21 I participated in the opening event, which felt surreal in some ways. Three years is a long time, and at the time of commencing the PhD I did not know that I would end up being engaged this much with the ECoC and during the development it seemed far away and I was uncertain about the specific activities taking place. But suddenly the three years had passed and it was here, it was real and I could go out and participate with people that I know and I could share my enthusiasm during the opening event. Standing among allegedly 70,000 participants throughout the streets of Aarhus was an amazing experience. Even though a picture does not give the best impression, Figure 7 illustrates some of what we were witnessing on January 21, 2017 at the opening event; a parade, a lighting show, music, crowds and fireworks as the finale.

**Figure 7. Mood picture from the opening event**
The engagement with RI2017 gave me a sparring partner with better knowledge of the domain than myself, project manager Louise Ejgod Hansen, for which I felt rather lucky. I had perhaps better understandings and theoretical insights on projects, but my familiarity with cultural policy and arts management was in 2014 very limited, but learned some lessons over the course of the PhD project.

The engagement with the projects taught me a personal lesson that I had not expected, especially the knowledge on biodiversity I learned along the way really refurnished my thoughts on the world. I topped that up with experiences in Australian nature during my stay at University of Technology Sydney (UTS), making the personal experience even greater. The stay in Sydney also serves as the best example of how luck and actively seeking it can mean the world of difference. It was somewhat coincidental that I ended up on a stay in Sydney, and more so that I during extra days came into UTS and did a presentation in conjunction with another visiting doctoral student. She presented research into effectuation and I knew very soon that I had to look into that. I wrote in my notebook early on in 2014 that if the end-in-view benefits management approach is so flawed, we should be looking at theories beginning with the beginning. This also leads me to what I have come to learn about ideas, the can come to you at any point in time, and a straightforward process usually does not produce many original thoughts.
4 Empirical setting

This section is a continuation of the methodology and provides a description of the empirical setting where the research took place. The overall setting for the research is within the frame of the ECoC in Aarhus, Denmark that will culminate in 2017 with a year of cultural events. Within this frame, the focal point of this dissertation is projects, but projects are not islands, and therefore the context provided by the cultural program is also studied and reported. This leads me to distinguish between the project level and the program level. The project level was studied through two specific projects that first received funding from Aarhus 2017 in 2014 and both projects received additional funding in 2015 and until 2017. The program level covers the program organization orchestrating the entire program of activities before and during 2017. The content of the program is developed primarily by the projects that were funded or partially funded in the years prior to 2017, and thus the projects with events in the cultural program are called content providers. Both projects that I studied are content providers in 2017 and I elaborate on the context for the two projects labelled Biodiversity and Campus. For the projects, I elaborate on the organizations that initiated the projects while details specifically on the projects are found in paper 4; after accounting for the project level, I elaborate on the frame, the ECoC labelled Aarhus 2017.

It should be noted that project specific details are mentioned in the papers addressing the project and program levels respectively. Here I mainly elaborate on details not provided in the papers, but that help in understanding the overall context for the contribution of this dissertation.

4.1 Biodiversity

The project that I refer to as Biodiversity is carried out by the Natural History Museum Aarhus. The main focus is biodiversity meaning that the project is aimed at sustaining and preserving both plant and animal species in urban areas such as Aarhus. The means are events and showcasing activities that demonstrate how urban habitats may be created or preserved.

The Natural History Museum Aarhus opened in 1921 and today it is the second largest museum of its kind in Denmark with a collection of approximately 19 million species. The museum employs around 35 full-time employees (Natural History Museum Aarhus, 2017). The museum is partially funded by the Danish state, but is an independent and self-governing institution with
an annual budget of around 20 million Danish kroner (DKK) with more than 65,000 visitors in 2015. The institution by-laws state that the purpose is to secure natural heritage in Denmark and develop the meaning of it through tasks on collection, registration, conservation, research and dissemination. Currently, the museum is undergoing changes aimed at increasing self-funding, which among others the rather new unit Projects and consultancy contribute.

The Natural History Museum Aarhus started the activities focusing on urban nature around 2012 and today the unit Projects and consultancy include employees working on projects related to nature in urban Aarhus. The original project was called Rethink Urban Habitats, and my experience is that it is becoming a well-known brand in relation to the ECoC. The project was co-funded by the Aarhus 2017 foundation, and the museum has since received funding from another sponsor for a complementary project called Habitat:Aarhus celebrating urban nature through photos taken by the public. Every month a photo has been awarded as the best photo, and as part of the Aarhus 2017 cultural program an exhibition of these photos will take place. The museum has also engaged in other projects related to nature in urbanized areas, and they were also placed in this unit. This all led to the original project functioning as an umbrella for the other activities due to the brand awareness of Rethink Urban Habitats.

**Figure 8. Biodiversity project overview**

The primary focus for the study has been the original project with the name Rethink Urban Habitats, but with the development other activities, these were also regarded and what I label Biodiversity is the umbrella covering the four subprojects. In practice, it was difficult to distinguish impressions of Rethink Urban Habitats due to the name overlap of project and
umbrella. The boxes in Figure 8 represent projects, and all but Taste Aarhus (Translated from the Danish name: Smag på Aarhus) are hosted and managed by employees at the Natural History Museum Aarhus. The museum is a partner in the project Taste Aarhus, but they are not in charge of the project. A museum curator oversees all the activities under this umbrella and the project manager for Rethink Urban Habitats is also in charge of Wild Aarhus and the museum activities related to Taste Aarhus. Rethink Urban Habitats received around 2.4 million DKK from 2014 to 2017 from the Aarhus 2017 foundation, Habitat:Aarhus received around 5 million DKK, GO’ Mejldage received 1.2 million DKK and Wild Aarhus approximately 0.3 million DKK. The activities relating to Taste Aarhus received 1 million DKK bringing the total project sum to around 10 million DKK (approximately €1.3 million) (Natural History Museum Aarhus, 2014, 2015).

4.2 Campus

The project I refer to as Campus is set in Silkeborg, Denmark, the main city of the municipality of Silkeborg that has a population of around 90,000 people, of which almost half the population lives in the main city. The focus of the project is to improve learning and the joy of going to school by creating better collaboration across educational institutions and by constructing a new building for additional space.

The project is formally called Campus Bindslev’s Square (Translated from the Danish title: Campus Bindslev’s Plads) and organizationally, it has roots both in the municipality and other educational institutions that are also publicly funded as well as one private school. A total of seven institutions took part in the project. The work on what constitutes the project I studied can be tracked as far back as 2006 in municipal plans mentioning a so-called cultural square at Bindslev’s Square. The geographic proximity to the square is essential, as this parameter was the rationale for working together initially, and it still was when institutions around the square initiated a project group in 2011. Since then other educational institutions not located close to the square have been included in the project, but the construction of a campus building was fixed to Bindslev’s Square and construction began in December 2015.

The project organization is not trivial, both because of multiple sub-projects and because the development of the project was carried out by a group of managers from the partner organizations that carried on through the execution of the project. Thus, this group may be
regarded as the customer, but they were directly engaged in the development of the project execution. There is also a steering committee to authorize economic commitments, thus the partners are also represented at this level and an idea development body that counseled on the design. In 2014, the group of managers handed over the project coordination to a project manager they hired to handle execution of the project. The project manager was the organizer and e.g. the one holding managers to their promises about manpower to project activities.

Since the start, two development projects focused on learning were initiated with external funding, and the municipality is in charge as owner and they manage the relations with the contractor. A fourth sub-project was added when the so-called Fablab was placed under the Campus umbrella. Fablab is short for fabrication laboratory, a concept from the US, and despite deviations in each case it may be described as a modern creative shop, e.g., for creating prototypes on 3D printers. In Silkeborg the Fablab is part of a collaboration project involving Aarhus University, Centre for Advanced Visualization and Interaction, and other Fablabs in Denmark. This collaboration is based on a concept developed by Paulo Blikstein at Stanford University for middle school and high schools. It is called Fablab@SCHOOLdk, and the focus among others is sharing inspiration and knowledge on using the Fablab for teaching pupils in middle school. The Fablab project was initiated independently from the Campus project, however after the municipal schools joined as a partner it was decided to place the Fablab physically in the new Campus building.

**Figure 9. Campus project overview**

In total, the project comprises the four sub-projects illustrated in Figure 9 that each has a different project manager. The manager of Campus is also the project manager of Rethink
Learning (translated from the Danish title: Rethink Læring) that is the connection to the ECoC, Aarhus 2017. This project has helped develop the collaboration across the partnering organization, and it has contributed to an increased readiness to making use of the Campus building upon finishing construction. This sub-project received around 1 million DKK and the development activities started in 2014 running until the planned opening of the building in 2017, where the project will contribute to the ECoC cultural program. The construction project is by far the largest investment, as the building is a 28 million DKK project bringing the investment to around 4 million Euro. In addition, a parking lot is being constructed beneath the Campus building, which is another investment of almost 50 million DKK (€6.5M). The municipality of Silkeborg has had yearly construction costs of around 330 million DKK (€44M) in the years 2014-2016, however this figure is expected to fall to around 250-280 million DKK (€33-37M) in the years 2017-2020.

4.3 Aarhus 2017

The two projects have both received funds from the Aarhus 2017 program organization since 2014, and Aarhus 2017 is the glue of the case. Therefore, it was essential for me to understand the phenomenon and the importance of the program on the two projects. Aarhus 2017 is a diverse name that can have multiple meanings and in daily language it has been used indiscriminately for concepts and organizations that have become intertwined over the many years of planning and development. I shall try to provide the reader with an understandable overview of meanings given to Aarhus 2017, and most importantly how this ECoC constitutes the overall case setting for my dissertation. Table 8 provides a brief overview that I will elaborate on in the remainder of this section.

Table 8. Meanings of Aarhus 2017

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Explanation</th>
<th>My label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>The Aarhus 2017 foundation is the organization in charge of executing this ECoC. It ranges from volunteers to the board, but usually the focus is on the secretariat the daily business managed by the CEO. This organization succeeded at a project within the municipality of Aarhus that prepared the bid for the ECoC title.</td>
<td>Program organization</td>
</tr>
<tr>
<td>Development</td>
<td>The development of projects started already before the bid in 2012 and continued through 2016. The majority of projects are rooted in the bid book from 2012. The development of projects provides the foundation for the cultural program.</td>
<td>Program</td>
</tr>
</tbody>
</table>
These three different ways of using the wording Aarhus 2017 are the ones I have come across, and it should not be regarded as an exhaustive list. I must also note that at times it can be difficult to know exactly which one or ones of the meanings are applied by a newspaper or individual. This list is meant for clarity as Aarhus 2017 is a publicly known and discussed concept. Before elaborating on the meanings, I will explain what an ECoC is, though briefly, as it is detailed in paper 2.

4.3.1 European Capital of Culture

ECoC is a title by definition, but it comes with expectations, commitment and development attached to it. The title is for a year only, and it is given to a city or a region usually within the EU. The European Commission describes the purpose of any ECoC with these four points: “[1] Highlight the richness and diversity of cultures in Europe [2] Celebrate the cultural features Europeans share [3] Increase European citizens' sense of belonging to a common cultural area [4] Foster the contribution of culture to the development of cities” (European Commission, 2017), and it is mentioned that ECoCs are good drivers of regeneration and development in cities as well as for boosting tourism and creating awareness of a city.

The first ECoC was opened in Athens in 1985 as the Greek minister of culture Melina Mercouri was one of the initiators of the ECoC as an initiative to emphasize culture in an EU integration focused on economy and politics (Patel, 2013). It is an initiative governed by the European Commission, meaning that they manage the bid process and designate cities to host the ECoC based on an assessment from an expert panel. The designation rotates across European cities and since 2001 two cities have been designated as ECoC each year. Denmark has not hosted the event since 1996 when Copenhagen was the host, and it is implied that a city will not host an ECoC again.

4.3.2 Program organization

The Aarhus 2017 foundation was formally established in November 2012, with Aarhus and the surrounding region being designated in August 2012. This organization is responsible for the management of ECoC activities.
satisfying the objectives presented in the ‘bid book,’ the proposal that secured Aarhus the title as ECoC. For practical reasons the foundation was setup as a commercial foundation, yet it is operated as not-for-profit but with plans to spend as much money as possible on program activities. The foundation is planned to shut down activities at the end of 2018, and perhaps therefore, the organization generally refers to itself as a project.

The foundation is headed by a board, and the daily operations were handled by a secretariat headed by the CEO. This secretariat is often referred to as the program organization that I also call it. One of their main tasks were funding projects and ensuring there was a cultural program in 2017 by also producing cultural content. Besides the CEO, another essential role is the program director, who was deeply engaged in shaping the content of the cultural program. Here, the program director is understood as an artistic director, who really shapes the product through deciding on funding, as the structure is decentralized, and most projects are executed by different cultural institutions in and around Aarhus. The secretariat includes not only the program team, but also a communications team, an administration team and a fundraising team. The organization has from the beginning partially been made up of staff seconded from the municipality of Aarhus and the Central Denmark Region. These employees were onboard in the project that ended in the bid that was submitted first in 2011 and revised for final submission in 2012.

The program organization has had different forms and foci. Until 2012, the focus was to win the designation, but after being designated the focus was to figure out how to execute the ECoC (Hansen & Laursen, 2015) and as 2017 came closer, the organization had to start delivering content such as the program presentations and the opening event. An overall timeline for the organization, ECoC and development activities is provided in Figure 10. The secretariat counts more managers and staff than the three roles, CEO, program director and head of communications that I have specified. In total the foundation will employ around 150 full-time equivalents from 2013 through 2018.
### 4.3.3 Development activities and cultural year

The program organization orchestrated the cultural program in the ECoC year through funding or co-sponsoring projects through multiple round of funding during 2013-2015. This meant that projects were meant to develop the content for the cultural program, however not all lived up to their potential of delivering programmable content, as it was called by the program manager. In this way, there is a difference between the total program counting all project and event activities and the cultural program during the ECoC year in 2017. However, it is expected that a total of more than 350 projects and events will take place during the ECoC year.

The total budget for the Aarhus 2017 foundation is 451.6 million DKK (approximately €60M) of which 70% will be spent on program activities and the remainder on marketing, communication, administration and other activities. The program organization hosts 10% of the activities during 2017, with the opening event being one of the largest at an estimated cost of 17.5 million DKK (€2.33M). The remaining 90% of the funds allocated to program activities were spent to fund projects and activities before and during 2017. The funds were supplied by the 19 municipalities in the Central Denmark Region contributing 159 million DKK (€21.2M), Central Denmark Region 59.4 million DKK (€7.9M) and the Danish state 129 million DKK (€17.2M) as well as EU funding of 8.5 million DKK (€1.1M) and from fundraising 95.7 million DKK (€12.8M) (Aarhus 2017, 2016).
The award of the ECoC for 2017 was meant to provide Aarhus and the surrounding region with a cultural as well as capability boost by providing a platform to ‘rethink’ society on a grand scale (Aarhus 2017, 2012). While the majority of the projects were for the purpose of developing content for the cultural program, some were also for capability development in a “Soft city” part of the strategy (Aarhus 2017, 2015). As seen, there is both a strategic development dimension to Aarhus 2017 and the culmination in the form of a year full of cultural activities and offers.

4.3.4 RethinkIMPEACTS 2017 evaluation

The spending of public funds entails monitoring the spending, which the Aarhus 2017 does itself. In addition, the Aarhus 2017 foundation and Aarhus University formed a strategic partnership by co-funding a research project with purpose to conduct research on and evaluate the ECoC activities until the end of 2018. The research project is similar to prior evaluation projects of ECoCs such as Liverpool (Garcia, Melville, & Cox, 2010) in 2008 and Umeå in Sweden in 2014 (Wählin, Kapsali, Harryson Näsholm, & Blomquist, 2016). The evaluation is focused on conducting a formative evaluation (Elliott, 1977) rather than only a summative evaluation. The reason for conducting a formative evaluation is to evaluate what worked, and to be part of the process that is unique as Aarhus will not be an ECoC again, thus most people involved will do this once and never again. Therefore, it was deemed valuable to learn along the way as opposed to only learning from experience after the cultural year. The evaluation approach is a form of participatory design that follows the phenomenon over a period of time (Christensen, Hansen, Krøgholt, & Stage, 2016), and in this case the researchers have been involved since around 2014. The evaluation is limited to the year 2018, which also put a limit on the options for obtaining a retrospective angle, as many impacts of the entire effort of being an ECoC are expected to materialize slowly and the legacy may not be clear until years after 2017, or over time the narrative will have had more time to be told.

RI2017 is working closely with the monitoring manager in the Aarhus 2017 program organization as Aarhus 2017 also sends out surveys to gather data both for research and for reporting key performance indicators (KPIs) to important stakeholders like the EU and the major public sponsors.
5 The four research papers

This chapter briefly summarizes the four papers by their publication status, characteristics and the abstract. I summarize the findings at the end of the chapter, which provide the input for the overall discussion in the following and final chapter of the cover part.

**Paper 1:** M. Laursen and P. Svejvig “Taking stock of project value creation: A structured literature review with future directions for research and practice”.

**Status:** The article was published in the International Journal of Project Management in 2016 after being accepted in June 2015. It was published in a special issue on ‘Project Benefit Management.’ The paper is co-authored by Per Svejvig, my main supervisor. A very early version of this paper was presented at IRIS37 in Ringsted, August 2014. The paper conceptualizes project value creation and provided concrete avenues that could be explored in the inquiry into project value creation.

The value creation stream of literature in project management had not yet been documented in a literature review, and therefore, I conducted my literature review as one that should take stock of the current knowledge base. Initially, it was only meant for my own research, but the opportunity presented itself to me, and I could gain traction through a special issue on my topic of interest. The review method combined my existing knowledge of relevant literature with a structured process, through which I became aware of new niches and concepts that formed the foundation to start my empirical study.

**Abstract:** This paper aims to take stock of what we know about project value creation and to present future directions for research and practice. We performed an explorative and unstructured literature review, which was subsequently paired with a structured literature review. We join several research areas by adopting the project value creation perspective on literature relating to benefits, value, performance, and success in projects. Our review includes 111 contributions analyzed through both an inductive and deductive approach. We find that relevant literature dates back to the early 1980s, and the still developing value-centric view has been the subject of many publications in recent years. We contribute to research on project value creation through four directions for future research: rejuvenating value management through combining value, benefits, and costs; supplementing value creation with value capture; applying a holistic
approach to project, portfolio, and strategic management; and theorizing by applying independent models and frameworks.

**Paper 2**: L.E. Hansen and M. Laursen “From applicant to designated European Capital of Culture”.

**Status**: The article was published in the International Journal of Managing Projects in Business in October 2015. The lead author is Louise Ejgod Hansen, the head and project manager of the formative evaluation of Aarhus 2017. She presented an early version of the paper at the International Conference of Cultural Policy Research in September, 2014. I assisted in completely rewriting the paper using project management theory and making it ready for journal submission.

The paper draws primarily on stakeholder theory and governance theory in explaining the struggles for management in the change of organizing following the designation as ECoC. It was a transition from being a project organization to becoming a program organization and changing the management in the same transition. The Aarhus 2017 organization has continued to refer to the ECoC as a project, they use terminology mostly rooted in the cultural sector, and they refer to themselves as the program organization, implicitly understood as the head of the cultural program taking place in 2017. We refer to the organization as the program organization because we see them as heading a program of projects. At the time of writing this paper, the number and characteristics of projects were still within the scope of a program. Louise and I discussed whether a more suitable label would be megaproject for Aarhus 2017 in its entirety.

**Abstract**: Purpose – The purpose of this paper is to investigate the management challenges related to the transition from the application phase to the delivery phase of the project of being a European Capital of Culture. Design/methodology/approach – Case study based on qualitative research interviews with the management team, combined with existing research on ECoC and documents on the Aarhus 2017 project. Findings – The first main finding is that the challenges are caused by the way in which the transition from applicant to designated ECoC includes a change in management, shifting from a project to a programme structure and change in organisation. The second main finding is that stakeholder management in relation to politicians and cultural agents is challenged by a high level of ownership and expectation. Research
limitations/implications – The study focuses on just one case and one phase of the project. Practical implications – Consequences for the way ECoC are managed and the programme organised could be drawn from this. Originality/value – The originality of the work is in that it studies this very critical phase in the project’s life-cycle in great detail, and focuses specifically on the management of ECoC.


Status: The paper is under review with the International Journal of Managing Projects in Business submitted for the special issue: Exploring Processual and Critical Avenues at the Crossroad of Entrepreneurship and Project Management. An earlier version on the manuscript was presented at the 2016 ANZAM conference (Australia New Zealand Academy of Management) as a so-called competitive paper.

In the paper we present three themes for value creation at the program level that were unveiled by the analysis. The paper draws on both program and project portfolio theory as managing the ECoC program shows elements of both types of organizing. We account for the difference between public and commercial value, and use the ECoC to focus on public value that might also be relevant for commercial settings. The identified themes for value creation are; collaboration, coordination and perception, which we find related to three types of value; transformational, emergent and strategic. We also observe management influence by effectual and causal logics. The discussion of the paper is focused on the relevance of the three themes for commercial settings and their coherence with effectuation. Effectuation is based in entrepreneurship but we suggest it might be relevant to consider in managing projects and especially programs too. The handling of uncertainty and ambiguity is difficult and effectual logics for decision making provide new avenues for practitioners.

Abstract: Purpose Holistically explore value creation approaches in a program of cultural projects to inform the practices of project/program management in both public and private sectors. Design/methodology/approach The paper brings together the literature on project, program and portfolio value creation to inform a case study conducted with engaged scholarship research methods. Findings Three themes of value creation are revealed; managing
collaboration, coordination and perception. Effectuation and causation are both observed, demonstrating that a combination of logics underpin decision making in projects. Research limitations/implications The results are based on a single case in a cultural context. Further research is needed to determine whether the observed value creation themes apply more generally, and to explore project decision logics more deeply. Practical implications The study reveals several non-commercial aspects of value creation that may play a role across a range of project environments. Practitioners may be able to recognize a wider range of value creation and to better nurture these previously unacknowledged types of value. Originality/value The study provides new insights on value and decision logic through in-depth analysis of value creation in a program of culture projects.

Paper 4: M. Laursen “Project networks as constellations for value creation”.

Status: After one revision the paper was recommended for publication with minor revisions in the Project Management Journal (as of May 15, 2017). The paper is being prepared for re-submission. The manuscript was submitted for a special issue on ‘Projects and Networks’. An earlier version of the paper was presented at the 2016 EGOS colloquium in Naples, Italy.

This paper combines project network theory with value constellations in studying the ‘how’ concerning project value creation. The two project networks ended up having more similarities than revealed by the initial talks, which provided deep insights into the importance of managing competences and skills. The results are divided into four main themes that are relevant for explaining value creation in projects and also a theme on value that is ‘missed.’ The theoretical contribution of this paper is informed through formal theory by applying S-D logic and network theory to projects. By drawing on the empirical results, the theoretical contribution of this paper is a model for project value creation.

Abstract: This paper explores how value is created in project networks through an empirical study of two interorganizational projects networks in a cultural setting. The paper discusses recent theoretical developments that suggest linking value constellations and project networks. The findings focus on how value is created through identifying four key value creation activities; developing infrastructure, creating knowledge, changing minds, and managing for value capture. On this basis two value constellations are suggested and the service-dominant logic is applied for
developing a conceptual model of value creation in project networks, which include theoretical and practical implications.

5.1 Summarizing findings

The four papers each produced findings related to the research questions they addressed, and in this section I will briefly summarize the findings in Table 9 that also serve as the input for discussing the overall contribution of this dissertation.

The literature review presented in the first paper reviews 111 submissions out of which 19 journal articles were coded inductively for identifying common themes. Books were neither included in the inductive analysis nor the overview of frameworks and models. Despite these limitations, the literature review successfully outlined important research gaps in the literature on project value creation. In the paper, we found that theory on project value creation was mostly substantive and empirically grounded, only very few studies employ formal theory such as RBV. Models are frequently presented, and they are often prescriptive and thus accessible for practitioners, but at the expense of theoretical development.

Table 9. Overview of contributions by each paper

<table>
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<tr>
<th>Paper</th>
<th>Findings</th>
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<tr>
<td>Paper 1</td>
<td>Project value creation is conceptualized as a combination of several streams of research related to projects and success, value and/or benefits. Few studies apply formal theory, but many suggest models. This leaves room for being informed by thoughts outside of project management. The review suggests four future research directions.</td>
</tr>
<tr>
<td>Paper 2</td>
<td>ECoC designation leads to a difficult organizational change from project to program. The imposed governance mechanisms and need for stakeholder management are unfit for the nature of the phenomenon.</td>
</tr>
<tr>
<td>Paper 3</td>
<td>Collaborative capabilities are important outcomes of engaging in the ECoC. Programs generate more value through coordination and diverse offers. Managing the perception of value may contribute to increased value among stakeholders. Programs generate both strategic, transformational and emergent value</td>
</tr>
<tr>
<td>Paper 4</td>
<td>Model of the process of creating project value: Focus on value generation and value capture. Three types of value were identified: value for existing actors, new actors, and process value. Value constellations operate differently within the model</td>
</tr>
</tbody>
</table>
The second paper concerns an empirical study of the ECoC, where the management attracted attention due to some turmoil after the designation as ECoC in 2012. In the following period the organization was transformed from a project to a program organization that was formally setup as a commercial foundation with the mayor as the head of the board. At times the media were rather critical and the communications manager quit in a rather abrupt manner. But was this just bad management or could there be other explanations? We did indeed make interesting findings from a project management perspective. The course of events is in part given by the schedule for designation by the EU, who imposes certain governance mechanisms on the ECoC. Many details have to be presented very early, and the public doesn’t know what an ECoC is like they do with other mega events like the Olympic Games. The current setup is very likely to be criticized in the beginning of the process, however such criticism might be part of the process that leads to an ECoC with impact and criticism is an indication of engagement.

The third paper also concerns the program organization. The focus is specifically on the value creation at an overall level, not the single project. We unveiled three themes that are relevant to discuss for value creation: Collaboration, coordination and perception. The program organization is actively engaged in managing perceptions of value of Aarhus 2017 that related to specific types of value. The findings relating to the themes and value also led us to look into effectuation as a theory that could inform the nature of a cultural program. We found examples of both entrepreneurial effectuation and traditional causal decision-making logics.

The final paper report the study of the project level through two project networks, one focused on increasing biodiversity and one on creating a campus. Combining project networks and S-D logic seems to be a good fit, as the project networks were focusing on integrating and sharing resources among each other. The concept of resources integration provided a sound explanation for that type of behavior.
6 Discussion and conclusion

This final chapter delivers a discussing of the results and contributions and puts the results into perspective. In the first part, I discuss the results and contributions of the four papers followed by implications of the results and suggestions for future research. I conclude the chapter by presenting limitations and a few concluding remarks.

6.1 Discussion of results and contributions

As a project researcher I find a discrepancy in terminology when it comes to the use of project and program by the program organization and project practitioners and even the public. The most difficult one to handle has been the use of Aarhus 2017 often being called a project. From the perspective of the municipality of Aarhus I see the perspective of the ECoC as one input to a branding program. However, I find it more challenging to grasp a project in charge of a cultural program and funding strategic development. It might also foster rethinking on the definitions of project and program with project management bodies.

The management of perceptions by Aarhus 2017, where they seek to encounter critical stories in the press if they are unjustified, and they seek to not end up in so-called shit-storms primarily the fear is on social media platforms, is a topical issue. Cynics might call it manipulation, but in a relative worldview following John Dewey, our perceptions are influenced all the time. Aarhus 2017 have mostly been making an effort to tell the narrative of Aarhus 2017 that will make the citizens of Aarhus and the Central Denmark region understand what will take place in 2017.

The perspective of effectuation in which planning plays a less important part might challenge established perceptions of project management. Some might raise issues concerning trust in the project manager, or the lack of control. However, effectuation shares traits with agile project management. Agile methods will focus on short development cycles than can be controlled (Fernandez & Fernandez, 2008), and similarly a principle of effectuation is to control what is possible as that need not be planned (Sarasvathy, 2001). The case did not offer any further insight into this relationship, but I would suggest further research into effectuation in relation to agile project management.
The final paper report the study of the project level through two project networks, one focused on increasing biodiversity and one on creating a campus. The instrumental approach to this dissertation means that I do not give full credit to the use of the concept of Bildung that is applied in this paper. Bildung, from German, a word for self-cultivation and it is closely related to the Humboldtian view of higher education (Bruford, 1975). The lack of knowledge on natural history was a repeated theme in the interviews in the case of Biodiversity, and a reason could be lack of focus on Bildung, self-cultivation with intrinsic value. Maybe instrumentalism is so embedded in society today that we only focus on the instruments that will yield a return to the invested attention. Before engaging with the empirical field, I had expected a cultural phenomenon to carry intrinsic value, but the management of value perceptions might suggest that instrumental value is also important to regard for cultural phenomena. The literature in public value shows that the two co-exist, and that the discussion on valuation started by John Dewey in the 1930’s is still relevant. A supportive local community that finds the ECoC valuable may be both an instrument for attracting tourists and also for securing positive feedback to the sponsors in the municipalities. The value of starting a discussion and doing things that benefit future generations may be of intrinsic value – though, if future generations will benefit, it could be argued that intrinsic value in some instances is instrumental value of the future.

6.1.1 **Towards a model for project value creation**

The findings in paper 4 are captured in a model on how project value is created in a step-wise process illustrated in Figure 11. I shall briefly explain and thereafter discuss the model. The model consists of two fundamental parts, the value generation (the project activities) and the value capture (post-project activities e.g. operations). Between those two parts, the valuation takes place i.e. involved individuals and potential new actors will perform the internal process of deeming whether the value proposition is valuable or not to them. The model has a processual dimension as value generation is the initiation, followed by valuation and value capture. Value generation entails the core of the project activities, where the product or service is created, but it is always presented as a value proposition.

This model is dynamic as it does not necessarily follow the project life-cycle as other models have done in the past. The reasoning is that partial deliveries may be presented, before the
projects in finished and they may also exist long after the projects have ended for new actors to deem the value propositions valuable or not.

Figure 11. Towards a model on the project value creation process

The value proposition may also be open for new actor to join the value capture part, and if they deem it valuable an increased pressure might arise and negotiation starts for capturing the value. Projects often have a clear suggestion on the purpose, or benefits, or value, which then the new actor disturbs. In the ECoC case, the parties more or less openly negotiated, but other projects with millions of dollars at stake can foster bigger disputes such as over new products. Value from the process is internal, and therefore that value cannot be captured by new actors. They may benefit from documentation on project processes, but not the process itself as they were not part of it.

The process value is similar to the learning from doing seen in Checkland’s FMA model (Checkland, 1985) illustrated in Figure 2. Project learning is not new though (Midler, 1995), but here I specify how the project is a source of learning and increasing competences for the involved individuals.

Aside from process value, two more types can be derived, use value for new actors and for project participants. Together these three types form a typology that could be considered by practitioners. Intrinsic value is not in the model, partially due to the instrumental stance in S-D logic, but also because a time lag of intrinsic value may be captured by the group of new actors.
Value across levels of organizing will be addressed as the last point before focusing on the implications and suggestions for future research. Projects contribute to competence that can lead later to the development of capabilities, and in a similar manner the program has led to the development of new capabilities across municipalities. In a program there is time to develop and benefit from capabilities, but it might be more difficult to apply them afterwards. In the project, the competences and capabilities are used for the everyday work.

6.2 Implications and future research

In this section I first address the theoretical implications and suggestions that this might bring for future research and I outline some practical implications as well.

6.2.1 Theoretical implications and suggestions for future research

Effectuation is a concept from entrepreneurship that informed my research, and it was the missing piece to my puzzle until I discovered it. However, it has been suggested that entrepreneurship does not belong to management but it might be a tradition of its own (Sarasvathy & Venkataraman, 2011). The argument is that management is for managing what is, and entrepreneurship is for creating something new. Project management is also placed within management, but where does project management belong? To answer this question might require a sound ontological discussion of what is a project? In my literature review it was clear that most projects studied in project research are related to classical types such as engineering. Very few articles are concerned with culture even though such projects would fit project definitions like the typical reported projects e.g. IT or engineering. One of the prominent scholars in promoting the current understanding of projects, Rolf Lundin, has pointed out for some years now that it is time for a new project management definition, and I would tend to agree. However, I see this strongly linked to a discussion in the research field about the phenomenon and conceptualization of projects.

The results from my study points towards theorizing on projects as pooling individuals with special skills, we might label it ‘specialized resources’ to solve a difficult task. Uniqueness and temporality may be discussed, as the use of projects outside of project management research often cover phenomena in the longer term, even to a degree that these initiatives have a longer life span than companies meant for ongoing operations. Drawing upon effectuation (Sarasvathy
we might distinguish between development projects and execution of relatively standardized tasks.

Emergent benefits and value has been largely absent in literature, despite it being relevant in practice, and I would claim it should receive more attention from researchers. From my research, I see at least three types of emerging value, the process value that few anticipate emerges. New opportunities for creating value propositions emerge to the people involved in the project and over time opportunities arise for users and new stakeholders. Studies on cost overruns are almost common, but we see few studies of long term value e.g. the value of the Sydney Opera House today. For process value, I specifically suggest letting knowledge management inform project management research on capturing knowledge based on project experience.

Both in the field of strategic management and marketing, value creation has been discussed great detail, and it should recognized that the idea for focusing on value creation in project is theoretically rooted in strategic management (Normann, 2001). But it should not only be formulation of ideas that project management scholars get from outside the field, solid research on similar phenomena should inform project management. It was Koskela and Howell (2002) that argued the theory of project management is obsolete, and they might have a point in project management not inviting in formal theory very often.

Value of the arts, New Labour made culture instrumental and requiring it to contribute to society, and over the past years we have seen report addressing that issue exactly (Crossick & Kaszynska, 2016; Dekker, 2015). In the arts value is and has been discussed much more open than in the project management literature, but it would be relevant to start that discussion (Dekker, 2015).

The immaturity of the research field focusing on project value creation, led me to an exploratory approach, and more research is needed to explore the relevance of the findings across sectors and project types. One of the important avenues I suggest is to focus on valuation processes in projects focused on creating different types of value e.g. business value or public value.

6.2.2 Practical implications

Generally, project management is a research area rather close to practice, and here I address practical implications beyond the ones in the papers. It is a general theme in the empirical paper that projects drive collaboration across organizational and other spans that keep individuals from
different branches apart. But, projects are drivers of interdisciplinary knowledge sharing and they could be essential for creating better solutions e.g. handling climate change in the cities will require knowledge on a wide range of areas. Parties facing difficult tasks should therefore actively seek partners outside their own domain.

In project work it is crucial to not only focus on value propositions, but as an organization to consider holistically who will benefit and who will compete with us for using the value generated by a project. Moreover, organizations should be very careful when putting governance mechanisms in place, as these mechanisms easily become counterproductive for creativity and the creation of value.

I assumed that value is perceived and the results show how perceptions of value can be managed or even manipulated. Organizations at large already engaged in branding, which is similar but internal branding of projects might be less applied. But projects that no-one knows about face a hard time convincing anyone that they create value. The long term implication might be a battle on perceptions with little relation to the physical world – which might already be here in some sense i.e. the post-factual society.

The presented model may inform practices such as selection of projects and new practices for executing projects e.g. by focusing on the suggested typology for value in the process and use value. This might help practitioners plan and design solutions. Moreover, it may feed discussion on the learning and capability development in organizations engaging in projects. For example for project portfolio selection the capabilities to be gained might serve as an integrated part of the criteria, for knowledge intensive organizations.

6.3 Limitations

Limitations are discussed in each of the four papers, but there are also some limitations to the dissertation at large that I shall address now. The study was conducted as a case study, which was suitable for research question, but it also had limitations as adding more projects was difficult. Thus, another setting with better opportunities for doing abductive research moving back and forth between data and analysis, testing preliminary propositions in new instances might have resulted in even stronger contributions. More projects would have allowed for a little
more variation across projects, which could have informed the span of public and commercial foci (Moore, 1995).

The focus of the study was on the project and program organizations, giving less attention to the valuation by the individual citizens and participants at a cultural event. Studying this from a project perspective might have unveiled new dimensions to the cultural perspectives (Crossick & Kaszynska, 2016) and the public value perspectives (Kelly, Mulgan, & Muers, 2002). It was beyond the scope of this study to address how to handle contradictory preferences among the public, I have focused on the process of creating value more than explaining when individuals or groups regards some as not valuable to them.

One potential limitation is the chosen focus of studying projects as networks – there might be inherent differences that make the presented model less relevant for other types of projects. But the focus was deliberate, as scholars argue that collaboration between organizations is the future of creating value (Normann & Ramirez, 1998). This also relates to the ontology of the projects I studied, they were focused on creating something together. It cannot be ruled out that the findings that were discovered in the publicly oriented sphere will not be applicable, or that private organizations for other reasons do not find it relevant to apply e.g. institutional logics (Scott, 2008).

### 6.4 Concluding remarks

My aim with the dissertation was to contribute to theory on project value creation in a rethinking project management spirit. Specifically, the purpose was to uncover how project value creation was conceptualized and enacted in organizations. The underlying wish to present a model of project value creation has been fulfilled.

Paper 1 laid the foundation for the dissertation, and the following two papers concentrate in the program organization by focusing on organizational frame that value creation is subject to and how a public organization work with creating value. The findings on the effectuation logics were very satisfactory to pushing project management theories beyond the traditional perspectives based on causal logics. Paper 4 focuses on the project level value creation and the paper presents a model of value creation based on the empirical study and the input from S-D logic theory.
Project success and the lack hereof formed some of the motivation for my studies, but not the object of my study. This dissertation contributes to a field of research that I hope might lead to the application of holistic perspectives on success by applying some of the many suggestions for types of value relevant for projects.
Epilog

During the last days of May, 2017, a land art exhibition was being prepared as part of a major Aarhus 2017 project by the local art museum ARoS. It is a triennial called ‘The Garden – End of Times, Beginning of Times’ that focuses on how we have depicted nature in the past, how we interact with nature today, and also challenges and provokes to reflect upon the future. One of the works of art, by the German artist Katharina Grosse received much attention even before the exhibition opened. This work of land art focused on how mankind is treating or abusing nature, and did so by painting part of a local park with acrylic paint, mainly the lawn but also a few trees and bushes. It caused an outrage on social media starting on Saturday, May 27, 2017 that continued the next days. Monday morning, national media stations picked up on the story within hours bringing comments from various stakeholders and people with an opinion, as this work of land art had incited very strong feelings and given rise to a debate. Many in the general public and politicians called it vandalism or even sabotage and it is surely not art what is depicted in Figure 12. Some critics were calmed being told the painted grass will be scraped off and replaced with new grass after the exhibition. The painted area covers around 5000 square meters in total (Stiften, 2017b).

Figure 12. Land art by Katharina Grosse (30 May, 2017)
The comments from a senior researcher from the Institute for Bioscience at Aarhus University were rather calming and he did not consider acrylic paint any worse than other human interaction with nature. The museum curator I had interviewed for my project was also contacted by national media for his expertise on nature, and he was thrilled about this provocation. Painting grass does no more harm to nature than driving a car, as a lawn is “cultivated nature” not wild nature. He provided a telling analogy; if kids paint on IKEA furniture it can be replaced like grass, while it is rather devastating if kids would paint on antique furniture or destroy rare habitats (JP, 2017).

ARoS, the museum curating the work of art was in a communicative offense during Monday e.g. bringing facts about the type of paint. They were backed by the responsible city councilor and it even came to point, where the mayor of Aarhus invited for a public debate Monday evening at the work of art asking: “…how much are we allowed to change nature? Can we mow the grass? Can we prune the trees? Can we paint nature?” (Stiften, 2017a) The Technical Committee in the municipality of Aarhus had a scheduled meeting Monday, and this work of art was put on the agenda as some politicians wanted it removed before the exhibition was supposed to open the following weekend – they were unsuccessful.

For me this showcased the value of culture – one single work of land art received more attention than any other initiative I have seen on this topic and the exhibition had not even opened. Many asked why it is necessary to destroy nature to make the point not to destroy nature. They seem to ask the wrong question, maybe because there is no debate about the difference between nature and a green area such as a park or a garden.

The entirety of the outrage and extent of the debate may be what I call emergent value, as some debate was expected, but nothing that would attract national media. From my studies I knew that it takes a lot to attract the attention from national stations. Aside from the cultural value, the publicity and increased attention might be of value to the curating museum.

The cultural value is not is the use per se, but surely in the interaction – without an audience being provoked there would be little debate but also scant justification for the work of art. As I was told during an interview, culture can initiate debates that others parts of society cannot. I see this as an excellent example of that, and there might be much value for society to follow after the debate and reflections on this and the rest of the works of art presented in The Garden by ARoS.
References


Crossick, G., & Kaszynska, P. (2016). *Understanding the value of arts & culture. The AHRC cultural value project.* Retrieved from Wiltshire, UK:


Erickson, F. (1986). Qualitative methods in research on teaching In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. (pp. 119-161)). New York, NY: Macmillan.


Lapadat, J. C., & Lindsay, A. C. (1999). Transcription in research and practice: From standardization of technique to interpretive positionings. *Qualitative Inquiry, 5*(1), 64-86.


Natural History Museum Aarhus. (2014). *Årsberetning*. Retrieved from Aarhus C:


PMI. (2016). *The High Cost of Low Performance How will you improve business results?* Retrieved from Newton Square, PA:


Ramírez, R., & Wallin, J. (2000). *Prime movers: define your business or have someone define it against you:* J. Wiley.


### Appendices

**Appendix A**

Definitions of a project and related concepts.

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<thead>
<tr>
<th>Source</th>
<th>Project</th>
<th>Project management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Time, task, team, transition (Lundin &amp; Söderholm, 1995)</td>
<td></td>
</tr>
<tr>
<td>PMI (2013)</td>
<td>A temporary endeavor undertaken to create a unique product, service, or result. (1.2)</td>
<td>The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. (1.3)</td>
</tr>
<tr>
<td>Axelos (2012)</td>
<td>A temporary organization that is created for the purpose of delivering one or more business products according to an agreed Business Case.</td>
<td>The planning, delegating, monitoring and control of all aspects of the project, and the motivation of those involved, to achieve the project objectives within the expected performance targets for time, cost, quality, scope, benefits and risks.</td>
</tr>
<tr>
<td>APM (2012)</td>
<td>A unique, transient endeavour undertaken to achieve planned objectives. (p. 43)</td>
<td>The application of processes, methods, knowledge, skills and experience to achieve the project objectives. (p. 42)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Program</th>
<th>Program management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>&quot;A program is a collection of change actions (projects and operational activities) purposefully grouped together to realize [...] benefits&quot; (Thiry, 2010, p. 15)</td>
<td>Programme management has been seen as a mechanism for coordinating and directing related projects (Pellegrinelli, 2011, p. 233)</td>
</tr>
<tr>
<td>PMI (2013)</td>
<td>A group of related projects, subprograms, and program activities managed in a coordinated way to obtain benefits not available from managing them individually. (1.4.1)</td>
<td>The application of knowledge, skills, tools, and techniques to a program to meet the program requirements and to obtain benefits and control not available by managing projects individually. (1.4.1)</td>
</tr>
<tr>
<td>Axelos (2010)</td>
<td>A temporary flexible organization structure created to coordinate, direct and oversee the implementation of a set of related projects and activities in order to deliver outcomes and benefits related to the organization’s strategic objectives. A programme is likely to have a life that spans several years.</td>
<td>The coordinated organisation, direction and implementation of a dossier of projects and transformation activities (i.e. the programme) to achieve outcomes and realise benefits of strategic importance.</td>
</tr>
<tr>
<td>APM (2012)</td>
<td>A group of related projects and change management activities that together achieve beneficial change for an organisation. (p. 369)</td>
<td>The coordinated management of projects and change management activities to achieve beneficial change. (p. 45)</td>
</tr>
</tbody>
</table>

**Project portfolio**  
**Project portfolio management**
<table>
<thead>
<tr>
<th><strong>Research</strong></th>
<th>&quot;A project portfolio is a group of projects that are carried out under the sponsorship and/or management of a particular organization. These projects must compete for scarce resources (people, finances, time, etc.) available from the sponsor...&quot; (Archer &amp; Ghasemzadeh, 1999)</th>
<th>&quot;...the simultaneous management of the whole collection of projects as one large entity...” (Meskendahl, 2010) which we may elaborate as &quot;...managerial activities that relate to (1) the initial screening, selection and prioritisation of project proposals, (2) the concurrent reprioritisation of projects in the portfolio, and (3) the allocation and reallocation of resources to projects according to priority.” (Blichfeldt &amp; Eskerod, 2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PMI (2013)</strong></td>
<td>A portfolio refers to projects, programs, subportfolios, and operations managed as a group to achieve strategic objectives. The projects or programs of the portfolio may not necessarily be interdependent or directly related. (1.4.2)</td>
<td>[T]he centralized management of one or more portfolios to achieve strategic objectives. Portfolio management focuses on ensuring that projects and programs are reviewed to prioritize resource allocation, and that the management of the portfolio is consistent with and aligned to organizational strategies. (1.4.2)</td>
</tr>
<tr>
<td><strong>Axelos (2011)</strong></td>
<td>The totality of an organization's investment (or segment thereof) in the changes required to achieve its strategic objectives.</td>
<td>A coordinated collection of strategic processes and decisions that together enable the most effective balance of organizational change and business as usual.</td>
</tr>
<tr>
<td><strong>APM (2012)</strong></td>
<td>A grouping of an organisation's projects and programmes. Portfolios can be managed at an organisational or functional level. (p. 368)</td>
<td>The selection, prioritisation and control of an organisation's projects and programmes in line with its strategic objectives and capacity to deliver. (p. 49)</td>
</tr>
</tbody>
</table>
Appendix B
Examples of interview guides.

Aarhus 2017 organization.

<table>
<thead>
<tr>
<th>ID</th>
<th>Heading</th>
<th>Research questions</th>
<th>Interview questions/topics</th>
<th>Question type</th>
<th>Theoretical anchoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Interviewer:</strong> Markus Laursen</td>
<td></td>
<td></td>
<td></td>
<td>(Kvale 1997)</td>
</tr>
<tr>
<td></td>
<td><strong>Time and place:</strong> 18.11.2015, Dokk1, Aarhus</td>
<td></td>
<td></td>
<td></td>
<td>(Kvale 1997)</td>
</tr>
</tbody>
</table>
|    | **Before the interview**       |                    | 1. Make an appointment with the interviewee and explain briefly what it is all about. *Important: ask the interviewee to find a meeting room where we can talk without interruption.*  
2. Send out an electronic notification of the meeting with a short description of my role and what the interview is about. This is the start of informed consent. (Kvale 1997:118-120) |                        | (Kvale 1997)          |
| 1  | Introduction and interview procedure |                    | Short presentation of the main points:  
- Information about the interview: duration, recording and anonymity  
- Purpose of the interview and the research project as a whole … |                        | (Kvale 1997:132)      |
|    |                                |                    | Do you have any questions before we start? |                        |                      |
| 2  | Personal data – pre-typed by MLA |                    |                                                                                           |                        |                      |
|    | 2.01                           | Name: Rebecca Matthews |                                                                                           |                        |                      |
|    | 2.02                           | Gender: Female      |                                                                                           |                        |                      |
|    | 2.02                           | Title and organizational unit: CEO |                                                                                           |                        |                      |
| 3  | Opening: Personal basic info   |                    |                                                                                           |                        |                      |
|    | 3.01                           | What are your daily tasks as the CEO of Aarhus 2017? |                                                                                           | Indledende             |                      |
|    | 3.02                           | What is the responsibility for you as the CEO? |                                                                                           | Opfolgende             |                      |
| 4  | Activities for creating value  |                    |                                                                                           |                        |                      |
|    | 4.01                           | The story          | 2  
- Tell me about this concept  
- What is the purpose of the story? |                        | Indledende             |
<table>
<thead>
<tr>
<th>ID</th>
<th>Heading</th>
<th>Research questions</th>
<th>Interview questions/topics</th>
<th>Question type</th>
<th>Theoretical anchoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.02</td>
<td></td>
<td></td>
<td>Why is the story important?</td>
<td>Undreinde</td>
<td></td>
</tr>
<tr>
<td>4.03</td>
<td>Main stakeholders</td>
<td></td>
<td>Who are the primary stakeholders for Aarhus 2017?</td>
<td>Lepak, 2007</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Why them?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.04</td>
<td></td>
<td></td>
<td>Do you seek to balance the benefits between stakeholders?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- How would that go on?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.05</td>
<td>Evaluation</td>
<td></td>
<td>How did you develop the long term impact statements?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- And KPIs?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.06</td>
<td></td>
<td></td>
<td>I don’t see the word experience in the KPIs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- I would consider that a key indicator for perception of the event</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.01</td>
<td>rethink</td>
<td></td>
<td>Have you encountered challenges in relation to the theme, rethink?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Which and how?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.02</td>
<td></td>
<td></td>
<td>What does the theme make you capable of doing that other ECoCs cannot?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.01</td>
<td>Subjective</td>
<td></td>
<td>Who defines the success of the ECoC?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>perceptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.02</td>
<td></td>
<td></td>
<td>What is your best case scenario for 2017?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Open questions</td>
<td></td>
<td><em>To provide an opportunity for exceeding the semi-structured interviews’ limitations</em></td>
<td>Creswell 2007:129-134</td>
<td></td>
</tr>
<tr>
<td>7.01</td>
<td></td>
<td></td>
<td>Er der andet du gerne vil nævne i forbindelse med vores snak?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Thank you for</td>
<td></td>
<td>Briefly explain the further process:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>your participation</td>
<td></td>
<td>- Jeg kommer til at foretage flere interviews med andre deltagende organisationer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and explain about</td>
<td></td>
<td>- Jeg vil så vidt muligt sikre anonymitet, men det kan vise sig umuligt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the further process</td>
<td></td>
<td>- Nogle spørgsmål har måske virket banale og der kan være overlap til andre interviews. Det er en mening med galskaben.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

94
### The Campus project

<table>
<thead>
<tr>
<th>ID</th>
<th>Heading</th>
<th>Research questions</th>
<th>Interview questions/topics</th>
<th>Question type</th>
<th>Theoretical anchoring</th>
</tr>
</thead>
</table>
| 1  | Introduction and interview procedure | | Short presentation of the main points:  
• Information about the interview: duration, recording and anonymity  
• Purpose of the interview and the research project as a whole … | | (Kvale 1997) |
| 2  | Personal data | pre-typed by MLA | Name: Poul Erling Kyvsgaard  
Gender: Male  
Title and organizational unit: Skoleleder, Den kreative skole (DKS) | | |
| 3  | Opening: Personal basic info | | Hvor længe har du været leder af DKS?  
Har du anden ledelseserfaring? | | |
<p>| 4  | Baggrund | | | | |</p>
<table>
<thead>
<tr>
<th>ID</th>
<th>Heading</th>
<th>Research questions</th>
<th>Interview questions/topics</th>
<th>Question type</th>
<th>Theoretical anchoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.01</td>
<td>Hvad er CBP for jer?</td>
<td></td>
<td>Hvordan er DKS involveret i projektet Campus Bindslevs plads?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Både indtil videre og fremadrettet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Føler du dig tæt på projektet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.02</td>
<td></td>
<td></td>
<td>Hvilke arrangementer har I deltaget i?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Læringslaboratorium 1?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.03</td>
<td></td>
<td></td>
<td>Hvorfor er DKS med i projektet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.04</td>
<td></td>
<td></td>
<td>Hvad er tanken at I kan få ud af projektet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Forventningen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Impact</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.01</td>
<td>Hvilken type værdi?</td>
<td></td>
<td>Hvad har I konkret fået ud af det indtil videre?</td>
<td>SDL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Fysisk eller som nye tilbud (services)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.02</td>
<td></td>
<td></td>
<td>Er der en økonomisk gevinst i sigte ved projektet?</td>
<td>Den Ouden, 2012</td>
<td></td>
</tr>
<tr>
<td>5.03</td>
<td></td>
<td></td>
<td>Kan du beskrive fremtidsscenarioet når i er færdige?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.04</td>
<td></td>
<td></td>
<td>Kan du sætte ord på andre gevinster?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.05</td>
<td></td>
<td></td>
<td>Hvordan vil I evaluere resultatet?</td>
<td>Value management standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hvornår?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Samarbejde og process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.01</td>
<td>Værdikonstellationer</td>
<td></td>
<td>Hvordan foregår samarbejdet med de øvrige organisationer i CBP?</td>
<td>Ramirez and Norman, 1993</td>
<td></td>
</tr>
<tr>
<td>6.02</td>
<td></td>
<td></td>
<td>Hvad bidrager I med?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hvad ser du de andre bidrage med?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.03</td>
<td></td>
<td></td>
<td>Hvordan oplever du processen med at gennemføre projektet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Hvilke ord vil du bruge?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Udfordringer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Open questions - To provide an opportunity for exceeding the semi-structured interviews' limitations</td>
<td></td>
<td></td>
<td>Creswell 2007:129-134</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Heading</td>
<td>Research questions</td>
<td>Interview questions/topics</td>
<td>Question type</td>
<td>Theoretical anchoring</td>
</tr>
<tr>
<td>----</td>
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<td>----------------------------</td>
<td>---------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>7.01</td>
<td>Er der andet du gerne vil nævne i forbindelse med vores snak?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 8 | Thank you for your participation and explain about the further process | | Briefly explain the further process:  
- Jeg kommer til at foretage flere interviews med andre deltagende organisationer  
- Jeg vil så vidt muligt sikre anonymitet, men det kan vise sig umuligt. | | |
| 9 | After the interview | Spend at least 10 minutes on reflection and write down essential observations | | (Kvale 1997:133) |
Appendix C
Detailed lists of collected empirical data.

Aarhus 2017 program organization.

<table>
<thead>
<tr>
<th>Informant position</th>
<th>Period affiliated with Aarhus 2017</th>
<th>Interview length (minutes)</th>
<th>Date of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO/managing director</td>
<td>1.6.2013 – now</td>
<td>62</td>
<td>18.11.2015</td>
</tr>
<tr>
<td>Program director #2</td>
<td>13.4.2015 – now</td>
<td>35</td>
<td>25.11.2015</td>
</tr>
<tr>
<td>Communications director</td>
<td>12.12.2015 – now</td>
<td>53</td>
<td>11.11.2015</td>
</tr>
<tr>
<td>Press and event manager</td>
<td>01.03.2014 – now</td>
<td>48</td>
<td>03.03.2015</td>
</tr>
<tr>
<td>Program employee, EU relations and regional manager</td>
<td>2008 – now</td>
<td>59</td>
<td>29.01.2015</td>
</tr>
<tr>
<td>Program employee, monitoring</td>
<td>2009 – 2015</td>
<td>60</td>
<td>17.11.2014</td>
</tr>
</tbody>
</table>

*Interviews conducted and transcribed by RethinkIMPACTS 2017*

<table>
<thead>
<tr>
<th>Informant position</th>
<th>Period affiliated with Aarhus 2017</th>
<th>Interview length (minutes)</th>
<th>Date of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO/managing director</td>
<td>1.6.2013 – now</td>
<td>70</td>
<td>30.05.2015</td>
</tr>
<tr>
<td>CEO/managing director</td>
<td>1.6.2013 – now</td>
<td>80</td>
<td>07.01.2015</td>
</tr>
<tr>
<td>CEO/managing director</td>
<td>1.6.2013 – now</td>
<td>60</td>
<td>01.09.2014</td>
</tr>
<tr>
<td>CEO/managing director</td>
<td>1.6.2013 – now</td>
<td>65</td>
<td>06.06.2014</td>
</tr>
</tbody>
</table>

*Transcribed by present author.*

Campus project.

<table>
<thead>
<tr>
<th>Informant position</th>
<th>Organization</th>
<th>Role in project</th>
<th>Interview length in minutes</th>
<th>Date of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project manager</td>
<td>Project organization</td>
<td>Project manager</td>
<td>74, 144</td>
<td>25.11.2015, 04.07.2016</td>
</tr>
<tr>
<td>Mayor</td>
<td>Municipality</td>
<td>Steering committee chairman, project owner</td>
<td>50</td>
<td>05.11.2015</td>
</tr>
<tr>
<td>City councilor</td>
<td>Municipality</td>
<td>Chairperson for culture, leisure and sports</td>
<td>66</td>
<td>03.11.2015</td>
</tr>
<tr>
<td>City councilor</td>
<td>Municipality</td>
<td>Chairperson for children and youth</td>
<td>57</td>
<td>24.11.2015</td>
</tr>
<tr>
<td>Headmaster</td>
<td>Private elementary school</td>
<td>Project group member and on committee</td>
<td>44</td>
<td>01.09.2015</td>
</tr>
<tr>
<td>Informant position</td>
<td>Organization</td>
<td>Role in project</td>
<td>Interview length in minutes</td>
<td>Date of interview</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------</td>
<td>------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Vice-director</td>
<td>Natural History Museum Aarhus</td>
<td>Project owner</td>
<td>51</td>
<td>20.11.2015</td>
</tr>
<tr>
<td>Project employee</td>
<td>Natural History Museum Aarhus</td>
<td>Project manager (Until autumn 2015)</td>
<td>50</td>
<td>08.07.2015</td>
</tr>
<tr>
<td>Curator</td>
<td>Natural History Museum Aarhus</td>
<td>Program manager</td>
<td>44</td>
<td>20.11.2015</td>
</tr>
<tr>
<td>Research assistant</td>
<td>Natural History Museum Aarhus</td>
<td>Project manager (From the end of 2015)</td>
<td>104</td>
<td>13.10.2016</td>
</tr>
</tbody>
</table>

**Biodiversity project.**
Taking stock of project value creation: A structured literature review with future directions for research and practice

Markus Laursen
Department of Management, Aarhus University, Denmark

Per Svejvig
Department of Management, Aarhus University, Denmark

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Taking stock of project value creation: A structured literature review with future directions for research and practice

Markus Laursen*, Per Svejvig

Department of Management, Aarhus University, Bartholins Allé 10, 8000 Aarhus C, Denmark

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Abstract

This paper aims to take stock of what we know about project value creation and to present future directions for research and practice. We performed an explorative and unstructured literature review, which was subsequently paired with a structured literature review. We join several research areas by adopting the project value creation perspective on literature relating to benefits, value, performance, and success in projects. Our review includes 111 contributions analyzed through both an inductive and deductive approach. We find that relevant literature dates back to the early 1980s, and the still developing value-centric view has been the subject of many publications in recent years. We contribute to research on project value creation through four directions for future research: rejuvenating value management through combining value, benefits, and costs; supplementing value creation with value capture; applying a holistic approach to project, portfolio, and strategic management; and theorizing by applying independent models and frameworks.

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Keywords: Projects; Value creation; Benefits management; Value management; Project success; Literature review

1. Introduction

Project management has traditionally been focused on delivering outputs, such as products (Atkinson, 1999), with a specific focus on delivering on time, on budget, and to a defined quality, which is often articulated as adhering to the ‘iron triangle’ (Andersen, 2008). However, this focus on product creation is problematic because delivering a product does not necessarily imply value creation for the base organization(s) (Winter and Szczepanek, 2008). In a wider view on the management of projects (Morris, 1994), we also see a shift from a sole focus on product creation to a holistic focus on both product and value creation (Winter et al., 2006a), and over the past few years scholars have paid more attention to value creation and the realization of benefits in projects (e.g., Winter et al., 2006b; Zwikael and Smyrk, 2012). Considering value in project contexts is nothing new, though; it has been done in value management (European Standard, 12973-2000, 2000; Quartermain, 2002) for many years.

The terms value and benefits are sometimes used interchangeably, and there appear to be many overlapping and ambiguous concepts such as value (Morris, 2013), benefits (Chih and Zwikael, 2015; Peppard et al., 2007), worth (Zwikael and Smyrk, 2012), success (Yu et al., 2005), and also value creation (Andersen, 2014; Winter et al., 2006a), benefits management (Ward and Daniel, 2012), and benefits realization management (Bradley, 2010). The aim of this paper is to take stock of what we know about the field of project value creation, to provide a comprehensive overview of the most salient concepts within project value creation, to present directions for future research to stimulate convergence on the terminology and conceptualization of project value creation, and provide implications for practice. We thus formulated the following research questions: (1) What are the main topics and debates in the literature on project value creation? (2) How may value and project value creation be conceptualized? and (3) How can future research expand this field of research?
This paper is organized as follows: Section 2 describes the theoretical background for this paper, which is followed by the research approach in Section 3. We present the results of the literature analysis in Section 4 followed by the directions for future research and the implications for practice making up Section 5, while Section 6 presents the conclusion.

2. Theoretical background

Value creation is a complex and multifaceted concept that is central to management and organization literature. Value creation applies to various levels such as micro level (individual, group), meso level (organization), and macro level (networks, industries, society) (Della Corte and Del Gaudio, 2014; Lepak et al., 2007).

There is confusion about the term, and Lepak et al. (2007) mention three important reasons for that confusion: First, the multidisciplinary nature of management and organization, where scholars within strategic management, organizational behavior, strategic human resource management, corporate finance, marketing, organizational psychology, and beyond address value creation differently (Barney, 2013; Della Corte and Del Gaudio, 2014; Lepak et al., 2007). Second, value creation refers to both content (what is value?) and process (how is value generated?) (Lepak et al., 2007: 181). Finally, the process of value creation is confounded with who creates value and who captures value—and scholars argue that we need to distinguish between value creation and value capture (Bowman and Ambrosini, 2000, 2010). Lepak et al. (2007: 182) define value creation in this way: “[V]alue creation depends on the relative amount of value that is subjectively realized by a target user (or buyer) who is the focus of value creation — whether individual, organization or society — and that this subjective value realization must at least translate into the user’s willingness to exchange a monetary amount for the value received”. It follows from this definition that there is perceived use value, subjectively assessed by the user (or buyer), and then monetary exchange value, the price paid for the use value created (Bowman and Ambrosini, 2000: 13).

We define value in this paper as the quotient of benefits/costs (alternatively satisfaction of needs/use of resources) (adapted from Morris, 2013: 83; Quartermain, 2002: 44–45–44–46), where “[v]alue is not absolute, but relative, and may be viewed differently by different parties in differing situations” (European Standard, 12973-2000, 2000: 12). Project management literature has also dealt with value and value creation, but generally at a more operational level. Value engineering and value analysis can be traced back to the 1940s with the aim to optimize projects and processes. Value management was later established as a more generic term to focus on the overall achievement of value (Quartermain, 2002; Thiry, 2002b). The intention with value management was to optimize both benefits and costs in projects, but it very often meant reducing capital cost rather than focusing on the nominator, i.e., increasing benefits and thereby enhancing value (Morris, 2013: 83). Value management (and related terms) has its source from industrial engineering (General Electric, US Department of Defense) (SAVE International, 2007). Another concept, benefits management, emerged in the 1980s and 1990s to understand the return on investment from IT (Breese, 2012), and later diffused into mainstream program and project management as an important discipline (Association for Project Management, 2012; Office of Government Commerce, 2011). The term value creation was reinforced as part of the UK initiative to rethink project management to emphasize value creation from projects rather than solely on the delivery of products (Winter et al., 2006b). This furthermore implied that project management was associated with the strategic management thinking of value creation (e.g., Normann, 2001) and thereby subscribing to value creation as a complex, multilevel, and multifaceted concept (Lepak et al., 2007).

We will in the following briefly discuss project value creation from a content and process perspective (Lepak et al., 2007). Table 1 encapsulates the core concepts related to project value creation:

The core concepts in Table 1 relate to each other starting with the strategy initiating the project, which delivers output to an organization resulting in a change, which again delivers benefits and value. This is, however, a highly simplified and idealized presentation, and the relationships between the concepts are much more complex and reciprocally linked in real projects (e.g., Breese, 2012). Nevertheless they are presented here to emphasize the basic concepts of project value creation (the building blocks).

<table>
<thead>
<tr>
<th>Concept</th>
<th>Explanation</th>
</tr>
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<tbody>
<tr>
<td>Strategy</td>
<td>Project value creation is highly linked to strategic management, and strategy could be seen as the art of creating value (Normann and Ramirez, 1993: 65). The strategy is enacted through portfolio management, program management, and project management (Meskendahl, 2010; Winter and Szczepanek, 2008).</td>
</tr>
<tr>
<td>Project</td>
<td>A project might comprise a single project or a collection of projects in the sense of a temporary organization (Bakker, 2010; Packendorf, 1995) that enables value creation (Winter and Szczepanek, 2008).</td>
</tr>
<tr>
<td>Output</td>
<td>Output is product creation which means “the temporary production, development, or improvement of a physical product, system or facility — and monitored and controlled against specification (quality), cost and time” (Winter et al., 2006b: 642).</td>
</tr>
<tr>
<td>Outcome/change</td>
<td>Outcome is the resulting change in the organization derived from using the project’s output (Office of Government Commerce, 2009: 21-22).</td>
</tr>
<tr>
<td>Benefit</td>
<td>Benefit is the improvement resulting from a change (outcome) that is perceived as positive by one or more stakeholders (adapted from Bradley, 2010: xiii; Office of Government Commerce, 2009: 21–22).</td>
</tr>
<tr>
<td>Value</td>
<td>Value α Value is used instead of an equal sign (=) to signify that it is not a quantitative quotient between benefits and costs, but only a representation. Value is relative and viewed differently by different stakeholders (adapted from European Standard, 12973-2000, 2000; Morris, 2013: 83; Quartermain, 2002: 44–45–44–46).</td>
</tr>
<tr>
<td>Value creation</td>
<td>Value creation depends on the relative amount of value that is subjectively realized by a target user (or buyer) who is the focus of value creation — whether an individual, organization, or society (Lepak et al., 2007: 182).</td>
</tr>
</tbody>
</table>
We will finally turn to the process of project value creation. In fact both value management (European Standard, 12973-2000, 2000; Thiry, 2002b) and benefits management (Bradley, 2010; Ward and Daniel, 2012) address the process of project value creation. However, as value management is mainly concerned with optimizing cost rather than benefit, we will focus on benefits management and briefly present it. We define benefits management as “the process of organizing and managing, such that potential benefits, arising from investment in change, are actually achieved” (Bradley, 2010: xiv). The process of planning and identifying, delivering, and realizing benefits is central to benefits management. Benefits and disbenefits are defined and planned at the beginning of the benefits management process, which may be part of creating a business case related to the strategy (Ward and Daniel, 2012). This is followed by delivering, measuring, and realizing the benefits (Bradley, 2010; Peppard et al., 2007).

Having accounted for the theoretical foundation of this paper, we will now address the research approach for the literature review that this paper presents.

3. Research approach

The literature review process for this paper was a two-part endeavor (Svejvig and Andersen, 2015): first, an explorative and unstructured part that had a number of different origins providing inputs from project management and other areas; and second, a structured review process involving searching databases using search strings and scanning the tables of contents of two journals in the field.

3.1. Part 1: explorative and unstructured literature review

The explorative search for publications on project value creation was initiated as part of a study drawing upon rethinking project management (Winter et al., 2006b). In this search, multiple research fields were encountered: benefits management (Bradley, 2010; Breese, 2012; Ward and Daniel, 2012), business value of information systems (Kohli and Grover, 2008; Schryen, 2012), business and organization value (Smyrk and Zwikael, 2011; Zwikael and Smyrk, 2012), and project success and evaluation of projects (Andersen, 2014; Andersen et al., 2006; Atkinson, 1999; Shenhar et al., 2001). A total of 28 journal articles and six books were identified as relevant to the review. The keywords from these 34 publications served as input for the search terms for the structured review process.

3.2. Part 2: structured literature review

The second part of the literature review was based on a structured and systematic approach, which applies methods inspired by both other reviews (Bakker, 2010; Schryen, 2012; Söderlund, 2011) and also literature on conducting reviews (Rowe, 2014; Tranfield et al., 2003; Vom Brocke et al., 2009; Webster and Watson, 2002). In this review, the process comprised four phases: (1) planning and scoping, (2) conceptualizing the review, (3) searching, evaluating, and selecting literature, and (4) analyzing the selected literature.

In phase 1, the scope of the review was limited to project-relevant literature that discusses value creation or benefits management, or in which either of the two concepts is central to the publication. The intention was to develop a robust corpus by combining a representative selection with exhaustive and selective coverage of pertinent project management journals.

In phase 2, the two key concepts—value creation (Winter et al., 2006a) and benefits management (Ward and Daniel, 2012)—were supplemented with benefits realization, business value, and organizational value. Other concepts such as success, evaluation, and impact were deemed too broad to produce a list of results that would be workable.

In phase 3, we had a goal of getting a relevant range, and therefore carried out the search in three databases (number of results in parentheses): Business Source Complete, EBSCO (469); ABI/Inform Global, ProQuest (1526); and ScienceDirect, Elsevier (194). The total number of results summed to 2189.

Complementing the structured search, the tables of contents of the International Journal of Project Management and the Project Management Journal were scanned in their entirety to ensure that all relevant articles were captured, even if the keywords did not match. We selected these two journals as they would allow for inquiries about the development of the field since their inauguration in the 1980s, and the International Journal of Project Management may be considered the premiere specialty journal for project management (Söderlund and Bakker, 2014: 1). As shown in Fig. 1 (inspired by Bakker, 2010), the search and selection process may be represented as three streams: first, the explorative and unstructured search; second, the structured search using search strings; and third, the scanning of two project management journals’ tables of contents.

Each stream illustrated in Fig. 1 contributed through a search and selection to the final result of 111 publications to be included in the analysis. In the selection process one author made the initial rough selection leading to 166 and 74 results, respectively, after limiting the results to academic journal articles, literature reviews, conference papers and proceedings, and books and book chapters. Hereafter both authors looked into all publications in order to apply triangulation methods (Bryman, 2008: 379). The initial selection was an assessment of whether or not the publications were related to project research and value creation, while both authors evaluated based on a set of inclusion and exclusion criteria, which are outlined in Appendix A. The evaluation determining inclusion or exclusion was based on the abstract, and for some publications also the introduction and the remainder of the paper if necessary.

In phase 4, the coding process was divided into an inductive analysis and a deductive analysis. For both parts of the analysis, the software package NVivo (Bazeley, 2007) was used to document the coding.

In the deductive analysis, we initially documented the university and country of the corresponding author, and inspired by the categories suggested by Rowe (2012), the research genre
was documented as empirical research, theory development, research essays and literature reviews, or the category ‘other’. In the following work, based on the inductive coding, the deductive coding was supplemented by whether the publications were applying theoretical frameworks such as the resource-based view (Wernerfelt, 1984) and contingency theory (such as Thorgren et al., 2010). It was also added whether the publication itself contributed a model.

The inductive analysis was based on a grounded theory approach (Wolfswinkel et al., 2011), in which a selection of the publications was coded using open codes and selective codes. We selected 19 journal publications for coding, with the majority selected based on the average number of citations per year to equal out the longer lifetimes of some publications. Three literature reviews in the corpus were also included (Lycett et al., 2004; Melville et al., 2004; Schryen, 2012), as these represent many more studies; in addition, three recent publications (Andersen, 2014; Breese, 2012; Zwikael and Smyrk, 2012) were included due to their strong contribution to project value creation research.

One author coded the 19 publications in their entirety, while the other author coded a minor part and read selected parts of the open codes. The grounded theory coding resulted in a total of 272 open codes. Some of the codes related to more than one source such as: ‘Success depends on stakeholders’, which expresses stakeholders’ relative perceptions of success, and ‘Project as a strategic endeavor’, illustrating that projects are viewed as more than the creation of outputs. Through a process of reading the list of open codes and pooling the codes into axial and selective codes, the basis for five themes was created as presented in Section 4.

Part 1 of the literature review took place from August 2013 to May 2014 in connection with related research activities, while the final assessment of relevant material overlapped the beginning of Part 2 in June 2014. Part 2 was carried out from June 2014 to May 2015.

4. Analysis of the project value creation literature

In this section we will present the findings of the analysis first by reporting on the descriptive statistical findings from the deductively driven analysis. Second, we report on the findings according to five themes that were derived from the inductively driven part of the analysis.

4.1. Descriptive results

The distribution of publications over years displays an interesting image of a field that has developed mainly over the past two decades as the distribution over time shows in Fig. 2. We also identified an overweight of empirical research contributions in the yearly distribution, which is underlined in the small histogram showing the total count in research genres in Fig. 2—a categorization of publication types in research genres that follows Rowe (2012) in part. Besides the strong empirical focus, we note that only a few literature reviews on value creation (3) have been identified in this study.

In terms of geographical distribution, the publications contributing to this research area originate from 30 different countries around the world, based on the main author’s university affiliation. A few countries stand out: the UK (31), the US (27), Australia (14), and Norway (6). Hence, it might be argued that project value creation is primarily rooted in these countries, and partially in countries throughout the rest of Europe that account for another 24 of the total 111 publications.
4.2. Project value creation in five themes

Development of terminology accounts for changes to the terminology from the 1980s to 2014. In some of the first publications, in 1988, we find an interesting convergence in two titles that both make use of the terms project success and measurement (de Wit, 1988; Pinto and Slevin, 1988). This convergence could hint at a focus, at that time, on measuring the success of projects. Nevertheless, the content of the two publications does reveal that the recommendation for broadening the concept of project success beyond the iron triangle was already present in the 1980s. The same topic was still addressed by several scholars in the 1990s (Atkinson, 1999; Baccarini, 1999; Lim and Mohamed, 1999; Shenhar and Levy, 1997; Wateridge, 1998) and to some extent in the 2000s (Andersen et al., 2006; Shenhar et al., 2001), when the project success titles in this selection dry out and we shift attention to benefits management research.

In 1996, the Cranfield process model of benefits management was proposed in the IS/IT literature by Ward et al. (1996), followed by the active benefits realization approach (Remenyi and Sherwood-Smith, 1998). Later the benefits dependency network was suggested by Peppard et al. (2007), linking benefits closely to strategy, as similarly does the benefits realization capability model suggested by Ashurst et al. (2008). This model combines benefits realization with the resource-based view of the firm (Wernerfelt, 1984), thereby bringing competitive advantage into the discussion.

We again shift the focus a little, addressing how projects have been promoted as value-creating systems (Winter and Szczepanek, 2008; Winter et al., 2006a) in the 2000s and forward. This view draws upon both benefits management and the success of project outcomes (Andersen, 2014; Winter and Szczepanek, 2008; Winter et al., 2006a; Yu et al., 2005). Zwikael and Smyrk (2012) suggest a model that applies the organizational value of projects though still applying project outcomes. Following this model, Chih and Zwikael (2015) develop a conceptual framework for target benefit formulation, coining the term project benefits management and repositioning benefits management into projects, not only IS/IT investments. Both benefits management and value creation focus on the outcomes of projects, which—similar to the project success literature in the 1980s—goes beyond output focus in the iron triangle. Hence, it might be argued that the same underlying concepts concerning project success and value have been discussed for more than 25 years, though using different terms and driven by different research areas over time.

Value creation and success outlines how project success and value creation are two closely related concepts. The concept of success has been addressed widely in the literature (Andersen, 2014; Atkinson, 1999; Baccarini, 1999; Davis, 2014; de Wit, 1988; Lim and Mohamed, 1999; Obiajunwa, 2012), and there seems to be a consensus on the use of project management success as a key measure of the success of output, whereas the success of a project as a whole is more diffuse, but concerns outcomes and the base organization (Zwikael and Smyrk, 2012). In chronological order, Table 2 lists publications presenting criteria for project success. There is considerable overlap between the parameters for output and outcome success, respectively, across the definitions in Table 2. Generally, project management success is defined in terms of adhering to cost, time, and quality (Atkinson, 1999; Lim and Mohamed, 1999; Zwikael and Smyrk, 2012). However, performance (Pinto and Slevin, 1988), efficiency, and stakeholders’ perceptions of process are also considered important (Baccarini, 1999; Obiajunwa, 2012). We note the split of quality from time and budget in Shenhar et al. (2001), as they regard quality to be concerned with the impact on the customer. From the above collection of definitions, we argue that the overall success of a project is concerned with benefits, stakeholder satisfaction, or impact, which by and large have to do with the value created. Thus, we argue that the success of projects is connected to the value created. While the iron triangle is a classic and commonly applied standard for judging output success, the judgment of outcomes is more scattered, and it might suggest that research on value creation is still developing, a view that Fig. 2 might support.

Application of theoretical frameworks concerns studies applying a theoretical framework, meaning that it applies...
concepts that are independent from the research area under concern such as the resource-based view or transaction cost theory. This is what Mathiassen et al. (2012: 350) label FI, where F is framework and I is the indication of it being independent from the research area, thereby separating it from concepts that originate in the literature of the research area of concern labeled FA, where A indicates the area of concern. The use of theoretical frameworks in the reviewed publications appears to be rather limited. Merely ten publications make comprehensive use of independent theories, another nine make limited use of such, and 12 publications mention one or more of these theories but do not apply them. Table 3 provides an overview of the theories applied and the publications that make use of them. By comprehensive application, in the first column of Table 3, we mean that the theory is applied and has a major influence on the research or theory development as a whole, as

<table>
<thead>
<tr>
<th>Literature</th>
<th>Comprehensive application</th>
<th>Limited application</th>
<th>Theory mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microeconomics</td>
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</table>
In Ashurst et al. (2008), who based a capability model on the resource-based view. The second column, limited application, on the other hand, covers the narrow application of a theory or in a minor part of the publication, with no major influence on the whole, such as in Chih and Zwikael (2015), who apply contingency theory to exemplify how context might influence benefit formulation practices. Finally, in the third column, the theory is mentioned but not actually applied, as in Winter and Szczepanek (2008), who mention Porter’s (1985) value chain in an overview, but apply another approach.

In total, ten of 111 publications apply independent theories comprehensively, as Table 3 shows, which we regard as rather limited. The theories that are independent of the research area may contribute new concepts and new understandings to the field. Thus, a limited application might suggest that it is a research area that is inwardly oriented, and there might be solid potential for applying theories and concepts to project value creation research similarly to the application of the resource-based view by Ashurst et al. (2008).

Stakeholders and benefits concerns the close relation between benefits and stakeholders. As presented in the second theme, success may be divided into output success and outcome success, and there is consensus that the project manager is responsible for delivery on time, at cost, and of the specified quality (Atkinson, 1999; Zwikael and Smyrk, 2012). However, our analysis shows that there is not the same level of agreement on who is responsible for realizing the benefits (Ashurst et al., 2008). Suggestions on the benefit responsibility vary from the stakeholders in the base organization (Baccarini, 1999) to the project manager (Shenhar et al., 2001), a view for which Zwikael and Smyrk (2012) find support in Malach-Pines et al. (2009). Andersen (2014) suggests that responsibility for project success should be a discussion between the project team and base organization, thus making room for negotiation. We find that these approaches to responsibility for realizing benefits and providing value extend the view of the normative benefits management process (Bradley, 2010; Ward and Daniel, 2012). Nevertheless, the focus on the actual value capture (Bowman and Ambrosini, 2000; Di Gregorio, 2013) is only addressed in four studies on project value and benefits (Ashurst et al., 2008; Chang et al., 2013; Melville et al., 2004; Zwikael and Smyrk, 2012). Lepak et al. (2007) outline that in strategic management the process side of value creation is distinguished from value capture. The value creation logic for projects (Winter and Szczepanek, 2008; Winter et al., 2006a) draws precisely on strategic management literature (Normann, 2001; Normann and Ramirez, 1993), yet value capture has hardly diffused in project management research. Chang et al. (2013) are the only ones making thorough use of value capture, which they use to explain how value is captured over time and across stakeholders over time. All stakeholders may not be known or even born at the time at which the project is undertaken (Chang et al., 2013), but still, in benefits management benefits may only be realized if managed actively (Bradley, 2010). The approach in the value capture process suggests a more open definition as any individual, organization, or society may potentially capture the value (Lepak et al., 2007), regardless of whether this is the intention or not.

In the theme value creation models we have identified 43 publications that propose models and frameworks related to different areas of project value creation. These publications may be divided into categories, as several of them share significant characteristics, and based on the type and nature of the models, eight categories can be defined. We list all eight categories and the publications that form each category in Table 4. The most prevalent categories are ‘prioritization and appraisal’, which concerns the ex-ante evaluation and selection of projects in an organization, followed by ‘process and cyclic models’ and the categories ‘benefits management’ and ‘benefit hierarchies and dependencies’. In summary, many of the models proposed in this research area are related to benefits management, but there is also a major focus on project evaluation, both ex-ante and ex-post.

We have omitted books in Tables 3 and 4, as books can include many theoretical frameworks and propose several models belonging to many different categories. In concluding the presentation of results, we move on with the discussion of the results and the implications for research and practice.

5. Future directions for research and practice

Based on the analysis, we present four directions for future research on project value creation to concretely outline how the field may be moved forward. Subsequently, we elaborate on the implications for practice that our findings might suggest.

5.1. Future directions for research

We suggest four directions for future research on project value creation in Table 5 (inspired by Winter et al., 2006b). The four directions should not be regarded as an exhaustive list as we might see emerging research and trends changing the foundation for our suggestion. When we use the word towards, the meaning is to enhance and build on the existing foundation rather than abolish it.

5.1.1. Direction 1: value management as reduction of costs towards value management integrating value, benefits, and costs

Value creation draws clearly on benefits management research, and we may regard it as one of the driving forces in focusing projects on creating value rather than primarily focusing on the product. With value being a relation of benefits and costs, it would suggest that value management should be a management practice that integrates the two dimensions, yet the literature has treated it in a very limited way. Value management was developed in engineering projects for making optimal use of resources or for cutting costs (Morris, 2013: 83). Later it developed into project management in general, and international standards have been established (e.g., European Standard, 12973-2000, 2000). The focus today is to reduce the capital cost and in this way to increase the value of the project, as the benefit or function is maintained (e.g., Ellis et al., 2005; Green, 1994). It has also been argued that value management is stagnating (Fong, 2004), as it lacks a theoretical underpinning (Male et al., 2007), and we see potential in the thoughts of Male et
Table 4
Overview of categories for value creation models.

<table>
<thead>
<tr>
<th>Category of model(s)</th>
<th>Description</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value focus</td>
<td>Covers the nature of value creation with a focus on value and organizational performance in the project objectives.</td>
<td>Winter et al. (2006a), Winter and Szeczejanek (2008), Zwika1 and Smyrk (2012)</td>
</tr>
<tr>
<td>Investment evaluation</td>
<td>Evaluation models for the project as an investment. These include both ex-ante and ex-post evaluation models.</td>
<td>Barclay and Osei-Bryson (2009), He et al. (2010), Yu et al. (2005)</td>
</tr>
<tr>
<td>Process and cyclic models</td>
<td>Cyclic models that deliver input for new cycles in the model itself. Process models following a number of steps, without feeding back into the process.</td>
<td>Brady et al. (2005), Gordon et al. (2009), Kumar and Keshan (2009), Lefley (2004), Sanchez et al. (2014), Serra and Kunc (2015), Ward et al. (1996)</td>
</tr>
<tr>
<td>Context models</td>
<td>Models that account for the context in which projects are situated and how this context influences the benefits derived and organizational performance.</td>
<td>Gregor et al. (2006), Johannessen and Olsen (2011), Melville et al. (2004), Schyren (2012)</td>
</tr>
<tr>
<td>Benefit hierarchies and dependencies</td>
<td>Benefits dependency networks, illustrating the underlying needed changes for project objectives and purposes and breakdown structures using benefit hierarchies.</td>
<td>Ahuja et al. (2009), Andersen (2014), Loader (2005), Peppard et al. (2007), Wilson et al. (2007)</td>
</tr>
<tr>
<td>Other value creation models</td>
<td>A collection of models that do not share traits with more than one other model. Examples are a portfolio model, the mediating effect of ERP systems, and a model for formulating benefits.</td>
<td>Bernroeder et al. (2014), Brygalla and Jahre (2009), Chiang and Nunez (2013), Chih and Zwika1 (2015), Jonas (2010), Pinto and Slevin (1988), Ross and Vitale (2000), Thiry (2002a)</td>
</tr>
</tbody>
</table>

Table 5
Future directions for research on project value creation.

| Direction 1 | From: value management currently focusing on cost management and reducing the capital cost | Towards: the development of an integrated approach combining benefits management and cost management into a holistic value management approach focusing on value, benefits and costs |

| Direction 2 | From: linear value creation processes similar to traditional value chains in the industrial economy | Towards: developing value creation and value capture as a broader concept in project management inferring short term, longer term and emergent value |

| Direction 3 | From: project management and portfolio management as rather tactical and operational disciplines | Towards: concepts and approaches to strategic management, portfolio management, program and project management are practiced holistically and by letting value imbue the discipline |

| Direction 4 | From: fairly limited application of theoretical frameworks that are independent of the project value creation research field | Towards: the development of new models and theories by applying frameworks of independent theory e.g., resource-based view |

al. (2007), who suggest value to be the management style for projects as well as Gillier et al. (2015) introducing a design perspective. We suggest rejuvenating value management into an integrated management practice covering value, benefits, and costs, rather than keeping the practices separate. While value engineering may provide cheaper solutions at the same function, we could imagine how an integrated value management approach could justify more expensive solutions as more benefits may be realized at an extra cost by applying a holistic view of the project. A step towards this holistic value management approach is taken by “Management of Value” (MoV) (Office of Government Commerce, 2010), but this might be further developed, especially to integrate it with benefits management (e.g., Bradley, 2010; Breese, 2012; Chih and Zwika1, 2015; Ward and Daniel, 2012).

5.1.2. Direction 2: value chain thinking towards value creation in value constellations

The essence of this direction is that value creation in today’s project environments is unfit with the thinking of the industrial economy, where a party would conduct their value-adding activities before passing the product downstream to a customer. Value is rather created in complex constellations of a multitude of parties and stakeholders that co-produce value (Normann and Ramirez, 1993). In fact, we should not only regard the creation, but also the capture of value, as the two might be distinct as suggested in other research fields (Bowman and Ambrosini, 2000; Mizik and Jacobson, 2003), and applying the distinction to projects might lead to essential new insights and understandings. The distinct nature of value creation and capture was explained by Chang et al. (2013: 1140), using the Sydney Opera House: “The value of this project is captured by Australia as a nation, yet many of the current ‘beneficiaries’ of this project did not participate in the original value-creation process. This demonstrates the need to consider project success as an ongoing and long term (emergent) process of value creation, as compared to the traditional output measures.” In distinguishing between beneficiaries, we also find the subjectivity of value essential as value differs across stakeholders, as individuals or groups of individuals subjectively perceive value (European Standard, 12973-2000, 2000). What is regarded as valuable to one stakeholder might be regarded as the opposite to
another stakeholder (Breese, 2012: 349; Lim and Mohamed, 1999: 244). In the literature we find a strong argument for regarding customers and regarding this external stakeholder deciding success (Baccarini, 1999; Lim and Mohamed, 1999; Pinto and Slevin, 1988; Shenhar and Levy, 1997), which we see resembled in the investor evaluation of project success (Zwikael and Smyrk, 2012). However, focusing on the customer might be too simplistic, as it might cannibalize, for example, investor and employee value. The concept of value capture may facilitate a broader perspective by recognizing disparate stakeholders, and project managers should recognize the negotiation for value among stakeholders that a project entails.

5.1.3. Direction 3: from project and portfolio management with an operational focus towards projects and strategy linked in a holistic approach

Similar to Direction 2 in Table 5, strategic management plays a vital role in Direction 3, but unlike Direction 1 where we suggest an integration of practices, here we suggest linking together the practices on project, program, portfolio, and strategic management in a holistic approach. The message is that it makes sense to regard all when regarding one, as decisions about one project are likely to influence other projects, the program, and perhaps the entire strategy (Serra and Kunc, 2015); vice versa, projects are influenced by their surroundings, as Engwall puts it: “No project is an island” (2003: 789). In the holistic approach value should be central, as essentially “strategy is the art of creating value” (Normann and Ramirez, 1993: 65), and projects may be regarded as strategic weapons (Shenhar et al., 2001). We therefore turn to the management of projects rather than to the single project, and we commend the extra focus on the front-end that Morris suggests in his latest book (Morris, 2013: 62). Our reasoning is that the potential value creation of projects is limited to the ones an organization chooses to fund and run, and if the project appraisal does not regard any interrelatedness, potential value might not be considered, potentially leading to less valuable strategic decisions on the project portfolio. We may see this encountered by establishing governance structures that host these strategic discussions on projects, yet organizations should ensure a level of project maturity, which might suggest educating the base organization on managing projects and the relation to strategy.

5.1.4. Direction 4: limited application of theoretical frameworks towards new models based on independent theory

Direction 4 in Table 5 completes our outline of directions for future research, and the essence of this direction is the limited application of theories that are independent of the research field (Mathiassen et al., 2012): project value creation, which our analysis shows. The limited application of theories independent of project value creation leaves a clear potential for applying independent theories, and we find it plausible that an increased application of independent theory might enlighten the project value creation field, as we have seen in other research fields (Mathiassen et al., 2012). We also see how Ashurst et al. (2008) expand the boundaries by applying the resource-based view to benefits management. Thus, applying theories from outside the research field is a way to develop and move the field forward. Many theories could be applied, for example, institutional theory (DiMaggio and Powell, 1991; Scott, 2008), structuration theory (Giddens, 1984), or resource-based theory (Wernerfelt, 1984). In suggesting this, we are not claiming it to be easy to theorize, nor do we suggest “throwing the baby out with the bathwater” by abolishing the practical foundation. One of the goals for research is to develop theories that may be applied in practice, and one way to develop these theories is by engaging with practitioners in collaborations on theory development (Van de Ven, 2007). We have seen how the application of the resource-based view in strategic management enhanced thinking on competitive advantages (Barney, 1991). Similarly, we need to develop the project value creation research field by taking the outside view.

5.2. Implications for practice

Project value creation is highly relevant for practice, and several of the future directions for research have practical implications. We highlight the following three implications for practice. First, practitioners should focus on value capture in order to move beyond the fairly simplistic understanding of benefits realization that seems to be ruling at the moment. Current theories fail to comprehend the complexity of today’s project environments (Breese, 2012), and practitioners may thereby be blinded to important parts of the social and political processes that may influence project value heavily. Thus, applying theories fit for the world in which the practitioners live might lead to both increased value creation and better satisfaction with the models overall. Second, the best practices such as PMI’s PMBOK (Association for Project Management, 2012), which address mainly costs, PRINCE2 (Office of Government Commerce, 2009), and Managing Successful Programs (Office of Government Commerce, 2011) that both address benefits and costs would gain from being informed by the value management approach in MoV (Office of Government Commerce, 2010). We also see a potential for integrating the practices within MoV by applying an increasingly holistic approach to value, benefits, and cost. Subsequently, the diffusion of the integrated value management practices should be strengthened as MoV appears to be less diffused into practice than the other mentioned best practices. Finally, in organizations the development and execution of strategy, portfolios, programs, and project management should be changed to incorporate the integrated benefits and costs approach to value. This would suggest that projects should have a strategic link to be funded and a much stronger focus on the front end of projects, ensuring that the portfolio fits the strategy, and that synergies may arise from the collection of projects. Thus, value management and value-centered thinking should be focusing on the management of projects rather than merely project management.

6. Conclusion

The objective of this review was to take stock of project value creation and identify directions for future research on
project value creation. We position project value creation as a research area that draws on the research fields of benefits management, strategic management, and value management, besides project management. Drawing upon a number of fields presents challenges, especially in terms of differences in wording of benefits, value, performance, and project success, which provided difficulties in creating a coherent and delimited view of the literature. This challenge might also be an indication of the need for an overview of the fields this review aims to offer, but the challenge also implies that potentially some relevant publications on project value creation might have been missed due to the scope of the search.

Conflict of interest statement

The authors have no conflicts of interest.

Acknowledgments

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Appendix A

The selection criteria for search results to be part of this review are listed in Table 6, first mentioning the inclusion and thereafter the exclusion criteria.

<table>
<thead>
<tr>
<th>Concepts and contexts</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value creation</td>
<td>It is a core concept of this literature review, and we highlight the use of the term in a UK-based network on rethinking project management (e.g., Winter et al., 2006a), where value creation was identified as a potential direction for further research.</td>
</tr>
<tr>
<td>Benefits management and benefits realization</td>
<td>The concepts are viewed as synonymous and as dealing with increasing the project value through managing and realizing the potential benefits of a project (e.g., Baccarini and Bateup, 2008; Breeze, 2012).</td>
</tr>
<tr>
<td>Project success considered broadly</td>
<td>Converting the limited focus of time, cost, and quality to benefits or value correspond to the value creation logic (e.g., Atkinson, 1999; Lim and Mohamed, 1999).</td>
</tr>
<tr>
<td>Strategic approach to delivery of value</td>
<td>Impact of organizations due to projects is also considered value that has been created (e.g., Martinso et al., 2012; Sánchez et al., 2014).</td>
</tr>
<tr>
<td>Project appraisal</td>
<td>Project appraisal was included if framed to have the intention of creating value (e.g., Lopes and Flavell, 1998).</td>
</tr>
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</table>

Table 6 (continued)

<table>
<thead>
<tr>
<th>Exclusion criteria</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>The absence of project focus or project related research</td>
<td>A project focus is implied for the focus on project value creation. Value creation in non-project activities such as continuous improvement (e.g., Coleman et al., 2013), and the value of non-project related services (e.g., Debande, 2002) are therefore not considered in this study.</td>
</tr>
<tr>
<td>Absences of value creation characteristics</td>
<td>Research on applying new ways of doing work more efficiently or new theories without a value creation was excluded, also in fields adjacent to value creation such as program management (Stoshil et al., 2014), risk management (Arrow, 2008), or portfolio management (Voss, 2012). Project value is typically not the main focus of such publications, but only a related or indirect concept (e.g., Niebecker et al., 2008).</td>
</tr>
<tr>
<td>Project management optimization and optimization of the project process</td>
<td>The focus on success factors and mere evaluation, as well as discussions of project success, is unrelated to the key concepts in this paper (e.g., Goparaju, 2012; Wells, 2012). This study focuses on the creation of value rather than the optimization of value that often happens in value management (Quarterman, 2002) and cost management (e.g., Mansour, 1994), and considered similarly is earned value management (e.g., Gowan et al., 2006; Townsend et al., 2014).</td>
</tr>
</tbody>
</table>

References


Reginato, J.M., 2009. Evaluating project robustness through the lens of the
SAVE International, 2007. Value Methodology Standard and Body of
Von Brocke, J., Simons, A., Niehaves, B., Riemer, K., Pl44-

From applicant to designated European Capital of Culture

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Abstract

Purpose – The purpose of this paper is to investigate the management challenges related to the transition from the application phase to the delivery phase of the project of being a European Capital of Culture (ECoC).

Design/methodology/approach – Case study based on qualitative research interviews with the management team, combined with existing research on ECoC and documents on the Aarhus 2017 project. Findings – The first main finding is that the challenges are caused by the way in which the transition from applicant to designated ECoC includes a change in management, shifting from a project to a programme structure and change in organisation. The second main finding is that stakeholder management in relation to politicians and cultural agents is challenged by a high level of ownership and expectation.

Research limitations/implications – The study focuses on just one case and one phase of the project.

Practical implications – Consequences for the way ECoC are managed and the programme organised could be drawn from this.

Originality/value – The originality of the work is in that it studies this very critical phase in the project’s life-cycle in great detail, and focuses specifically on the management of ECoC.

Keywords Stakeholder management, Cultural projects, Arts management, European Capital of Culture, Political prestige

Paper type Case study
1. Introduction

Becoming the European Capital of Culture (ECoC) is a prestigious nomination for a European city and with it comes a one year-long programme that needs to be filled with culture activities, events, often including infrastructure investments and with direct effects on numbers of visitors. The planning procedure is extensive and last more than eight years from the start to the end. It includes formulation of the core ideas, outlining the bid, writing the applications as well as evaluating the outcomes of the Capital of Culture year.

How do you hold a series of project with several endings together so that you in the end create the foundation of creating a programme based on the outcome of the first series of projects? This case investigates Aarhus 2017 in its early process during 2010-2014 and elaborates on challenges that occur for the management team. In this case we will focus on the transition periods when the management team is changed and the whole project is in a period of crisis. What happens in the turmoil when state funding is not yet guaranteed, the project is delayed and two members of the new management team leave the project in one year after their recruitment? Is this a sign of bad management or related to structural issues concerning how the organisation of the whole period has been planned from the beginning? And what can we learn from the long life-cycle of a ECoC investment and specifically from the case of Aarhus 2017?

The main focus of the paper is the analysis of the case, and the structure of this paper is based on the abductive approach we have taken to it. Therefore, we start out with a brief presentation of the case, combining general information about the process of becoming a ECoC with information about the local case of Aarhus. Based on this presentation, we raise the question: is Aarhus 2017 (and the ECoC in general) better understood as programme than as a set of projects, and does the concept of the “megaproject” add something? After that we present the empirical study, which is based on an engaged scholarship approach (Van de Ven, 2007). We then move on to presenting the findings, and these are structured around three main challenges: the transition from applicant phase to designated ECoC, the changes in management, and stakeholder management. Different theoretical points related to the challenges are introduced along the way; this includes general project management literature (Müller et al., 2014, Cleland, 1986), programme management literature (Lycett et al., 2004); literature on the management of megaprojects initiated by public authorities (Klakegg and
Haavaldsen, 2011) and arts management literature (Landry, 2011; Wennes, 2002, 2007). Following this, we present the conclusion implying that the underlying issues of great ambitions in the application phase might cause problems in the execution of the ECoC programme, which also lead us to present three implications for practice. First, the project manager of ECoCs defines to a greater extent the output compared to traditional execution projects, which would suggest that the manager should not be changed, yet ECoCs are known for often changing management, and therefore it seems reasonable to plan for handling management changes in the transition from applicant to designated host city.

2. ECoC

The ECoC is the best-known and longest-running cultural policy scheme conducted by the EU. It was launched in 1985, and since 2001, two cities have been designated ECoCs each year. The cities concerned then organise what may be described as a year-long cultural festival aimed at celebrating European cultural identity.1

The EU member states take turns hosting the event, and in 2017, Denmark and Cyprus are the hosts. The EU does not provide funding, aside from the possibility of €1.5 million from the Melina Mercouri prize. The prize may be awarded to the designated city no later than three months before the start of the event. The Melina Mercouri prize was introduced in 2010 to ensure that cities did deliver – especially with regard to the European dimension of the event, which for many cities seems to disappear in the complex local process of creating a year-long mega-event that has to fulfil a number of local and national political purposes (Palonen, 2011). The prize is awarded based on a monitoring process that allows for a dialogue between the delivery organisation of the event, and the EU Commission for the development and changes to the project after the designation.

The process involved in becoming a ECoC is depicted in Figure 1. Five years prior to the event, candidate cities in the appointed countries submit a first bid. After a national and European evaluation, up to four candidate cities qualify for a second application round, resulting in the designation of the winning cities, which then start their preparations.

The preparation for Aarhus 2017 began officially in 2007, when the city council decided to run for the title. Behind the bid were not only the Aarhus Municipality, but also the Central Denmark Region and the other 18 municipalities in the region. The extensive bid book presented the strategic objectives, the budget, the process, the sub-themes, the structure of the cultural programme and many cultural projects that were intended to be included in the final project.

Many different stakeholders contributed to the development of the project during the application phase, aiming to secure strong local and regional commitment to the project. The total budget for Aarhus 2017 during the application procedure was DKK 500 million (€67 million), generated as follows: DKK 100 million (€13.3 million) from Aarhus Municipality, DKK 45 million (€6 million) from the other municipalities in the region, DKK 55 million (€7.3 million) from the region, DKK 200 million (€26.7 million) from the Danish state and DKK 100 million (€13.3 million) from private sponsors and donors.

The theme of Aarhus 2017 is “rethink”, and the objectives related to this theme were formulated as six strategic goals during the application. These goals were approved politically by all local and regional public partners. After winning the title, preparation for the event began, including the establishment of the Aarhus 2017 foundation, which is responsible for organising the event. This means that the responsibility for delivery was handed over from the administration in the municipality to an independent foundation. The process of establishing the new organisation took place alongside the start-up of the project itself. The process scheduled in the bid book included a strategic development phase in the years 2013-2016. This meant that the project was ongoing during the establishment of the new organisation, a process that turned out to be longer and more complex than expected.
Managing director Rebecca Matthews began in June 2013; after a second call for applicants, programme director Gitte Just joined in September 2013. In November, head of communications, Benedicte Strøm, joined as the last member of the management team. She left in February 2014, and in September of the same year, the programme director also left. Additionally, there were problems with state funding for the project. Not until June 2014 did the Minister of Culture commit to a specific amount of money: DKK 145 million-DKK 55 million less than in the projected budget.

2.1 Case: project, programme or megaproject?

The case presentation illustrates that an ECoC is no ordinary project – and we might question whether the 2017 organisation is correct in still labelling it a “project”. We divided the ECoC into two stages: the bidding process, and the execution of the ECoC after its being designated as such, as we see significant differences in the organisation of the two parts, which we briefly outline below.

During the first stage, the organisation was setup as a project: it had a project manager, a project team and political management, with the role of a steering committee. With the designation, the organisational setup was transformed entirely into managing a programme of multiple projects, all of which adhered to the defined strategic direction, labelled “rethink” (Lycett et al., 2004), as all have been, and will be, co-funded by the Aarhus 2017 foundation, provided they have a “rethink” agenda. This may be considered as multi-project management or a programme, and in practice, it may be difficult to tell the difference (Näsholm and Blomquist, 2015). As the programme organisation is not responsible for developing the different projects, but ensuring only that the projects they fund adheres to the strategic objectives, we use the label of “programme”.

We have argued that the temporary organisation changed from project to programme. However, by applying Morris (2013, p. 13) general project definition we could also consider the stage up until the designation as the initiation of the ECoC project, and, with the designation, the execution follows, and we could regard the whole as one single project. Applying this line of thought, we have a very large cultural project, which draws our

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2 The term ‘programme director’ may be a little confusing in the context of discussing project and programme. The role of Gitte Just is that which is ordinarily termed ‘artistic director/manager’, but reflects the fact that the role of the programme director is not to develop cultural content, but the cultural programme, including all the different (sub)projects developed by artists, cultural operators and cultural institutions.
attention to megaprojects (Flyvbjerg et al., 2003). Some of the megaproject traits of the Aarhus ECoC are that the capital investment is relatively larger than any other cultural initiative, the level of complexity is very high, and the bid book may have been subject to a planning fallacy (Flyvbjerg, 2005), where the most ambitious project increased the likelihood of Aarhus receiving the title of ECoC. Despite these similarities, we refrain from using “megaproject”, as the capital investment is far from the rule of thumb minimum of $1 billion, and the responsibility for developing the major part of the programme relies on the projects themselves, not the programme organisation.

In this paper, we refer to the Aarhus 2017 organisation as a “project” before the designation, and a “programme” after the designation.

3. Empirical study

Our case study of Aarhus 2017 is based on a combination of formally gathered data sources, and more informally acquired information about Aarhus 2017. Louise Ejgød Hansen has been engaged in the project in the period from 1 February 2013 to the present day, involved in coordinating, and later managing, the research and evaluation project, rethinkIMPACTS 2017, a strategic partnership between Aarhus University and Aarhus 2017. Because of her close cooperation with Aarhus 2017, Hansen has comprehensive insight into the process and the challenges involved, but this also means that she cannot be considered a traditional, disengaged, independent researcher with an external perspective on Aarhus 2017. Markus Laursen includes Aarhus 2017 as a case study in his PhD project, Rethinking management of projects, focusing on value creation in projects, and has followed the development of Aarhus 2017 and participated as an observer at various events and workshops arranged by both rethinkIMPACTS 2017 and Aarhus 2017. However, he is not engaged in direct cooperation with Aarhus 2017.

3.1 Engaged scholarship

The research practices of both Hansen and Laursen may be considered examples of what van de Ven (2007) has termed “engaged scholarship” meaning that central insights are developed in the dialogue with the external partners engaged in the research process and research findings. Hence, our research findings cannot be considered value-free, but rather value-full, to paraphrase van de Ven (2007, p. 14).
For the purpose of this case study we have approached the data abductively (Van de Ven, 2007, p. 105): without a predefined, theoretically-based research question, and starting by inductively examining what may be key research topics related to our interest in understanding the transition from applicant to designated ECoC.

3.2 Research interviews

Since this paper focuses on the challenges related to the management of the transition from candidate to designated ECoC, we have chosen to focus on the way the management team responsible for the organisation of the first phase following the designation has tackled this, and how the structures may have influenced the situation. This means that the main empirical material for analysis consists of four, semi-structured research interviews with the managing director and programme director from Aarhus 2017, carried out by Louise Ejgod Hansen. The interviews with both the managing director and programme director took place in June and September 2014. The interviews were conducted as a part of a broader data-gathering process that is part of the research and evaluation project, rethinkIMPACTS 2017, and is intended to document various aspects of the Aarhus 2017 project, including management and organisational issues.

The interviews were broad and explorative, and not guided by any specific research questions. After their transcription, the interviews were first thematically categorised, and then condensed into central concepts and terms. These included terms such as: “political attention”, “state funding”, “change in management”, “prioritization”, “change of management”, and “application”. Both the categorisation and the condensation were done inductively, which means that the themes and concepts originated from the interviews, and were not guided by theoretical concepts or predefined research questions. In this sense, the method is similar to a grounded theory approach (Charmaz, 1983; Krogager, 2012), when it comes to generating and formulating relevant research questions.

3.3 Media content analysis

We are aware of the implication that the perspectives presented in this analysis are those of the current management team. Therefore, the analysis of the interviews is supplemented by additional data from media content analysis.

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3 The interviews have been conducted as a part of the data gathering for the research-based evaluation carried out by rethinkIMPACTS 2017. The use of the interviews in a non-anonymised form has been accepted by both Rebecca Matthews and Gitte Just. Both were informed of the plans to publish and an early draft of the paper was presented to them.
media content analysis aimed at examining the hypothesis that Aarhus 2017 was indeed in a management and communications crisis during the period we examined it. Thus, we conducted a media search on the Danish national media database, Infomedia. The search covered the period from 1 June 2013 – the day managing director Matthews took over the management of Aarhus 2017 – to 1 October 2014, approximately a month after programme director Just resigned. The search included all articles in regional and national newspapers containing both “2017” and “management/ leadership” (in Danish: “ledelse”), and the result was 721 articles, of which 71 were deemed relevant. The tone of the coverage was analysed by categorising each article as neutral, positive descriptive, positive analytical, negative descriptive or negative analytical (Garcia et al., 2010). The category of “descriptive” was used for articles mainly referring to facts and attitude, but not presenting an evaluation as such, whereas the positive or negative analytical articles were articles in which the overall attitude and conclusions were value-based. Most of the articles in the analytical category were editorials.

3.4 Document analysis

A key data source is the bid book. This official document is the key to understanding how Aarhus 2017 was conceived and planned in the application phase. It gives insight into the basis on which the current management team has had to build, and the way in which the actual process has been diverted from the original plan. We would like to argue that in terms of project management, the bid book may be considered the business case for the project. This understanding informed our reading of the bid book, and made us focus on aspects such as whether or not the delivery goals were realistic, the balance between clearing the interests of stakeholders at a strategic level, and the detailed development of the project delivery. The bid book was analysed, focusing extensively on it as a basis for the transition from applicant to designated ECoC. Key descriptions for the analysis included: first, the relationship and balance between strategic objectives and specific subprojects, second, the description of the process of developing the project in the application phase including the way in which stakeholders were engaged, third, the outline of the process of delivery including the milestone plan for the establishment on the organisation and management and the initiation of the different subprojects, and fourth, the funding and financing of activities over the years 2013-2018.
4. Findings

Based on the perhaps vague, initial idea of Aarhus 2017 being in a crisis, we identified four characteristics of the phase of our period of interest: the period immediately following the successful bid in 2012. The three challenges were:

1) the challenge of going through what might have been considered just a phase change in the project life-cycle, but what we argue might better be understood as a change from a project structure to a programme structure;

2) the challenge of a concurrent change of management; and

3) the challenge of managing stakeholders of a programme with strong groups of stakeholders with a high level of interest and a high level of power (Eden and Ackermann, 1998).

We have approached these three challenges abductively, analysing the empirical material and linking this to theories on project and programme management including management of public projects, arts management and stakeholder management. We also link to secondary data and existing research on ECoC. This is done in order to search for possible generalisations. As stated in the introduction, we are looking for an understanding of the challenges of managing Aarhus 2017 than are not based on individuals but on structures. The existence of similar challenges in other ECoC is thus used as an indicator for this.

4.1 Challenge 1: Transition from one project phase to the next or transition from project to programme

As we have argued in the case presentation, we consider the transition from applicant to designated ECoC as not only a transition from one project phase to another. This is not just a matter of change of organisational structure and of level of complexity, but also a matter of change in the purpose of the organisation carrying out Aarhus 2017. And as we will show, the discrepancy between the objectives of the project and the programme can be considered as having consequences for the scoping and planning of Aarhus 2017 in its entirety.

The process involved in becoming and being a ECoC is long and complex. The EU process from the call for applicants to evaluation alone takes eight years. The European Commission describes the process as going through the following phases: application, implementation,
delivering (the actual year) and evaluation[^4]. There are different milestones in this process, one of the central being the milestone of designation. If we make an attempt to understand this within a project-based thinking an ECoC is regarded one project and it is similar to Morris generic development sequence of a project “(1) idea; (2) outline concept and strategy; (3) detailed planning; (4) execution; and (5) completion/close-out” (Morris, 2013, p. 13). The frequent use of the label project, indicates that the Aarhus 2017 organisation understand itself adhering to this project cycle, and not as we have argued in Section 2.1 that the organisation is now a programme that have succeeded the project covering the application stage using the terms of the European Commission.

This is in many ways also the way that the bid book understood and described the transition from applicant to designated, but as we have argued, the understanding of the milestone of designation might be better understood as a transition from a project to a programme. In the case of Aarhus, the change from applicant to designated ECoC meant a change in organisation from a project organisation within the cultural department of Aarhus Municipality to an independent foundation, as well as the initiation of a recruitment process for a new management team. This understanding also makes it possible to understand the application process not just as a pre-project and initiation phase, but as a project in itself. One indication of this is the fact that the Aarhus Municipality hired the manager of the application process as just that: the manager of the application process. This meant that his main focus and main success criterion was winning the title. Of course, the explicit objective of the application phase is to actually be a ECoC, but the first (more implicit) objective is to win the title. If, during the application process, the project organisation focused too much on the objective of delivering an application with the chance of winning, it might have taken attention from the proper planning of the subsequent realisation phase within the 2017 project as a whole.

Another indication of the fact that the application process for Aarhus 2017 was planned as a project in its own right is the set of phases into which the team divided this process (Figure 2). This seems very similar to the project life-cycle model, with the mapping phase as the initiation phase, the vision phase as the initiation phase, the workshops and themes

[^4]: Based on the text: How does it work (http://ec.europa.eu/programmes/creative-europe/actions/capitals-culture_en.htm)
phase as the realisation phase, and the preparation of the first and second applications as the final delivery phase.

The foregoing analysis indicates some of the challenges that Bent Flyvbjerg has described with regard to megaprojects (Flyvbjerg et al., 2003). Again, we do not claim that Aarhus 2017 is a megaproject, but we find that some of the challenges are the same. First the evaluation process of the bidding phase is similar to the bidding process of megaprojects, and is characterised by what Flyvbjerg has termed “the megaproject paradox”, meaning that megaprojects tend to have a poor performance rate, if you base the performance evaluation on the promises made during the bidding phase. Looking into research on former ECoC, we find the discrepancy between the project as described in the bidding phase and the actual, delivered programme being analysed by Connolly (2011), who argues that Liverpool 2008 is better understood as two different projects – a project developed and described in the bidding process, and a totally different one, delivered after the ECoC designation. The challenge is related to the process of applying and delivering, as they are framed by the European Commission. The long planning process as well as the mandatory planning of subprojects as a part of the bidding phase is a challenge addressed by Garcia and Cox (2013). They argue for the need to focus on the development of visions and strategies more than on the developing concrete projects and events in the bidding phase.

<table>
<thead>
<tr>
<th>Figure 2: Project life-cycle of the application project</th>
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<tbody>
<tr>
<td>2008</td>
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<tr>
<td>Mapping</td>
</tr>
<tr>
<td>Visions</td>
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<tr>
<td>Workshops: themes and subprojects</td>
</tr>
<tr>
<td>1st application (deadline 11-09-030)</td>
</tr>
<tr>
<td>2nd application (deadline 12-06-15)</td>
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Figure 2. Project life-cycle of the application project

The Study Workshop I participants highlighted the detrimental effect of placing too much emphasis on event detail at the bidding stage, before a sound mission statement has been defined and fully developed, validated and appropriated by key stakeholders. Such detail, and the expectation that final programming should adhere to original event proposals from the bidding stage, hinders the city's ability to develop a sound vision afterwards, and forces organisers to compromise in order to keep often disparate events as part of the programme (ICC Workshop I, April 2013).
Even though in their report the EU Commission replies that they have an understanding of the need for a flexible and dynamic development of a project, Garcia and Cox maintain their criticism of the process.

In this context, it is not surprising that cities spend considerable time thinking of detailed programming examples, which may, in turn, limit their capacity to consider carefully enough the overarching vision, or result in specific event programming promises that may eventually contradict or limit the credibility of the overarching vision (Garcia and Cox, 2013, p. 161).

During the application phase, the potential imbalance between developing strategies and visions, and concrete projects forecasts-problems in the subsequent planning and delivery phase, where the projects may not be based on a strong vision, and thus may not be able to contribute to the achievement of the strategic objectives. This also indicates the need to continue the development of the vision and strategy during the planning and delivery phase.

The ongoing development and dynamics of an ECoC mean that the actual year never mirrors the application entirely. In the case of Aarhus 2017, this is not just a result of the budgetary constraints caused by less funding than expected from the national government. It was also caused by the fact that the projects developed in the application phase needed further strategic development, resulting in the development of a strategic business plan presented by the Aarhus 2017 foundation in January 2015 (Aarhus 2017, 2015).

4.2 Challenge 2: Management transition

Concurrent with the change or organisation and the transition from project to programme, the Aarhus management team changed completely. This is not extraordinary for ECoCs, where change in senior staff happens quite regularly. And, with the differentiation we made between the application process as a project in its own right, and the delivery as a programme, it may be argued that the shift in management profile and the skills of the management team are positive (Garcia and Cox, 2013, p. 16). However, the change itself is a challenge, especially in the case of Aarhus 2017, because it did not happen smoothly: the hiring process took longer time than expected, which meant a gap in management of several months, during an important transition. And, it was followed by unplanned changes in management, when the head of communications and the programme director resigned in February and September 2014.

When looking at arts management theory, a change in management within arts and culture organisations is considered a greater challenge than in other organisations. But, the personal
profile and qualities of the manager are important for the management of cultural projects. According to Wennes (2002, 2007), this means that there are special challenges and dilemmas related to the question of management of art organisations. Based on the same argument that the management of art organisations is a special case, Landry (2011) provides a conceptual framework for the analysis of management succession in art organisations. Referring to consultancy reports by MacSkimming and D’Entremonte (2005), and Liteman (2003), Landry defines the goal of succession as: “to facilitate the achievement of the organisation’s artistic mission and strategic objectives, thus ensuring its artistic vitality and sustainability” (p. 46). This also means that changes in management should be expected to influence the development of the project. When discussing with the managing director the experience of managing a project developed by someone else, she states:

[…] taking on another person’s dream, another person’s ideas, trying to inhabit them. I think in a way that it was less hard for me than it would be for the programme director, because of course they have to choose to either unpack it or move it and start again or build on top of it (Matthews, 2014a).

At the outset, the programme director stated very clearly that she saw a need for the development of the project, related to both the scope of the project and the prioritisation of the strategic objectives:

I think you need to stay much more focused and say that we don’t have to do everything that we could do just because we could. We need to do the things that make sense. And we need to make very strict priorities. It is important to be able to agree that something simply do not have the level of quality in this context that can put you in a strong position and mean that you’ve got something to build on (Just, 2014).

The programme director identifies the need for a clearer and more focused strategy, a need that, according to the linear project life-cycle model, should have been dealt with during the initiation phase. This links directly to the point about the challenge of change in management in cultural programmes: that it is tightly linked to the idea that the programme director would have the ambition to influence the content and strategy of the cultural programme.

Based on a neo-institutional approach, Landry (2011) emphasises the duality of continuity and change when looking at succession processes in cultural organisations. He distinguishes among planned succession, emerging succession and spontaneous succession. In the case of Aarhus 2017, the change in management may be considered a planned succession (Landry,
2011), because the process was described in the bid book, which stated that calls for applications for all three members of the management team should be announced in the autumn of 2012, so the team could be in place between January and March 2013 (Aarhus 2017, 2012, p. 96, sec 3.1.3). But there are also elements of spontaneous succession (Landry, 2011), since no efforts were made to prepare for the transition, or to have a period of handing over.

Landry (2011) presents three pillars on which institutional stability rests: regulative, normative and cultural-cognitive (p. 50). All these forms of stability need to be included when investigating the role and the possibilities of a new management team taking over in the middle of a project period.

The regulative pillar consists of rules and contracts on which the management of the cultural institution or project is obliged to base its practices. In the case of Aarhus 2017, the bid book and the monitoring process of the European Commission, linked to the potential reward of the Melina Mercouri Prize, are important parts of the regulatory pillar. This role became clear at the first official monitoring meeting in autumn 2014, on the basis of which the panel set by the commission recommended:

The Managing Director and the Board have a responsibility to ensure that the strategic objectives of the ECOC criteria and the bid book are met. […] The panel suggests that the managing director, with the incoming senior artistic team, ensures that the various Boards and advisory panels are aware of the importance of the bid book and the internationalisation of projects (Monitoring and Advisory Panel, 2014, p. 5).

The implication of this statement is that there are strict regulatory limitations on the way in which a new programme director may change an ECoC.

Normative stability comprises the values and expectations of the manager in relation to the programme, and cultural-cognitive stability is linked to the artistic mission of the organisation. In the case of Aarhus 2017, the strong commitment of a wide variety of stakeholders certainly added to the cultural-cognitive stability of the programme, which we further explore in the next section. But also, the continuity among staff members added to the stability: several key staff members (below management level) have been participating in Aarhus 2017 since the beginning. Finding a way to balance the dichotomy of stability and change as a part of the transition in management has certainly been a challenge for Aarhus 2017, not least because this strategically important concern was not the only thing on the
agenda when the transition took place. It took place simultaneously with the transition from
the application phase to the delivery phase, and at a time when the budget of the programme
was insecure.

The clear implication for practices in other, similar projects is that it is important to allow
time for strategic development when changing management, especially when this change is
also related to a transition from one organisation to another, and from one project (winning
the title) to another (delivering the event).

4.3 Challenge 3: Managing stakeholders and operating within the EU governance
structures

The stakeholders and the governance structures of the Aarhus 2017 present a challenge, as
the expectations of the stakeholders, and their power in the project, may have been the root
causes of some of the public criticism and frustration.

During the bidding phase, many parties were involved to a great extent, and it was to a high
degree a bottom-up process. This was meant to forge a strong commitment, to establish solid
roots for the ECoC among both political and cultural stakeholders, if Aarhus were entitled to
host the 2017 ECoC. This high level of involvement did obtain commitment from stakeholders, but it also created expectations. The expectations were related to further
involvement in developing the programme, following the designation, and from the projects
that were developed to be included in the bid book came the expectation of funding, despite
no stated promise of it. These projects were pre-qualified for the 2013 call, as outlined in the
bid book.

The power of stakeholders may be scrutinised applying the power/interest grid that Eden and
Ackermann developed for stakeholder analysis (Eden and Ackermann, 1998, pp. 121-122),
where we adhere to “stakeholders” as “individuals and institutions who share a stake or an
interest in the project” (Freeman, 2010; Cleland, 1986). The stakeholder grid considers the
interest in the performing organisation along one axis, and the power of the stakeholder to
influence the success of the organisation, along the other. Special attention is paid to the
actors who have both the power to influence and an interest in doing so: the players (Eden
and Ackermann, 1998, p. 122). We also regard the stakeholders in relation to governance,
addressing the general approach to project governance and the related governmentality
(Müller et al., 2014), where we may expect a process-oriented approach, as the ECoC is a
major public investment project (Klakegg and Haavaldsen, 2011; Miller and Hobbs, 2005).
Miller and Hobbs identify a number of key themes for the governance of large, complex projects; we particularly emphasise two: the importance of having strong sponsors, and the high levels of uncertainty and of risk.

A high level of stakeholder commitment comes at a cost, as the expectations of future involvement have been high. The expectations are related to both the funding and the development of the programme. The project owners that took part in the bidding process felt their projects were already included, but they were never promised more than a pre-qualification for the planned 2013 call. Aarhus has applied “a broad, bottom-up, consultation process that is about listening to the voice of people […]” (Matthews, 2014b), which is in accordance with one of the core values of Aarhus 2017: democracy. When developing the actual programme, the process was focused with the help of experts, and despite the managing director not seeing it, entailed a change from bottom-up to top-down management, whereby some stakeholders were no longer part of the process, leaving them frustrated in their expectations of continued involvement.

The stakeholders were probably right to have expectations, and the management team may also have been right in focusing their efforts, as they say, “when you have an ambition […] you cannot be everything to everyone” (Matthews, 2014b). Instead, we focus on the application process, where the application needed to show examples of projects, more than five years in advance of the ECoC year. We might say that this level of detail puts pressure on the bid, and it forces the project organisation into developing projects to be displayed in the bid that may never be funded. Therefore, these projects may function only in the screening of the bid, and not form part of the creation of the ECoC.

The management team of the programme organisation took over a plan and expectations created by the prior management, which had outlined the funding of projects from 2013 until 2017. However, in 2013 – the programme organisation was not yet in place, and therefore, the application process in 2013 differed significantly from the original plan. Instead of a large round of strategic projects, there was a call for development projects, resulting in a subsidy for 111 projects, and a total budget of DKK 10 million (Aarhus 2017, 2013). This may have created expectations of future funding, as the programme director puts it: “We’ve made it! We’re part of the project” (Just, 2014). The 2014 call was also changed from the original plan, as state funding was still not established, leading the board to limit the funding of strategic projects – the essential part of creating a lasting effect, and not just events in 2017. A total of DKK 9 million were granted to 44 strategic projects in 2014 (Aarhus 2017, 2014),
which is DKK 13 million less than the budget in the bid for 2014, and for 2013 it was DKK 5 million less than the original budget (Aarhus 2017, 2012, p. 98). As seen, the funding scheme has been somewhat inconsistent, in terms of both signals and timing. The former management had a broad perspective, whereas the current management team is more narrow focused, as the strategic projects will be funded on a yearly basis until 2017. Therefore, the terms for managing stakeholder expectations have been tough, and the organisational structure may also have an influence.

As touched upon in Section 4.2, the management team is essential, and most likely more important for delivery of arts projects than most other types of projects. Therefore, strong political commitment and potential interference may cause problems, and at the same time, political backing is also needed, provided that the ECoC is a very political project. In the case of Aarhus 2017, we need to add a dimension to Palonen’s three political dimensions: European, national and local, as the entire region of 18 municipalities is a co-host. Therefore, the project needs to strike a balance between the Aarhus municipality and the wider, regional political agenda, as all the municipalities have been promised a return on their investment in the ECoC. There may be a problem with political interference, as the arm’s length principle does not apply in Aarhus 2017, this is a known problem for ECoCs, as about half the cities studied have experienced problems with too much political interference (Palmer/Rea, 2004, p. 55).

In summing up this analysis, we will compare the Aarhus 2017 programme strategy to that of Umeå 2014, which Näsholm and Blomquist (2015) describe as a co-creation strategy, an approach that seems very similar to the approach taken in the application phase in Aarhus. Their analysis of an emergent process in which the projects existing within the programme were neither the result of the top-down development of a central organisation, nor the gathering together of existing projects, constitutes a management challenge and is a process in which the management of the project has to change roles during the process.

In the Umeå 2014 case improvisation and flexibility is stressed as an important strength of the team, but as the programme begins to develop they see a need for a slightly more structured approach. With the diffuse roles and unclear ways of working it was challenging in the beginning, but with increasing control the need to create a balance between different types of projects became more apparent (Näsholm and Blomquist, 2015, p. 69).
What happened in Aarhus 2017 as a part of the transition from applicant to designated ECoC may be described as a change from the more open, flexible and less settled process, to a more structured process focusing on delivering and planning the event. This seems so obvious, but the way this process develops is dependent on the management team, the strength of the organisation responsible for this process, and the way in which they are able to manage the different interests of the stakeholders.

5. Conclusion

It should be clear from the present case study that managing a ECoC is no easy task, which might invite research, owing to the recurring nature of two ECoC projects every year, yet this is not the case. There is little empirically-based research on the management of the projects and on the challenges related to this, despite a considerable amount of research on ECoC projects in general. The nature of an ECoC project in relation to management reveals complexity comprised by a relatively large size and the embedded local significance that may take this type of project beyond classic project management theories. As Näsholm and Blomquist (2015) have argued, ECoCs may be better understood as programmes, because this better mirrors the complexity of the process. Our elaboration of this indicates the idea that the process as a whole may be understood as a project followed by a programme, thus emphasising the transition from applicant to designated ECoC. Understood as such, it becomes clear that the implicit purpose of the application project is part of the challenge of managing an ECoC. As pointed out by Connolly, the chances of winning the title are greater if the promised results are so ambitious that they are impossible to deliver.

However, the commitment to economic and social regeneration within Liverpool’s approach proved to be both a blessing and a curse: a blessing in that it contributed to its winning the award; a curse in that the tensions and incompatibilities within such an approach inevitably destabilised Liverpool’s plans for COC08 (Connolly, 2011, p. 170).

The management of a high level of expectation is very strongly linked to the challenges of managing key stakeholders during the transition period. High ambitions are required to win the title, and to obtain political and public support, with the more pragmatic and realistic question of how much change and development a year of being a capital of culture can actually generate, a point that we further address in the discussion returning to Flyvbjerg’s
(2009) critical analysis of megaprojects. Therefore, we turn to megaprojects as presented by Flyvbjerg et al. (2003).

In Aarhus and the surrounding region, the ECoC cultural project is tremendous, and although it does not come close to the rule of thumb of USD 1 billion of a megaproject, EUR 67 million is a relatively large sum of money in this context, and the time span of a decade is not trivial. Although the risk of overspending in Aarhus 2017 may be reduced by the fact that few events are organised centrally and funds are given to projects, we see another risk, in terms of the bidding structure. Bid books are handed in by candidate cities with the intent of being awarded the title of ECoC, which provides incentives for overly ambitious projects, similar to those noted by Flyvbjerg (2009). The fundamental difference is the absence of sanctions, only EUR 1.5 million were given by the EU to the project. In contrast to the Olympics, ECoC cities do not necessarily commit to large infrastructure investments or other investments that supposedly bring about cost overruns (Flyvbjerg and Stewart, 2012). It is suggested that further research should be conducted on ECoC projects, by regarding them as megaprojects.

5.1 Implications for practice

In our findings, we see implications for practice in three main areas that are relevant to practitioners, especially in culture and arts projects. First, the change in management of cultural projects is particularly risky, owing to the strong connection between the project manager and the project, that is, the manager may define the project, in contrast to traditional, product-focused projects, where the project manager does not define the output. In this context, changing the project manager is likely to lead to delays in the activities. Second, following the first implication, the common practice of not having the same project manager across application and final delivery in the ECoC requires attention to managing the succession actively, or ensuring that interim project management is in place, to keep the project on track, bearing in mind the risk of the project taking a zigzag course. Third, making fundamental changes to the project organisation along the way requires attention, and many resources. Therefore, during the application process it is vital to plan how the transition from

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5 In the case of Aarhus 2017, a lot of investments are being made alongside the preparation for 2017, but these infrastructure investments are not included in the budget of the year itself. This follows a general feature of ECoCs to have “a complex, and not clearly articulated” relationship between the physical development and the event itself (Garcia & Cox 2013, p. 65).
applicant to designated ECoC should be carried out, in a way that will support the outlined schedule and activities to which the bid book commits the project.

Even though the application describes the project in great detail, room has been left for the current management team of Aarhus 2017 to influence and change the project in ways that add their vision and direction. The current management team uses this freedom when changing the way the programming will proceed. The challenge is to do this in a way that does not create too much resistance from the local cultural institutions and artists that must participate in the event, in order to make it successful. They also try to address the political involvement, which seems more difficult because of the organisational structures, which include not only a board with a political majority, but also a regional steering group with representatives from 19 municipalities that have a strong say in the development of the project, including a consultancy role with regard to the programme. How this develops during the next years remains to be seen.

References
Aarhus Candidate European Capital of Culture 2017 (2012), Application, Kulturforvaltningen Aarhus Kommune, Aarhus.
Horizons*, 33, 44-54.
Cox T., O’Brien D. (2012), The "Scouse Wedding" and other myths and legends: Reflections
on the evolution of a "Liverpool model" for culture-led regeneration. Cultural Trends
ECoC Policy Group (2010), An international framework of good practice in research and
delivery of the European Capital of Culture programme. University of Liverpool, Liverpool.
SAGE Publications.
Emerson R. *Contemporary Field Research*, Waveland Press, Prospect Heights, IL, pp.109-
126.
Flyvbjerg, B. 2009. Survival of the Unfittest: Why the Worst Infrastructure Gets Built, And
Flyvbjerg, B. & Stewart, A. 2012. Olympic proportions: cost and cost overrun at the
Oxford.
Press.
Garcia B.; Cox, T. (2013), *European Capitals of Culture: Success strategies and long-term
effects*. Bruxelles: Directorate-general for internal policies, European Parliament
Garcia, B.; Melville R.; Cox, T. (2010), Creating an Impact: Liverpool’s experience as
European Capital of Culture, Impacts 08, Liverpool


PMI 2013. *A guide to the project management body of knowledge*, Newtown Square, PA, USA, Project Management Institute, Inc.


Programming for holistic value creation: Collaboration, coordination and perception

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Abstract

Purpose Holistically explore value creation approaches in a program of cultural projects to inform the practices of project/program management in both public and private sectors.

Design/methodology/approach The paper brings together the literature on project, program and portfolio value creation to inform a case study conducted with engaged scholarship research methods.

Findings Three themes of value creation are revealed; managing collaboration, coordination and perception. Effectuation and causation are both observed, demonstrating that a combination of logics underpin decision making in projects.

Research limitations/implications The results are based on a single case in a cultural context. Further research is needed to determine whether the observed value creation themes apply more generally, and to explore more deeply the use of logics associated with entrepreneurship in project decision making.

Practical implications The study reveals several non-commercial aspects of value creation that may play a role across a range of project environments. Practitioners may be able to recognize a wider range of value creation and to better nurture these previously unacknowledged types of value.

Originality/value The study provides new insights on value and decision logic through in-depth analysis of value creation in a program of culture projects.

Paper type Research paper

Keywords Value Creation; Program Management; Effectuation; Entrepreneurship; Public Value; ECoC
Introduction

The inquiry reported in this paper uses a program in a cultural setting to better understand how value is created through program and project portfolio activities. The holistic management of a portfolio of projects has long been associated with stronger strategic alignment and higher value in the portfolio. The ‘value’ created by programs and project portfolios is complex and multi-faceted, however little research is reported on program value and most research on project portfolio management (PPM) frameworks focus primarily on financial and commercial value, providing little guidance for the management of programs and portfolios with non-commercial aims such as public value (Benington, 2011; Moore, 1995).

The purpose of this paper is to extend our existing knowledge about how value creation is practiced in programs in the public sphere to understand the creation of public value. Our focus on a case with non-commercial outcomes has assisted in exploring of what types of value is generated rather than how much in financial terms; value that may also be relevant in commercial organizations. Such value can be elusive due to the prevalence and focus on financial and commercial metrics. Therefore, the findings are relevant to both commercial and public environments and provide increased depth in our understanding and management of the types of value that are created through programs. We studied the management of a program that developed the European Capital of Culture (ECoC) in Aarhus, Denmark in 2017. The projects in this program were mainly development projects for creating cultural activities during 2017. The ECoC is a yearlong celebration of European culture and identity first initiated in 1985 by the European Commission (European Union, 2015). In 2012 Aarhus was nominated as the Danish host for the 2017 ECoC (referred to as Aarhus 2017) and the projects in the program were funded through multiple rounds of funding during 2013-2015. In total there will be more than 350 projects and events including cultural projects as well as projects for community consultation, administration. A commercial foundation was established in 2012 to head the delivery and management of this 60.2 Million Euro initiative (Aarhus 2017, 2016), however culture can provide a wide range of value types; from the individual level to the societal level and from wellbeing to economic value (Crossick & Kaszynska, 2016), but often the value is for the public sphere (Benington, 2011).

In entrepreneurship research, effectuation was introduced as a radically different approach to decision making (Sarasvathy, 2001). Effectuation principles have subsequently been applied
in project management literature and research (Brettel, Mauer, Engelen, & Küpper, 2012; Huff, 2016; Nguyen, 2015) and our study suggests that effectuation may have a particular role to play in cultural projects. In many ways, effectual principles represent the inverse of the traditional causal logic underlying common project management approaches. Causal mental models drive up-front definition of project aims and results, a focus on return on investment, and planning to avoid risks. In contrast, effectuation principles support project evolution based on available means, allowing for affordable losses, while experimenting and forming partnerships to create opportunities and share risks. We explore the use of both effectual and causal logic in ECoC decisions making.

In this paper, we first provide an overview of the research context, the ECoC Aarhus 2017, and then we present the literature background, followed by the methodology. We present our findings on three themes for creating value; collaboration, coordination, and perception followed by the types of value and findings concerning the types of logic underlying decisions made during the ECoC. We discuss the application of the findings to commercial environments and we present implications for research and practice as well as limitations based on this study. Finally, we present conclusions of this study.

Aarhus 2017 – European Capital of Culture

The award of the ECoC for 2017 was meant to provide Aarhus and the surrounding region with a cultural as well as capability boost by providing a platform to ‘rethink’ society on a grand scale (Aarhus 2017, 2012). Aarhus announced their candidacy in 2007 and a project organization was set up in 2008 to start the preparation of a bid for the selection process that lead to the designation of Aarhus as ECoC in 2012. After 2012 the organization was transformed (Hansen & Laursen, 2015), setting up a commercial foundation primarily funded by state, region and municipal funds but also partially funded by others such as foundations and commercial actors. In a timeline of Aarhus 2017 illustrated in Figure 1 the transition from project to program marks a change in character and level of activity in the program organization. The foundation has a board of politicians and experts of relevant professions, who are ultimately responsible for the ECoC. The foundation operates a secretariat in charge of all aspects of daily work for executing the ECoC, which includes artistic programming, project co-funding, promotion, and fundraising as well as a small proportion of events in 2017. The main part of the projects were selected by the program organization and executed by various cultural institutions and other actors throughout Aarhus and the surrounding
region. In addition, major cultural and sports events may be affiliated with the Aarhus 2017 narrative without Aarhus 2017 co-funding these activities.

**Figure 1. Timeline of Aarhus 2017**

The Aarhus 2017 ECoC is centered on the theme ‘Let’s rethink’, which was initially divided into three areas of rethinking; the city, values, and creativity (Aarhus 2017, 2012). The three areas are complemented by six strategic objectives that provided directions for the development of the ECoC and implicitly state the effects and value that the initiative seeks to create, for instance ‘1: Aarhus 2017 will support the long term development and also underpin the significance of arts and culture. The cultural program will contribute to a strengthening of the development of a European culture.’ and ‘3: Aarhus 2017 will employ creativity, innovation, knowledge and experimentation to fuel human development and economic growth.’ (Aarhus 2017, 2012, p. 8). Value creation goals are stated in strategic objectives covering six impact areas; Cultural, Image and identity, Economic, Social, Organizational and political, and Governance and funding (Aarhus 2017, 2015).

In this paper, we refer to the group of projects funded under the Aarhus 2017 budget as a ‘program’ similarly to Näsholm and Blomquist (2015) who studied the 2014 ECoC in Umeå, Sweden. We emphasize that projects have a shared vision but are run and managed independently from the Aarhus 2017 program organization, and the program organization aimed for an average cofunding of 50% across all projects. The projects may have activities into or extend beyond 2017. We use the term ‘cultural program’ to refer to the artistic activities and events that will take place during 2017, as marked in Figure 1.

The high profile of the ECoC has led to the initiation of a research project, ‘rethinkIMPACTS 2017’ (RI2017), to evaluate and learn from Aarhus 2017. RI2017 is a strategic cooperation
between Aarhus 2017 and Aarhus University similarly to prior ECoC evaluations such as Liverpool 2008 and Umeå 2014 (Garcia, Melville, & Cox, 2010; Wåhlin, Kapsali, Harryson Näsholm, & Blomquist, 2016). The study reported in this paper contributes to RI2017 by addressing the lack of knowledge about the management of value in the non-profit sector in the program and portfolio management field. We focus on how value is created and managed in a program with a primary focus on public value.

**Literature background**

In this section we review the literature regarding long-term value in programs and project portfolios as well as value creation in a public sector setting.

Over time programs have been conceptualized in different ways from up-scaled projects to project portfolios (Lycett, Rassau, & Danson, 2004; Maylor, Brady, Cooke-Davies, & Hodgson, 2006; Pellegrinelli, 1997). The focus here is on programs as the coordination of a collection of projects (Pellegrinelli, 2011; Thiry, 2002), which some organizations might label differently e.g. using the label ‘a large project’ (Vereecke, Pandelaere, Deschoolmeester, & Stevens, 2003). This meaning is reflected in the definitions of practitioner organizations PMI, APM and Axelos that by and large focus on coordination and realizing strategic objectives or benefits through multiple projects (APM, 2012; Axelos, 2010; PMI, 2013). Value management has been suggested as a way to handle the uncertainty and ambiguity that is increasingly common in programs (Thiry, 2002; Thiry, 2015). Programs have long been associated with realizing value, but most studies focus on business value (Williams & Parr, 2004; Winter & Szczepanek, 2008), and there has been a tendency to focus too narrowly on commercial success (Jugdev & Müller, 2005) leading to a suggestion for broader evaluation frameworks (Barclay & Osei-Bryson, 2009). Commercial value is also emphasized in most portfolio studies and frameworks, however ‘best practice’ studies show that a narrow focus on financial value is associated with lower portfolio performance (Cooper, Edgett, & Kleinschmidt, 2001; Killen, Hunt, & Kleinschmidt, 2008), leading to calls for wider definitions of value and new frameworks that include strategic and longer term aspects (Kopmann, Kock, Killen, & Gemuenden, 2015; Meskendahl, 2010). However, research on the management of value in projects and portfolios is largely influenced by commercial measures, providing recognition and influence for only a subset of the potential types of value generated by the portfolio. This limits the quality of decisions and provides very little guidance for managing portfolio value in non-commercial environments.
Constructing value more holistically is beginning to be explored in project management field of research. A review of strategic value management in projects and portfolio concluded that there is a ‘*need to delve deeper and continue to find better ways to comprehensively identify and measure strategic value*’ (Martinsuo & Killen, 2014, p. 56). At the project level Artto, Ahola, and Vartiainen (2016) highlighted the value of non-financial aspects such as coordination structures and image, and propose that new project management approaches are needed to support value creation. Ang, Sankaran, and Killen (2016) explore the creation of value at a portfolio level, highlighting the wide range of value types perceived by multiple stakeholders and that the value that is created is not always anticipated or articulated, and therefore not adequately measured or included in decision making.

Outside the project management (PM) field we see value creation being addressed in ways that might inform PM research too. This will be addressed in two steps, first by the concept of value in business and public sectors and then value creation will be addressed. In PM research mainly related to the for-profit sector value has been defined as a representation of benefit/cost (Laursen & Svejvig, 2016, p. 737; Morris, 2013), where benefit may be regarded as ‘an outcome of a change that is perceived as positive by a stakeholder’ (Bradley, 2010, p. xiii), and cost as ‘the outlay or expenditure (as of effort or sacrifice) made to achieve an object’ (Merriam-Webster, 2016). Thus, the definition of value seeks to consider holistically both benefits and costs. It is acknowledged that in practice other terms such as benefit, outcome, and worth (Schryen, 2013) are used interchangeably with value. In this perspective, value is considered subjective and relative to the stakeholder (European Standard 12973-2000, 2000) and an implication of this is that value for one stakeholder may vary over time. But value has different characteristics in the for-profit and public sectors (Cole & Parston, 2006; Moore, 2013). According to Moore (1995) the goal and motivation for public organizations is to achieve a social mission by providing services and to increasingly improve the offerings (Cole & Parston, 2006), while the goal in the for-profit sector is maximizing shareholder wealth (Moore, 1995). This follows an instrumental perspective on public value that concern what is valued, but long-term public value might also be considered as intrinsic in answering the question, what is valuable to the public sphere? (Benington, 2009, 2011).

Based on the differences in the concept of value, performance and value creation differs as well. In the public sector the goal is related evaluating the efficiency and effectiveness in achieving the social mission and in the for-profit sector performance is based on the financial
bottom line (Moore, 1995). The for-profit sector may improve through competences of the firm for competitive advantage (Prahalad & Hamel, 1990) or by positioning products or services in the market (Porter, 1985), while the public sector improves through finding better ways to achieve the social mission (Cole & Parston, 2006; Moore, 2000). Moore finds that the public sector may apply for-profit management techniques, but these techniques do not comprehend the complexity need for balancing goals when achieving a social mission (2013). But value creation is central to both for-profit and public organizations, and we find some similarities outlined in the following subsection.

Value creation takes place at various levels, such as micro, mesa and macro (Lepak, Smith, & Taylor, 2007) and similarly the service to citizens may create outcomes of value to the public, such as citizen health (Kelly, Mulgan, & Muers, 2002; O'Flynn, 2007). Lepak et al. (2007) also focus on the duality of creation and realization of value, while others have focused value creation as a process of enabling resources (Love, Matthews, Simpson, Hill, & Olatunji, 2014, p. 6; Pang, Lee, & DeLone, 2014) through the application of capabilities (Barney, 1991). Programs have been discussed as value creating systems (Winter, Andersen, Elvin, & Levene, 2006; Winter & Szczepanek, 2008) in the understanding that focusing on the customer’s customer, or the use of the product delivery of the project means focusing on the outcomes and hence the value creation. This resembles the post New Public Management wave in creating public value that focus on the citizen as a shareholder (Horner & Hazel, 2005; Kelly et al., 2002). Recent developments to the normative perspective on creating public value (Bryson, Sancino, Benington, & Sørensen, 2016), some suggesting focusing on collaboration across sectors for creating value (Page, Stone, Bryson, & Crosby, 2015).

In the field of entrepreneurship Sarasvathy (2001) introduced effectuation as an inversion of the causation-based reasoning that formed the basis for traditional perspectives on new venturing. Effectuation logic is primarily based on four principles 1) being driven by means, 2) focused on affordable loss, 3) employ partnering for tackling uncertainty, and 4) the unexpected is considered as a new opportunity (Sarasvathy, 2001). Studies suggest that these four principles support entrepreneurial decision making (Dew, Read, Sarasvathy, & Wiltbank, 2009; Sarasvathy, Kumar, York, & Bhagavatula, 2014), however Sarasvathy’s model of effectuation logic has been criticized for not meeting traditional quality criteria for a theory (e.g. Arend, Sarooghi, & Burkemper, 2015). More work may be required to effectively operationalize Sarasvathy’s model, however the underlying logic has been applied to project-
based research, for example in a study of project portfolios (Nguyen, 2015), types of projects (Huff, 2016), and research and development projects (Brettel et al., 2012). Chandler, DeTienne, McKelvie, and Mumford (2011) validated the dimensions of effectuation, and find that the construct is based on the three sub-dimensions; experimentation, affordable loss, and flexibility, while pre-commitments is shared with causation.

After introducing the literature background, we shall present the research methodology for the present study through by elaborating on the research process and thereafter on the methods for data collection and data analysis.

**Research methodology**

The present study was initiated with the aim to explore how value creation is practiced in the Aarhus 2017 program. This study contributes to the research project RI2017 that has a broad scope of formatively evaluating the impacts of the Aarhus 2017 ECoC.

With a research focus on exploration, the research was designed as a case study based on qualitative research methodologies (Edmondson & McManus, 2007; Myers, 2009) including interviews (Kvale & Brinkmann, 2009), a research workshop (van de Ven, 2007), participant observation (Spradley, 1980), and document studies (Bowen, 2009). There has been an active dialogue with the Aarhus 2017 organization, which might be described best as adhering to a collaborative research methodology (Geraldi & Söderlund, 2016; van de Ven, 2007), and by following approach best described as abductive (Dubois & Gadde, 2014; Martela, 2015). This approach involved collecting data with the research question in mind and few theoretical concepts such as value creation as sensitizing concepts (Patton, 2002, p. 456). After coding the interviews, formal theory was applied to inform theorizing on the basis of the data.

The data consist of data collected specifically for this study, but it also draws upon interviews for the RI2017 study that has followed Aarhus 2017 since 2013. There has been a rather close collaboration between the researchers with mutual influence enriching both our understanding of the phenomenon and the RI2017 researcher’s understanding of project value creation to some extent. The focus on impacts is a good fit to the present study, as we may consider impacts a synonym for long-term value.

The sampling of informants for interviews followed a purposeful sampling strategy with different criteria across organizational levels. At the management level all managers with
external project contact were interviewed. The team-level informants were selected based on long-term involvement with Aarhus 2017. For the workshop conducted by one of the researchers of this paper, the invitation was open to all projects, civil servants, researchers and others interested in the cultural field. For the RI2017 workshops, the participants ranged from managers in municipalities, to cultural actors, and researchers.

**Data collection methods**

A total of eleven interviews have been conducted within the program organization – six conducted by the lead author of the present study and seven interviews with the management team were carried out in from 2014 to 2016 as part of the RI2017 evaluation project as seen in Table 1. All interviews were audio recorded and subsequently transcribed verbatim for the purpose of in-depth analysis.

<table>
<thead>
<tr>
<th>Informant position</th>
<th>Period affiliated with Aarhus 2017</th>
<th>Study foundation</th>
<th>Time of interview</th>
<th>Interview id</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>1.6.2014 – now</td>
<td>RI2017</td>
<td>June 2014</td>
<td>CEO_1</td>
</tr>
<tr>
<td>CEO</td>
<td>1.6.2014 – now</td>
<td>RI2017</td>
<td>Sep. 2014</td>
<td>CEO_2</td>
</tr>
<tr>
<td>CEO</td>
<td>1.6.2014 – now</td>
<td>RI2017</td>
<td>Jan. 2015</td>
<td>CEO_3</td>
</tr>
<tr>
<td>CEO</td>
<td>1.6.2014 – now</td>
<td>RI2017</td>
<td>May 2015</td>
<td>CEO_4</td>
</tr>
<tr>
<td>CEO</td>
<td>1.6.2014 – now</td>
<td>Present study</td>
<td>Nov. 2015</td>
<td>CEO_5</td>
</tr>
<tr>
<td>Program director #2</td>
<td>13.4.2015 – now</td>
<td>Present study</td>
<td>Nov. 2015</td>
<td>PD_1</td>
</tr>
<tr>
<td>Program director #2</td>
<td>13.4.2015 – now</td>
<td>RI2017</td>
<td>Mar. 2016</td>
<td>PD_2</td>
</tr>
<tr>
<td>Communications director</td>
<td>12.12015 – now</td>
<td>Present study</td>
<td>Nov. 2015</td>
<td>COM</td>
</tr>
<tr>
<td>Press and event manager</td>
<td>1.3.2014 – now</td>
<td>Present study</td>
<td>Mar. 2015</td>
<td>PR</td>
</tr>
<tr>
<td>Program employee</td>
<td>2008 – now</td>
<td>Present study</td>
<td>Jan. 2015</td>
<td>PE_1</td>
</tr>
<tr>
<td>Program employee, monitoring</td>
<td>2009 - 2015</td>
<td>Present study</td>
<td>Nov. 2014</td>
<td>PE_2</td>
</tr>
</tbody>
</table>

The interviews designed specifically for the study presented in this paper were conducted between November 2014 and November 2015. These interviews were semi-structured, where the management level informants were considered experts, and thus especially used to answering critical questions and communication an agenda (Richards, 1996). The interviews with grounding in the RI2017 research were designed to follow Aarhus on an ongoing basis and were conducted between June 2014 and March 2016. The research workshop was conducted in June 2015 and was designed to make the participants document their own value.
concepts and co-create shared concepts that were documented on paper and posters. The RI2017 workshop participation took place in May 2014, and in November 2016. Additionally, one author participated in Aarhus 2017 events; in June 2014 a promotion event for attracting business sponsors, and in April 2015 a public exhibition of the program.

Documents from the program organization were collected at the beginning and on an ongoing basis. These include the bid book from 2012 and the strategic business plan from January 2015, the updated version in December 2015, but also press releases and newspaper articles from Denmark and abroad were collected.

Data analysis methods
The transcribed interviews were loaded into NVivo for open coding inspired by grounded theory (Charmaz, 2014). The interviews conducted for this study were coded in entirely, while the RI2017 interviews were coded partially. The entire transcripts were read and notes were made to relevant parts. The open coding resulted in 709 codes, and these were grouped into categories starting with the most populated codes. Based on 8 categories the three themes emerged from the data and memos written through both data collection and analysis.

Documents and field notes served as background information for the coding as well as for input to memos that were applied to explore new avenues during data collection. The background information qualified the statements made by informants, by elaborating, supporting or at times being a contrast to statements made during interviews.

Holistic value creation through a program
This section presents our findings that highlight three primary themes for value creation in managing the program and preparing the ECoC year; collaboration, coordination, and perception. Subsequently, we present an overview of how these themes relate to recognized value types; strategic, transformational, and emergent value. Through our exploration of the themes and types of value we observe that both effectuation and causation have a role to play as underlying logics for decision making in the program.

Value in collaboration
One of the strong benefits of an initiative such as Aarhus 2017 is the creation of collaborative capabilities. The value from collaboration and from the development of networks and new cross organization relations (Granovetter, 1973) was a repeated theme discussed by the
interviewed members of the Aarhus 2017 program organization. It suggests transformational and also emergent value from executing an ECoC for the individuals and organizations who are involved.

Aarhus 2017 is a collaborative endeavor among all 19 municipalities in the Central Denmark Region (the Region), and it is the first time the 19 municipalities work together after a structural reform of the municipal and regional setup in Denmark in 2007. In 2007 Aarhus announced their candidacy for the ECoC and the following year work began to prepare the proposal for the ECoC, a proposal that was submitted in June 2012 after many meetings, workshops and involvement of cultural institutions and citizens of the Region. In this way an ECoC has a much higher level of collaboration than other types of initiatives such as a festival. One manager says: ‘European Capital of Culture is created often from consensus. It comes often from a broad or very imaginative consultation and that kind of creative brainstorming feed into what people want from it. We started this process by saying: What do you want if we win it?’ (CEO_5). While individuals and artists have connected through this process, so have the 19 municipalities and the Region. The cultural city councilors started meeting around the ECoC and after designation of Aarhus in 2012. They started collaborating in formal committees but also informally across geographical spans not taking place before. In this way networks have been formed both in preparing the proposal, and especially in working with the cross municipal collaboration in rather unanticipated ways as ‘some of the culture managers entered this circle reluctantly and were asking why should we give money to Aarhus? Please tell us that. […] To the transformation of them realizing that they are the basis for one another. They can help each other, and they have become colleagues.’ (PE_1). This statement emphasizes the unanticipated value of much collaboration established by the ECoC. These networks and identified synergies between municipalities will exist long after 2017 allowing for future value creation after the ECoC ends in 2017. This suggests that the value of establishing new relationships may be intrinsic implying that the value of an initiative as the ECoC is not only created through the use of the project outputs as suggested by the instrumental value creation perspective (Winter et al., 2006; Winter & Szczepanek, 2008). Rather it is an ongoing activity and value is not only realized after implementation as suggested by benefit realization management (Bradley, 2010; Ward & Daniel, 2012). Another dimension to the establishment of networks is the employees in the Aarhus 2017 organization, as some of them are seconded from the Region and some of the municipalities. These individuals contribute to creating a network among the municipalities and the regional
organization, and furthermore, they will bring back knowledge about managing a program and a yearlong cultural program. The program organization itself is divided into teams, and the internal collaboration is also a source of value creation. As the teams complement each other in identifying stories that may help communicate the narrative of the ECoC (PR).

Overall, the ECoC has a strong focus on development, and supporting development two program strategies were formulated; cultural infrastructure and soft city. Cultural infrastructure concerns physical projects like urban regeneration and improvement of public spaces, while soft city is focused on the development of knowledge and competencies, such as developing new networks and developing artists and the creative industry (Aarhus 2017, 2015). The ECoC offers good support for municipalities that want to regenerate urban areas. But there is a hurdle to overcome, as projects have to collaborate with international partners from the EU. However, it creates excellent opportunities for new partnerships because the ECoC is a brilliant platform for marketing oneself and cultural offerings that would not receive much attention in trivial situations. One of the managers says ‘being nominated European Capital of Culture gives you a platform for you to present yourself internationally [...] it is a platform for promoting Danish culture’ (COM). We infer that the platform itself has some value, but using the platform holds the most value. Here, it is used to leverage a management strategy to internationalize the projects funded by the ECoC. Municipalities are often engaged in promoting projects, and engaging in a bid process is a good opportunity for gaining experience that improves the municipalities’ capabilities to apply for EU funds to support future projects and there are rich opportunities for improving these capabilities among Danish municipalities (COM). The capabilities in this area vary a lot across municipalities; part of the programming effort is to ensure that the entire Region develops strong capabilities in these areas. In this way, the ECoC opens a new avenue for the municipalities for accessing EU funding. Value in collaboration is not only in the intended and unanticipated establishment of new networks among people and organizations, but also in the value of boosting organizational capabilities.

Value in coordination

Coordination of activities to bring about change not possible for individual projects is at the heart of program management. Coordinating for a diverse program that would give everyone a place in the cultural program and securing a strong legacy stood out as important findings in the study. Coordination refers to both the program and the cultural program. The program of
projects and the cultural program are heavily interrelated as many projects are development projects with the purpose of producing content for the cultural program. Other projects, such as the soft city projects are primarily focused on long term change and the legacy of Aarhus 2017 (PD_2).

From the outset the ECoC was planned to be very diverse and to offer something for everyone with more than 350 projects and events (Aarhus 2017, 2012). Along with the overall slogan for Aarhus 2017 ‘Let’s rethink’ the following three program areas were defined; the city, values, as well as art and creativity that projects could rethink. Projects should also have a local, regional, and European dimension. On top of that, the program organization had three values guiding their actions; diversity, sustainability and democracy. All these measures were taken to secure not only an enjoyable year of events in 2017, but also to secure a legacy of the year 2017 meaning creating something valuable that will persist with the citizens in Aarhus and the surrounding region. In this way, the coordination was ensuring ‘that everyone has their space in that year’ (CEO_5), but the coordination was also ensuring that projects were producing quality content for the year or getting help to get on track (PD_2).

The projects have been funded through three funding pools; seed funding in 2013 for some of the projects that were involved in the development of Aarhus’ ECoC proposal, and co-funding of projects in 2014 and 2015. In the end more than 100 projects were part of the program. Over the years, the program organization has developed the narrative of Aarhus 2017. The progress is evident in the publications made by the program from the proposal in 2012 through two the strategic business plans in 2015 (January and December) to the program book presented in October 2016. One way the narrative became visible was the issue of event categories giving the cultural program specific structure (Aarhus 2017, 2015). Another was the division of the year into four seasons each with a mega event expecting an average of 60,000 participants and 12 full moon events expecting 15,000 participants each – one event every month of the year. This coordinated timeline would also ensure the year has the right momentum (CEO_4), and the mega events should ensure that the program does something extraordinary, a little like the shows at the 2012 Olympic Games in London (CEO_1).

The program organization coordinated and put together the cultural program also for the benefit of tourists by programming two-three highly interesting events together and thus
creating synergies (CEO_3). The coordination of the program also sought to ensure a read
thread across the projects, so that they go in the same direction (CEO_1), this enables
clustering the projects and making a bigger impact. And for the cultural program it enables
Aarhus 2017 to go through the past, the present and the future in the four seasons of the year
with events centered on celebrations, contemplations, provocations (PD_2).

An ECoC like Aarhus 2017 is not only what is in the program and cultural program, but also
some of the projects that were not funded by the ECoC that were realized in other ways. Such
projects are complementary to the ECoC, and they may produce more radical content than
what the ECoC can cover and one manager says: ‘Why do you want to be official? Why don’t
you stay unofficial and then you can do whatever you like’ (PD_1). In this way, the
experience and capabilities of the program management team contribute to developing the
local artistic community. Hence, projects adhering to the purpose of rethinking are welcomed
even though they are not official.

Being funded by the program organization was not a promise for more than initial funding,
projects had to show progression and show the ability or potential for delivering quality
content for the cultural program. Thus, the development of projects was a matter of showing
trust in some artists that they would be able to deliver (PD_1). A coordinated program makes
it possible to develop a hub and boost local arts communities that might never happen under
usual conditions. It could be helping groups of people with promising potential to develop the
right capabilities, or trying to develop capabilities with groups that have none (PD_1). The
capabilities and funding in a program organization can foster rapid development and
transformation given the right circumstances. Coordination is a matter of intended
transformation, where the program can exercise control over funding and direction.

Value in perception
Perceptions of value can be highly subjective and complex – and for a large and expensive
public initiative such as the ECoC, such perceptions are extremely important. Managing the
perception of value formed a major theme in the findings from our inquiry of how value is
created in the Aarhus 2017 programming. Stakeholder perceptions of value are one way that
the delivered value can be determined, and for public spending like culture the justification
lies in the public opinion (Moore, 2013). Yet, any stakeholder is limited to form an opinion
about what he or she is aware of. Managing stakeholder perceptions is a specific way of
managing stakeholders (Toor & Ogunlana, 2010), and one that suggests Aarhus 2017 needs
to be visible and associated with positive experiences for the public to form positive opinions about the ECoC (PR). As with the public, especially the political sponsors need to be made aware of the content being delivered, and thus the ECoC reports to the political sponsors from local politicians to the EU. The public is a heterogeneous group, and the perception of value will be mixed and especially the critical voices will be holding the politicians accountable for the public spending on culture. Similarly, the politicians hold the program management accountable for delivering a success defined by the agreed KPIs. Perceptions of value are one way that value can be ‘measured’; in absence of hard measures of the quality of the experience or the impact on the community, both users and the public community at large can form opinions that provide a mirror of the value being proposed by the program or a single project. The program organization needs some support from the media and other external stakeholders, as only by being visible and associated with positive experiences, we may expect the public to think positively about the ECoC and therefore believe that the ECoC has met the defined success criteria (PR).

Achieving success is important for the political sponsors as they must justify spending more than €50 million on Aarhus 2017. The success measures are operationalized through KPIs that help the sponsors evaluate the success of the ECoC, and this is influenced by the perceptions of the direct beneficiaries of the cultural program; they will have the experiences and take part in events will be citizens and visitors and will form perceptions of the value of the ECoC. There is an organizational divide between beneficiaries and the sponsors and for the value of the ECoC to be visible to the sponsors, it needs to be communicated to them. Therefore, it has been important for Aarhus 2017 to communicate to the public and political stakeholders how projects in the ECoC program have already been creating value before 2017, and in this regard, the media is a strong player. In times of negative press coverage about the ECoC there might be a negative spill over to the perception of value of the projects in the entire program. As a result, it might be expected that the willingness to endorse the ECoC would diminish in persisting negative press coverage as ‘it might have a self-reinforcing effect, because it is impacting a general attitude or it might encourage other to join the choir. That is the reason one should not just lean back and let critique be undisputed, one should try and talk about it when it is unjustified.’ (PR). One way the Aarhus 2017 organization has sought to encounter negative media coverage and pressure from the public has been to collaborate very closely on communicating the positive narrative early on. The narrative is often communicated using storytelling (Fog, Budtz, Munch, & Blanchette, 2010),
and the program organization is quick to pick up positive news and put it on Facebook. These are stories that show how the projects in the ECoC program are already generating value before 2017. The Aarhus 2017 program communicates through various channels, such as directly to the public on social media platforms, where they ensure a diverse and even coverage of the projects in the program. The ECoC has been compared to the Olympic Games, but we see one major difference that is very important for managing the perceptions. The public knows the Olympic Games, but often the ECoC is entirely unknown making it very difficult to communicate anything without facing flawed preconceptions. The theme ‘Let’s rethink’ perhaps made it even more difficult to provide positive stories during early development, because there was no example to give for program content – it was a development from A to Z. The value in the managing perceptions is of strategic nature, especially the increase in international awareness of Aarhus in a branding perspective.

*Dimensions of value*

The three themes for program value creation may be summed in creating at least three types of value; transformational, emergent and strategic. We associate these with the organizational, ecosystems, and societal levels (Ouden, 2012).

Value in collaboration emphasized value that it was unanticipated or emerging as managers from municipalities now have a common raison d’être on the area of culture. Value in coordination seeks to ensure the change and impact will take place as intended by building narratives, and it may be labelled as transformational value (Gregor, Martin, Fernandez, Stern, & Vitale, 2006). Managing the perception of value is related to ensure strategic development, labelling it strategic value. The three dimensions are briefly explained in Table 2.

**Table 2. Dimensions of value types**

<table>
<thead>
<tr>
<th>Value type</th>
<th>Characteristics</th>
<th>Example</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>Intended effects of changes from initiatives</td>
<td>New capabilities for delivering cultural content</td>
<td>Gregor et al. (2006)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Empowerment</td>
<td></td>
</tr>
<tr>
<td>Emergent</td>
<td>Unanticipated impacts that evolve from the course of events</td>
<td>Collaborative capabilities Creation of networks</td>
<td>Ang, Killen, and Sankaran (2015); Mintzberg and Waters (1985)</td>
</tr>
<tr>
<td>Strategic</td>
<td>Long-term and high level value that might be intrinsic</td>
<td>City brand awareness Cultural awareness among citizens</td>
<td>Martinsuo and Killen (2014)</td>
</tr>
</tbody>
</table>
The types of value outlined in Table 2 is not an exhaustive list, as there are many taxonomies of value e.g. seven types of value suggested by Ang et al. (2016), four by four model suggested by Ouden (2012), strategic value in several dimension (Martinsuo & Killen, 2014). While strategic value and transformational value are relatively well-described in literature, emergent value is relatively undescribed. It follows the line of thought that context change and the environment reacts, and some of the outcomes will be emerging (Mintzberg & Waters, 1985).

The findings suggest that the two types; transformational value and strategic value may be covering both intrinsic and instrumental value. Instrumental because executing the ECoC will bring tourists to the region and it is expected to lead to increased wealth. Simultaneously, the legacy of the program is expected to create value in itself, and that it will bring value to the public sphere such as a stronger cultural sector in the region surrounding Aarhus.

**Decision making logics**

The three themes for value creation in the program and associated dimensions of value have been established in a very complex environment; the level of complexity was a recurring theme in interview data. The case was subject to very high uncertainty and ambiguity, making it difficult to apply the value management approaches, where a defined product and existing customers with identifiable profiles are available to consult (Thiry, 2002). The ECoC had neither; the cultural program was being developed and the public as a user group is highly heterogeneous. Artistic programming based on available skills was one part of the solution to managing the program. The findings suggest that traditional project management ends-in-view logic was combined with other logics. Thiry (2015) mentions that entrepreneurial methods can be applied for program management; we also support this view and apply an effectual perspective (Sarasvathy, 2001) adapted to the project domain (Nguyen, 2015) in our analysis. First, the characteristics of the case setting are outlined in relation to the four dimensions of effectuation and then we broaden the discussion to the management of the program and decision logics.

The nature of the setting and the types of decisions required demonstrates affinity with the four dimension of effectuation: 1) Means-driven: The Aarhus 2017 proposal was created based on a range of workshops, including doing SWOT analyses, that focus on the means at hand. Yet, after being nominated ECoC and onboarding the management the program organization face reality – the proposal was calculated to require a budget of more than 125
million Euros. However, they had budget estimate of only 66 million Euros at that point, thus enforcing a focus on means in terms of funds. But there was also a strong causal drive for two reasons; firstly, the EU considered the proposal as a de facto contract. We remark that the first proposal was submitted in September 2011 for a cultural program starting January 2017, and secondly because municipalities were promised a return on investment of at least one to one. 2) Affordable loss-focused: Funding artists was partly based on the affordable loss effectual principle, if artists did not perform they could be dropped from the program or a project could be left as is without delivering content to the cultural program. 3) Partnering: Due to the nature, both of being an EU initiative, but also the public setting, there was not much of a market. The municipalities were seeing each other as competitors in the beginning and all wanted at the same in return as their neighbor. 4) Leveraging surprises: ECoCs are notoriously known for changes to the management, and it was also the case during 2014 with two managers resigning. Especially regarding the program director is was difficult, but the management flipped the situation and brought in knowledgeable manpower and made the best of the situation.

Looking back at the three value creation themes identified; collaboration, coordination and perception, we note that the ECoC did not follow traditional and prescriptive ends-in-view logic for funding projects and carrying out activities. The emphasis on the value of collaboration created by the program recognizes the synergies of combining capabilities in line with the effectuation principle of partnering. Effectuation principles also align with the creation of coordination value. For example, the value of coordination was exhibited by active engagement with artists that enabled the setting of an entirely new course if a project hit a dead end; in this way the program was managed in a way that allowed leverage of unexpected events, demonstrating the use of means-driven principles in shaping projects and the cultural program. Various types of changes in the environment were used in communicating the narrative of Aarhus 2017, and thus unforeseen events have been widely used in managing the perceptions.

The unique setting of the ECoC program creates an environment that may lend itself to the application of effectuation logic in decision making. It follows naturally from the theme “Let’s rethink” that the ECoC is concerned with change, but the specific impacts and the long term legacy were not pre-defined. The guiding keywords for the content providers, i.e. the projects, have been ‘experimental’, ‘new connections’ and ‘create extraordinary experimental
projects’. It is acknowledged and accepted that some projects will fail, primarily in the sense that some will not end up delivering quality content and others may not be selected to deliver any content at all for the cultural program during 2017. The program content consists mostly of cultural events, and often the potential event is developed within the project. Thus, it was not pre-defined when funded by Aarhus 2017, and hence the output is defined by the resources and competences in line with effectual decision logic. This is in contrast with traditional project logic, where ends are in focus and failures are not welcome.

**Discussion and implications**

The investigation on how value is created and managed in a program of cultural projects has highlighted three primary themes. These themes reveal different levels of intent, temporality, and subjectivity. Focusing on value creation in a program of cultural projects has enabled non-financial themes to emerge. The analysis suggests that such themes are also important in the commercial sector, but that often such themes are not recognized or focused on due to the strong emphasis on financial and ‘hard’ measures. The first part of the discussion explores ways in which the value creation themes observed in our study of the program cultural of projects may also relate to other environments including the commercial sector. The discussion then considers how an alternate logic based on effectuation can be applied to the types of challenges exhibited in the ECoC case, especially in managing uncertainty and ambiguity in projects and programs.

*Relating value creation themes to the commercial sector*

First the larger and longer term value created through collaboration such as collaborative capabilities was exposed – not just for Aarhus 2017 but for the future. While the creation of value through the development of long term collaborative capabilities is one of the expected benefits from a program such as the ECoC, it is difficult to measure this type of value. Therefore, it might be difficult to justify the project or gain political or public support based on the development of these structural and transformational capabilities. Despite this, the EU has supported European Capitals of Culture for over 30 years, and the largescale initiatives of the ECoCs have also often contributed to city regeneration. ECoCs support enhancing the image of the host among own citizens and essentially contributing to decentralization by boosting capabilities in cities far away from the metropoles like London and Paris.
Value in coordination represents a purposeful intention to provide diversity in the program to create value and to develop the cultural sector. The level of diversity is able to be measured through qualitative measures such as the breakdown of programs for different age groups, or the spread of projects representing different media, or the variety of locations for the cultural program. While these measurements are relatively easy to record and communicate, they are a proxy for the perceived value; the reason coordination and balance are considered important is that it is expected that diversity will enable a high percentage of the population value the ECoC. A positive public perception is meant to lead to a successful ECoC.

In commercial environments, the coordinating for diversity is strongly exhibited in PPM literature and frameworks. The importance of balance across a program or portfolio of new products for example provides a way to manage risk by balancing low risk and short term projects with more radical longer term and riskier projects. Similarly, the balance of projects across geographic areas in a commercial program aims to engage and address a wider range of employees and customers. In these commercial environments the success of these approaches is evaluated based on the ultimate success (usually measured in financial terms) of the resulting products. However, in the cultural program studied, the value creation is harder to measure as direct financial and market measures are not feasible for the program, and indirect effects are difficult to assign to one initiative as many factors may be influential.

Finally, addressing the probably most controversial theme; ‘value in perceptions’, which might be considered a very specific type of stakeholder management. The subjectivity, complexity and the role of external influences such as the media on the perception of value (and therefore the creation of value is suggested) is reflected in this third theme. From a program or PPM perspective, with its roots in the commercial world, it can seem controversial to suggest that ‘perceptions of value’ represent actual value. There can be a feeling that perceived value could be an illusion, that there may not be any underlying value after all. On the other hand, it follows the understanding that value is in the eyes of the beholder – each individual has their own perception of what is valuable. However, although there is some evidence that value perceptions are important when managing a program in a commercial environment (brand perception and goodwill for example), the creation of program value is usually expected to be demonstrated in hard measures such as financial performance, market penetration, or patents. These hard measures of value are much less
relevant in a cultural or non-commercial project, where value may be therapeutic and based in what attitudes towards something (Crossick & Kaszynska, 2016).

The case of Aarhus 2017 demonstrates the importance of managing the stakeholder perception of value – and how the media and communications related to the program must be managed to ensure that value is created. For a program, in the absence of many hard measures of value, the importance of ‘perceived value’ has emerged through this study. Looking at commercial environments, in PPM decision settings, consideration of perceived value and managing media and communications have not been illustrated in research. However, such organizations often have media and communications efforts, and therefore organizationally there is recognition of perceived value and its importance and the need to manage it. The study of value creation in a cultural project raises questions about whether perceived value creation is (or should be) considered during PPM decision making in commercial organizations. Value will also be perceived in commercial settings, whether business managers recognize that perspective or not.

*Effectuation logic in projects and programs*

We have illustrated the importance of context when applying effectuation and causation logics to program management practices. A cultural and public context provides quite different characteristics than a traditional commercial context, and provided a rich environment for the observation of effectuation logic alongside causal logics. Our study suggests that instead of a dichotomous perspective (where projects are managed by either effectuation logic or causal logic) the two logics may be used in a variety of combinations depending on the decision context. The degree of use of effectuation and causation could be considered along a continuum, where either pure form is at the extreme ends, with most project environments falling along the continuum. The concept of the effectuation-causation decision logic continuum may serve as a way to understand when and how each type of logic is used, the type of environments where one or the other decision logics dominate, and to assist practitioners in assessing their situation for guidance on suitable actions.

Causation principles are readily identified in classical project management (Svejvig & Andersen, 2015) and in the task perspective (Andersen, 2008; Winter & Szczepanek, 2009). With further research, effectuation could be similarly aligned with some of the keywords from rethinking project management; learnability, complexity, and uncertainty (Svejvig & Andersen, 2015). We proposed that the perspective of effectual logic can be relevant for both
projects and programs, although the higher degree of uncertainty and ambiguity at the program level may mean that effectuation is particularly relevant for program management (Sarasvathy & Venkataraman, 2011).

Entrepreneurial methods such as effectuation might be beneficial to the project management community in advancing the field of project studies; including also program management and project portfolio management. This is supported by previous research that shows the coherence between the fields of entrepreneurship and project management (Lindgren & Packendorff, 2003).

**Implications for practice**

Considering a continuum of effectual and causal logics for decision making in projects could change the perspective for project practitioners, who find the project classical models and theories unfit in complex environment with uncertainty or ambiguity. The continuum concept could also suggest that the project manager communities can provide even more relevant training by considering elements from outside the traditional project management toolbox. A contingent perspective would suggest that entrepreneurial projects with unknown ends (Sarasvathy & Venkataraman, 2011) are distinguished from traditional projects, as the underlying logics would suggest different ways of managing.

Emergent value, it might provocative to suggest that commercially operated projects should count on value to arise based on what some will regard as pure coincidence. Contrary, practitioners who spot the unanticipated early might be able to nurture it and create more value from the emergent sources.

The value of collaboration might suggest that collaboration become integrated and maybe even a necessity when applying for funds, but it might also integrate with the specific tasks of a project or program, in the sense that creating forums for integration and discussions should always be established across participating organizations.

In summary, the cultural context allows for scrutinizing value in ways beyond those applied in commercial settings, generating findings to challenge and extend the established concepts of value and success in projects and programs. The paper illustrates the ways that a program of cultural projects is managed to facilitate the creation of strategic, emergent and transformational value, and suggest that these approaches may form an important part of value creation in commercial and other settings. Our findings highlight the long term
structural value in creating collaborative capability through the program; the ways that coordination of a program contributes to value creation; and the value placed on the perceptions of value that leads to careful monitoring and management of communication.

**Limitations**

The present study is an explorative endeavor in Denmark after a reform of the public sector. In countries with long steady state collaboration within and across regions there might be forums for collaboration already. The synergies in the creative industry in a small internationally oriented country might be different from a large country, with a greater diversity and having minorities that are bigger in absolute numbers. As each ECoC is unique in terms of context, approach and program of activities, it would be recommended to conduct further studies of cultural programs, perhaps other European Capitals of Culture for elaborating on managing holistic value creation and coping with ambiguity and uncertainty.

The present study does not cover the entire length of the Aarhus 2017 ECoC; rather it is a study of the time until the peak of events taking place in 2017. The long-term effects, the so-called legacy and other major societal changes are not expected to show immediately, and the results of this study should therefore be seen as a study of the process, not a retrospective account of the ECoC and the value it created.

**Conclusion**

This study answers the call for further in-depth research into value creation in non-commercial environments through a case study of a cultural program. We identify three themes for creating value; collaboration, coordination, and perception that all have relevance in both the commercial and non-commercial environments. The themes may help organizations anticipate and plan for value creation. The three themes are related to the creation of three types of value; strategic, transformational and emergent value that primarily is created at the organizational and societal level.

The identified themes served as the basis for exploring the underlying logic of decision making that is related to the entrepreneurial concepts effectuation and causation. Effectuation and causation logics, although quite opposite from each other, are shown to help manage uncertainty and ambiguity in projects and programs. We suggest that a combination of both logics can be effective and that projects and program management practices often contain
elements from both at the same time. To better understand the degree and context of the use of both decisions logics, we suggest there may be benefits from considering the environment along an effectuation-causation decision logic continuum. This understanding might also foster distinctive project and program practices for managing entrepreneurial initiatives i.e. projects and programs without known ends.

**Acknowledgments**

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**References**


Crossick, G., & Kaszynska, P. (2016). *Understanding the value of arts & culture. The AHRC cultural value project*. Retrieved from Wiltshire, UK:


166


Project networks as constellations for value creation

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Abstract
This paper explores how value is created in project networks through an empirical study of two interorganizational projects networks in a cultural setting. The paper discusses recent theoretical developments that suggest linking value constellations and project networks. The findings focus on how value is created through identifying four key value creation activities; developing infrastructure, creating knowledge, changing minds, and managing for value capture. On this basis two value constellations are suggested and the service-dominant logic is applied for developing a conceptual model of value creation in project networks, which include theoretical and practical implications.

Keywords: project network, value constellation, value creation, value capture, service-dominant logic

Introduction
Value creation is central for organizations and Morris (2013) argues that the creation of value for stakeholders is one of the main purposes of projects. This view is emphasized in the value creation approach, where business projects are perceived as value-creating systems (Winter, Andersen, Elvin, & Levene, 2006; Winter & Szczepanek, 2008), which is considered an enhancement to the product-focused approach (Winter, Andersen, et al., 2006). It has been suggested that value is created not in dyads solely between a buyer and a seller but rather in value constellations (Normann & Ramirez, 1998) among multiple actors (Artto, Ahola, & Vartiainen, 2016; Matinheikki, Artto, Peltokorpi, & Rajala, 2016) in interorganizational
project networks (Hellgren & Stjernberg, 1995). Two views of project networks have been outlined: a single project in an interorganizational network (Hellgren & Stjernberg, 1995) and as a series of projects with interorganizational links that connect them, which has implications for not only the governance, but also the tensions in projects (DeFillippi & Sydow, 2016).

Value is not only relevant for businesses but is also an important concept for public organizations that seek to create value for their stakeholders e.g. through providing services to the public (Cole & Parston, 2006; Moore, 2013; Pang, Lee, & DeLone, 2014). Service has been reconceptualized through the marketing field, where service-dominant logic (S-D logic) has been presented and refined (Lusch & Vargo, 2014; Vargo & Lusch, 2004) as well as critiqued (e.g. Grönroos, 2011). By applying S-D logic, value co-creation has been suggested as a further development of the value creation approach (Vargo & Clavier, 2015) and it has been discussed how further elaboration of S-D logic is needed for it to be operationalized in project management (Fuentes & Smyth, 2016).

Few studies have specifically addressed value creation in project networks. Artto et al. (2016) address integration mechanisms related to value creation throughout the project lifecycle and identify four integration mechanisms and accordingly four propositions for new project management approaches. Matinheikki et al. (2016) elaborate on the value creation in the project front-end in interorganizational projects. Both of these studies focus on business projects, and in general few studies have addressed value creation in cultural projects where the focus is on nonfinancial value rather than profits. Also, most project studies focus on the product delivery dimension between client and seller (Svejvig & Andersen, 2015). This inspired us to change the perspective and initiate a study of the European Capital of Culture (ECoC) taking place in Aarhus, Denmark in 2017, guided by the research question: How is value created in project networks?

The unit of analysis is two specific projects from the ECoC program, and we focus on how different types of value are created for different stakeholder groups in each of the projects. Knowing more about how value is created and how organizations act in value constellations has implications for how projects are managed, prepared and handed over to operations. It is especially interesting to explore nonfinancial effects and value, as focusing on these types of value may lead to better project performance also in terms of financial value (Martinsuo & Killen, 2014), making the results of this study relevant across nonprofit and for-profit sectors.
European Capitals of Culture were first initiated in 1985 by the European Commission and it is a yearlong celebration of European culture and identity (European Union, 2015). The Aarhus 2017 ECoC has the theme ‘rethink’ and the cultural program is not limited to the events taking place during the year 2017: the first pool of funding was provided in 2013 for developing projects that ensure change and leave a legacy to the ECoC. In this way, hosting an ECoC may be compared to hosting the Olympic Games, in Europe most recently in 2012 in London. The Olympic Games was studied from various fields (e.g. Davies & Mackenzie, 2014; Grabher & Thiel, 2015), and there is also a strong interest in knowing more about both the short- and long-term value of hosting an ECoC (Näsholm & Blomquist, 2015). Consequently, a research-based evaluation was initiated (Degn & Hansen, 2015), which this study on project value creation is a part of. The two projects under study were partially funded by the ECoC in 2014 where a pool of strategic projects was selected. The ECoC program organization aims for co-funding the projects in the program by, on average, 50%. One of the projects is Rethink Urban Habitats, hosted by the Natural History Museum Aarhus. The project is focused on biodiversity by sustaining and preserving both plant and animal species in the city through events and showcasing how urban habitats may be created or preserved. We refer to this project as Biodiversity. The other project is Campus Bindslev’s Square, which received ECoC funding for development activities now pooled in one of four interconnected subprojects. The project is concerned with connecting seven organizations around the Bindslev’s Square in the city center of Silkeborg in Denmark and constructing a new common campus building on the square. We refer to this project as Campus. Both projects are multi-actor project networks with a focus on creating public value (Cole & Parston, 2006; Moore, 2013). We note that the organizations hosting the projects are not limited to public organizations, but they seek to create value for the public (Benington, 2011), such as economic, social, ecological and psychological types of value (Ouden, 2012).

In the field of project management, few studies have addressed how value is created, rather the focus has been project success and managing benefits (Laursen & Svejvig, 2016). Consequently, we initiated this exploratory study focused on exploring and describing the activities and sources of value being created from executing projects in interorganizational contexts. Following an inductive approach, allowing the data to speak to us, the results show the characteristics of value creation in project networks, and through the theoretical lens of S-D logic the integration of knowledge and skills is highlighted as a source of value creation in
projects. We suggest a conceptual model of project value creation that integrates the empirical findings and the insights of S-D logic on value creation.

The paper is structured in the following way. First we outline the theoretical background for the analysis, which is followed by the section outlining the research methodology applied for the study. Thereafter, we present the results of the analysis through the course of the two projects and then we present four focal activities for value creation in project networks and their implications. The paper continues with the suggestion of two types of value constellations and a conceptual model of project value creation and the practical implications of the results. Finally, we present a brief conclusion of the paper with suggestions for future research and limitations of the study.

**Theoretical background**

For informing our study of project networks as constellations for value creation we first conceptualize the key concepts of value and value creation and review the literature on S-D logic in relation to project management, touching upon project networks.

**Project value creation**

Value is neither understood universally the same way (Ng & Smith, 2012) nor easily defined (Laursen & Svejvig, 2016), even in a rather technocratic management discipline like project management (Svejvig & Andersen, 2015). In project management research, value is a concept that is often understood as rather vague and sometimes used interchangeably with words such as benefit, outcome and worth (Schryen, 2013; Zwikael & Smyrk, 2012). We therefore provide a definition that covers the use throughout the paper, and we follow the definition suggested by Laursen and Svejvig (2016) that value is the relation between benefits and costs. In this context benefit is regarded as “an outcome of a change that is perceived as positive by a stakeholder” (Bradley, 2010, p. xiii), while cost is “the outlay or expenditure (as of effort or sacrifice) made to achieve an object” (Merriam-Webster, 2016) or to achieve an output. It follows from the definition that value is subjectively perceived and relative to the stakeholder (European Standard 12973-2000, 2000; Lusch & Vargo, 2014). It should also be noted that we use value in the singular only, as it is not to be confused with the plural form *values* that we consider to be fundamental *beliefs* that guide action for individuals and organizations (Lencioni, 2002).
Value is often categorized by type, which may be related to specific purposes such as public value. Public value does not only point to the stakeholder but it also connotes what it is not – business value focused on profits. These two types follow a differentiation between value in the for-profit sector and the public sector (Allee, 2000; Cole & Parston, 2006; Moore, 1995). As both sectors are represented in the projects under study, we outline some general differences in Table 1, as suggested by Moore (1995):

Table 1. Differences between for-profit and the public sector

<table>
<thead>
<tr>
<th></th>
<th>For-profit sector</th>
<th>Public sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normative goal</td>
<td>To maximize shareholders' wealth</td>
<td>Achieve social mission</td>
</tr>
<tr>
<td>Principal source of revenue</td>
<td>Sales of services and products</td>
<td>Tax appropriations</td>
</tr>
<tr>
<td>Measure of performance</td>
<td>Financial bottom line</td>
<td>Efficiency and effectiveness in achieving the mission</td>
</tr>
<tr>
<td>Key calculation of improvements</td>
<td>Find and exploit distinctive competence of firm by positioning it in product/service markets.</td>
<td>Find better ways to achieve mission</td>
</tr>
</tbody>
</table>

Moore (1995) emphasizes the social mission of public organizations as the goal, though they may still apply cost-cutting exercises similar to for-profit organizations, and public institutions increasingly apply management methods from the for-profit sector. However, these methods do not always comprehend the complexity and contradictory goals of cost-effectiveness and fulfilling the social mission that applies to public institutions (Moore, 2013).

In the field of strategic management, value creation and the logics of value creation have developed from the value chain understanding (Porter, 1985) to new logics, such as the value network (Allee, 2000), value configuration (Stabell & Fjeldstad, 1998), value constellation (Normann & Ramirez, 1993), through co-creation (Prahalad & Ramaswamy, 2004) and as valuable resources (Bowman & Ambrosini, 2000). Value creation has also received much attention in the field of marketing focused on co-creation (e.g. Grönroos & Voima, 2013; Vargo & Lusch, 2014). Some of these thoughts (Normann, 2001) served as inspiration for the emphasis on value creation in rethinking project management (Winter, Andersen, et al., 2006; Winter & Szczepanek, 2008). However, research on project value creation is still nascent and the logics are not developed as in other fields (Laursen & Svejvig, 2016). Therefore, we
continue to let project management be informed by the fields strategic management and marketing.

Value creation has been described in different ways in the literature: Lepak, Smith, and Taylor (2007) focus on the creation and later realization of value through use and exchange, and Love, Matthews, Simpson, Hill, and Olatunji (2014, p. 6) focus on value creation as a process of enabling resources through the application of capabilities (Barney, 1991). Conceptualizing projects as value-creating systems (Winter, Andersen, et al., 2006; Winter & Szczepanek, 2008) is a development of benefits management (Bradley, 2010; Ward & Daniel, 2012) inspired by value constellations from the strategic management field (Normann, 2001; Normann & Ramirez, 1993). In this view, value creation is considered “...the process of co-producing offerings (i.e. products and services and information and relationships) in a mutually beneficial seller/buyer relationship” (Ramírez & Wallin, 2000, p. 62). In this paper we focus on value creation as a process, but we challenge the buyer/seller relationship, as we see no inherent reason for projects to be buyers and sellers; actors may engage in applying their knowledge and skills for co-production and applying outputs. Hence, the focus is on enhancing the value of an initiative for the involved actors (Vargo & Clavier, 2015; Zwikael & Smyrk, 2012). In this, we recognize that value is created in complex constellations among multiple actors (Normann & Ramirez, 1998), such as the project network (DeFillippi & Sydow, 2016; Hellgren & Stjernberg, 1995).

**Service-dominant logic and value creation in project networks**

Originating in the field of marketing (Lusch & Vargo, 2014; Vargo & Lusch, 2004), S-D logic has been applied to project management (Fuentes & Smyth, 2016; Vargo & Clavier, 2015) and it may serve as a way of informing value creation in project networks. S-D logic is a new way of understanding markets, even society, where no offering is only goods – all goods are also a service. The reasoning is that goods hold no inherent value, as the value is in the use (Lusch & Vargo, 2014; Vargo & Lusch, 2004, 2008). Among others, S-D logic draws upon value constellations (Normann & Ramirez, 1993) and the theory is founded on ten fundamental premises; however, Lusch and Vargo (2014) shortened those ten to four axioms as presented in Table 2.
Table 2. The four axioms of service-dominant logic

<table>
<thead>
<tr>
<th>Axioms</th>
<th>Premise</th>
<th>Explanation/Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axiom 1</td>
<td>Service is the fundamental basis of exchange</td>
<td>The application of operant resources (knowledge skills), “service”, is the basis of all exchange. Service is exchanged for service.</td>
</tr>
<tr>
<td>Axiom 2</td>
<td>The customer is always a co-creator of value</td>
<td>Implies value creation is interactional</td>
</tr>
<tr>
<td>Axiom 3</td>
<td>All economic and social actors are resource integrators</td>
<td>Implies the context of value creation is networks of networks (resource-integrators).</td>
</tr>
<tr>
<td>Axiom 4</td>
<td>Value is always uniquely and phenomenologically determined by the beneficiary</td>
<td>Value is idiosyncratic, experimental, contextual, and meaning-laden.</td>
</tr>
</tbody>
</table>

Service, *singular*, is the basis for exchange seen in Axiom 1, Table 2, and service is the offering that all actors refer to. The reasoning is that the exchange is considered an application of knowledge and skills (operant resources). Axiom 2 elaborates on the interactional nature of value creation in S-D logic, similar to that of project networks. The customer may co-create value based on the value propositions of sellers. Axiom 3 elaborates on the second core activity that value creation takes place through resource integration among the parties we would traditionally call buyers and sellers. Axiom 4 states that value is of a subjective nature, hence value may differ across beneficiaries and over time for the individual beneficiary. Fuentes and Smyth (2016) summarize limitations and critiques related to the applications of S-D logic specifically to projects and emphasize that S-D logic still need to be operationalized at the project level. We add that in a project network, there might be no actual customer but only actors working together, and at other times the value proposition is free of direct financial transactions, but service for service. Vargo and Clavier (2015) presents a comparison of S-D logic principles to the classical and rethinking project management principles (Svejvig & Andersen, 2015; Winter, Smith, Morris, & Cicmil, 2006), and present S-D logic as a further development of ‘emergent views’ as they label rethinking project management (Svejvig & Andersen, 2015; Winter, Smith, et al., 2006). Vargo and Clavier (2015) present an S-D logic and service-ecosystems approach to project management based on four principles: 1) where rethinking project management focuses on the customer’s customer, the service-ecosystems approach calls for a continuous service flow and a phenomenological measure of success; 2) value is co-created in networks not dyads; 3) the management is not focused on reflective practitioners but resource integration focused on actor-to-actor; 4) the level of complexity is moved from multidisciplinary and focuses on
social processes to the next level where institutionalization is recognized. The ‘emergent views’ looks to be truly emerging as with the rethinking project management 10 year special issue (e.g. Geraldi & Söderlund, 2016; Svejvig & Grex, 2016). Fuentes and Smyth (2016) suggest the adoption of Service Design for operationalizing S-D logic, yet their suggested model implies buyer–seller relationships that are not always applicable to project networks.

We will focus mainly on project networks as single interorganizational projects (DeFillippi & Sydow, 2016), where S-D logic may inform the value creation process through the focus on resources and resulting competences and capabilities (Wernerfelt, 1984).

**Research methodology**

As part of the formative evaluation of the 2017 ECoC in Aarhus, we initiated a case study (Stake, 1995) of two project networks with the aim to better understand the conceptualization of value in a cultural context as well as to explore how value creation is enacted in interorganizational project networks. We rely on qualitative methods and these allowed for gathering detailed empirical data on the two projects from multiple organizations and sources. In answering our research question we focused on network activities related to value creation and value for the involved organizations, and thus both value creation during the project as well as expected value creation post-project were addressed. The unit of analysis is the project, but we also considered the context (Engwall, 2003). The overview of activities, expected outcomes and such helped us understand how value is created in a project network.

The paper presents the combined results of studying two project networks, providing an even richer understanding of value creation in project networks than either of the two cases alone. We are interested in the combined insights from the two unique cases, however it should be noted that they converge in terms of being co-sponsored by Aarhus 2017, and through the study we found other dimensions to be converging too. While this was not at all intentional, it gives more detail to the value creating activities presented in the analysis. This is not to suggest that the aim was to generalize conclusions to projects at large, rather we opt for analytical generalizations to theorize from this inductive study (Eisenhardt & Graebner, 2007).
Sampling

We selected the two cases for the purpose of a multiple case study from the Aarhus 2017 pool of strategic projects that were funded in 2014. The sampling process was based on three basic criteria: 1) that the projects had to involve other actors or stakeholders in the value creation process; 2) in line with the research question, the project had to focus on creating public value; and 3) for practical reasons the projects had to have primary activities beginning no later than the second quarter of 2015. Our wish had been to study at least three projects in order to look into the possibility for different types of value creation in project networks, but the third criteria ruled out many projects and other projects were not interested in participating. Therefore, the final selection was only two projects and the interaction with each of the projects was therefore closer than if more projects had been studied.

We outline important details about each of the two projects in Table 3, where it is clear that Campus entails a larger monetary investment than Biodiversity due to the construction of a building as one of the subprojects. Campus involves primarily public organizations, but one partner is a private elementary school. Biodiversity looked into collaborating with private sector partners, but the focus was set on establishing collaboration with the local municipality and other public partners.

Table 3. Project details

<table>
<thead>
<tr>
<th>Project dimensions</th>
<th>Campus project</th>
<th>Biodiversity project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>~ €4 million</td>
<td>~ €1.3 million</td>
</tr>
<tr>
<td>Subprojects</td>
<td>Four</td>
<td>Four</td>
</tr>
<tr>
<td>Sector</td>
<td>Public and private</td>
<td>Public</td>
</tr>
<tr>
<td>Purpose</td>
<td>Change employee mindsets and improve pupil and student enjoyment</td>
<td>Spread joy and change thinking about nature</td>
</tr>
<tr>
<td>Organizing</td>
<td>Committed partnership among seven organizations</td>
<td>One party acting as facilitator for all other network participants</td>
</tr>
</tbody>
</table>

Both projects have an underlying purpose of not only creating artifacts or changing processes, but to change the mindsets of people. Campus is primarily focused on involved partners, meaning employees, pupils, and their families, while Biodiversity seeks to change the mindset of the general public to become aware of biodiversity, starting by changing the mindset of partners and other relevant parties in urban planning. Campus is organized by a
project group consisting of managers from each of the seven partners. Biodiversity is organized from one organization, in need of collaboration with other organizations, and each subproject has its own stakeholders. The difference between the two projects is reflected in the data collected for studying the two projects, which we turn to in the following.

**Data collection**

The primary data comprise a total of 20 interviews, as seen in Table 4, observations and a wide range of internal and publicly available documents such as newspaper articles. All interviews were semistructured (Flick, 2009) and lasted between 35 and 144 minutes, though most interviews lasted around 50–60 minutes, as specified in Table 4. All interviews were audio recorded and transcribed verbatim. For Campus, a total of 16 interviews were conducted with the project manager, managers of all partner organizations, selected steering committee members from the municipality and project ambassadors. The sampling of informants followed two different strategies: at the managerial level we followed a full selection, while the employee level and city council, selection by relevance was carried out. For Biodiversity, the four interviews were conducted with the initial project manager, the new project manager, the project owner and a senior curator now in charge of all subprojects related to Biodiversity, which followed a full selection strategy at the outset. Though, as more subprojects were funded more personnel were added to the project group, but only the new project manager was deemed relevant for interview due to the high convergence of answers in the first three interviews. The smaller interview sample for Biodiversity was complemented by observations of event activities at two days and by newspaper articles reporting on events and other project activities. For Campus, the internal documents include minutes from all project group meetings since that group officially formed in 2011 until August 2016.

For both projects, an initial meeting with the project manager was carried out to gain essential insights into each of the projects and for managing the expectations of the study. These insights served, in part, as the foundation for creating interview guides. For Campus, the point of departure was to make the managers elaborate on their specific purpose for participating in the project, and their wishes. To do so, they were asked to describe the scenario in the future, when the construction subproject would be completed, as that is perceived to be the most important milestone for that project. The words success and value
were deliberately avoided when asking these questions, in order to avoid framing the informants’ answers.

**Table 4. Overview of research interviews conducted**

<table>
<thead>
<tr>
<th>Informant position</th>
<th>Organization</th>
<th>Role in project</th>
<th>Interview length in minutes</th>
<th>Date of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project manager</td>
<td>Project organization</td>
<td>Project manager</td>
<td>74, 144</td>
<td>25.11.2015, 04.07.2016</td>
</tr>
<tr>
<td>Mayor</td>
<td>Municipality</td>
<td>Steering committee chairman, project owner</td>
<td>50</td>
<td>05.11.2015</td>
</tr>
<tr>
<td>City councilor</td>
<td>Municipality</td>
<td>Chairperson for culture, leisure and sports</td>
<td>66</td>
<td>03.11.2015</td>
</tr>
<tr>
<td>City councilor</td>
<td>Municipality</td>
<td>Chairperson for children and youth</td>
<td>57</td>
<td>24.11.2015</td>
</tr>
<tr>
<td>Headmaster</td>
<td>Private elementary school</td>
<td>Project group member and on committee</td>
<td>44</td>
<td>01.09.2015</td>
</tr>
<tr>
<td>Teacher</td>
<td>Private elementary school</td>
<td>Ambassador</td>
<td>35</td>
<td>01.09.2015</td>
</tr>
<tr>
<td>Director</td>
<td>Library</td>
<td>Project group member and on committee</td>
<td>58</td>
<td>02.09.2015</td>
</tr>
<tr>
<td>Team coordinator</td>
<td>Library</td>
<td>Ambassador</td>
<td>57</td>
<td>02.09.2015</td>
</tr>
<tr>
<td>CEO</td>
<td>Business College</td>
<td>Project group member and on committee</td>
<td>53</td>
<td>03.09.2015</td>
</tr>
<tr>
<td>Secretary</td>
<td>Business College</td>
<td>Ambassador</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Project manager</td>
<td>Municipal elementary schools and Fab-lab</td>
<td>Project group member and on committee</td>
<td>51</td>
<td>03.09.2015</td>
</tr>
<tr>
<td>Vice-principal</td>
<td>Municipal elementary school</td>
<td>Ambassador</td>
<td>49</td>
<td>03.09.2015</td>
</tr>
<tr>
<td>Headmaster</td>
<td>Music school</td>
<td>Project group member</td>
<td>56</td>
<td>28.10.2015</td>
</tr>
<tr>
<td>Headmaster</td>
<td>Municipal after school</td>
<td>Project group member</td>
<td>56</td>
<td>24.11.2015</td>
</tr>
<tr>
<td>Headmaster</td>
<td>High school and adult education center</td>
<td>Project group member</td>
<td>44</td>
<td>24.11.2015</td>
</tr>
<tr>
<td><strong>Biodiversity project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vice-director</td>
<td>Natural History Museum Aarhus</td>
<td>Project owner</td>
<td>51</td>
<td>20.11.2015</td>
</tr>
<tr>
<td>Project employee</td>
<td>Natural History Museum Aarhus</td>
<td>Project manager (Until autumn 2015)</td>
<td>50</td>
<td>08.07.2015</td>
</tr>
<tr>
<td>Curator</td>
<td>Natural History Museum Aarhus</td>
<td>Program manager</td>
<td>44</td>
<td>20.11.2015</td>
</tr>
<tr>
<td>Research assistant</td>
<td>Natural History Museum Aarhus</td>
<td>Project manager (From the end of 2015)</td>
<td>104</td>
<td>13.10.2016</td>
</tr>
</tbody>
</table>
The research follows an engaged approach (Geraldi & Söderlund, 2016; van de Ven, 2007), gaining rich empirical data through interviews (Kvale & Brinkmann, 2009), participant observation (van de Ven, 2007), engaging in an ongoing dialogue with the projects and gaining access to project material for document studies. Hence, triangulation in this study is not only focused on accessing multiple sources (Flick, 1992) but also on consistency (Mathison, 1988) due to the projects’ long history. The decade-long history of Campus implied that some accounts were second-hand and the triangulation with documents proved particularly relevant. For Biodiversity, external sources such as newspaper articles were an important account for the perception of activities and, due to the nature of the project, media coverage has been quite extensive compared to other Aarhus 2017 projects.

Data analysis

The data analysis followed a multistage approach, with ongoing memos written during the data collection phase; the primary part of the coding took place after collecting the data followed by a process of categorizing and establishing themes for the write-up of the results. The analysis was inspired by Charmaz (2014), however instead of coding during the collection process, field notes made immediately after each interview were used for adapting the interview guides during collection. The coding process followed an inductive approach searching for actions and process, and as displayed in Table 5 codes were given as gerunds (Charmaz, 2014). In addition, informants’ reflections, sense making and justification of actions expressed during the interviews were coded using appropriate themes, as these would rarely be expressing project actions. Categorizing was initiated through most populated codes through to the least populated where only one reference was made to that code.

Table 5. Examples of coding and categorization

<table>
<thead>
<tr>
<th>Example of transcription extract</th>
<th>Codes</th>
<th>Category</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>They have been located next to each other for ages, but there hasn't been someone who has taken the initiative to create the collaborations</td>
<td>Collaborating on campus</td>
<td>Collaboration</td>
<td>Developing infrastructure</td>
</tr>
<tr>
<td>Yes, we see it more as we have put forward a number of dilemmas, and the funny thing was, in this small executive committee, we sat there imagining dilemmas, and then he says to me: What is your worst scenario?</td>
<td>Trusting partners</td>
<td>Collaboration</td>
<td></td>
</tr>
<tr>
<td>they can experience just as much, it is something else they experience in Mols Bjerge, but they don't have the language to describe it, as they don't know what there is to look for, they don't know things – a tree is a tree.</td>
<td>Educating public</td>
<td>Education</td>
<td>Creating knowledge</td>
</tr>
</tbody>
</table>
If you just actually rethink some of what you did before, do you have to mow the lawn 20 times a year if you can just impoverish the grass and then do it 5 times. You know, there are all these things that people simply have not thought about but are just habitual thinking.

We have relatively easy access to the press. So, that is, when we send something out that we want them to pick up, it's relatively easy and then we will make an introduction for the journalist to write about it, that way around.

There are lots of things underway here, but it is an awareness that is slowly changed. I do think that the consciousness will get a boost when the building is there.

How do all these things interact, who makes the decisions, how to influence the decisions and if it is majority decisions, then we will discuss it.

It has to be place somewhere, and for practical and logistical reasons, it may be a good idea to associate the building with another partner or to another building in considering the caretaker, locking up or other crew.

They are employed to undertake specific teaching tasks and if they are to do more tasks, we will pay them and we do not have the economy for that, we do not.

Table 5

<table>
<thead>
<tr>
<th>Example of transcription extract</th>
<th>Codes</th>
<th>Category</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you just actually rethink some of what you did before, do you have to mow the lawn 20 times a year if you can just impoverish the grass and then do it 5 times. You know, there are all these things that people simply have not thought about but are just habitual thinking.</td>
<td>Rethinking habits</td>
<td>Changing minds</td>
<td></td>
</tr>
<tr>
<td>we have relatively easy access to the press. So, that is, when we send something out that we want them to pick up, it's relatively easy and then we will make an introduction for the journalist to write about it, that way around.</td>
<td>Accessing media</td>
<td>Communicating</td>
<td>Changing minds</td>
</tr>
<tr>
<td>There are lots of things underway here, but it is an awareness that is slowly changed. I do think that the consciousness will get a boost when the building is there.</td>
<td>Changing minds</td>
<td>Changing the world</td>
<td></td>
</tr>
<tr>
<td>How do all these things interact, who makes the decisions, how to influence the decisions and if it is majority decisions, then we will discuss it.</td>
<td>Governing decision power</td>
<td>Managing</td>
<td></td>
</tr>
<tr>
<td>It has to be place somewhere, and for practical and logistical reasons, it may be a good idea to associate the building with another partner or to another building in considering the caretaker, locking up or other crew.</td>
<td>Operating building</td>
<td>Operating phase</td>
<td>Managing for value capture</td>
</tr>
<tr>
<td>They are employed to undertake specific teaching tasks and if they are to do more tasks, we will pay them and we do not have the economy for that, we do not.</td>
<td>Lacking resources</td>
<td>Challenges</td>
<td>Missed value</td>
</tr>
</tbody>
</table>

To illustrate the link between interview data and categories, we provide examples in Table 5 where a few extracts from transcribed interviews are connected to the code and the category they have been assigned to and the value creation activity. The extracts are translated from Danish, while codes and categories were given in English from the beginning. The categories form a list of 11 small contributions to creating value, focusing mainly on the activities and processes, but the list also includes structures and organizing principles and it served as input for identifying created value. From the list categories a few overall pools of activities were summarized into overall means for value creation. We present these means for creating value in the following section after the course of the project has been presented.

**Results**

The following section presents the course of the two projects: Campus and Biodiversity. Then, we present four value-creating activities and the implications of these, and in addition we also outline our findings regarding “missed value”.

181
The course of the projects Campus and Biodiversity

*Campus* is a project with a rather long history as the activities began no later than 2006 – Figure 1 illustrates the project schedule. Around 2006, there was an idea of bringing together three cultural organizations: the local library, the music school and the local community center. A new building for the music school was constructed and opened in 2008 across from the local library, and a new community center was built next to the music school and opened in 2010. It was during up to this time that an idea was pushed for bringing these three organizations closer together in what was called a ‘cultural square’, as the street address is an old market square in the center of the city of Silkeborg.

![Figure 1. Timeline of Campus project.](image)

The municipality was not willing to spend more money on culture by constructing a cover over the small road between the existing and new buildings, and the activities were stalled for some time. However, the idea was not abandoned altogether, and it was revived in 2011 by bringing a number of educational organizations onboard: A business college, an adult education center, a private elementary school, the municipal elementary schools, and later the municipal school for evening classes. As illustrated by the double rope in Figure 1, the project is a flow of many minor events. With the many educational organizations joining, the purpose changed to become threefold – Learning, Culture and Creativity – which included creating a campus around the square, where all but the municipal schools are located. Several of the organizations were lacking in space for specific purposes, such as for graduation, and for the performing arts, such as plays or dance shows. Thus, the idea of constructing a common campus building was soon fostered, and the partners developed this idea over a couple of years. In April 2014, the seven partners hired a project manager to have one person drive the project, as it was – and still is – only a small part of the daily tasks for each of the managers among the partners. Soon after, funding for development activities was obtained through two subprojects focused on learning and developing new ways of teaching, and later
a fabrication lab was added as a subproject. The new campus building will not have traditional classrooms, but rather will suit teaching, for example, 200 pupils at once, which will require other methods than teaching usual class sizes of 20–40 pupils. The construction is the final one of the four subprojects, and apart from that, the most significant subproject is primarily manifested through one-week learning laboratories. During that week teachers offer courses applying new methods across organizations focused on a general theme; in 2014 it was focused on the local Danish artist Asger Jorn; in 2015 it was democracy and in 2016 entrepreneurship. The purpose is to experiment with new ways of learning and teaching and for getting the employees engaged in this new collaboration with other campus partners. The organizations have been neighbors for years and some without the slightest form of collaboration or integration, while others like the music school have had collaborations with the local municipal schools as they share pupils. Over time the collaboration has become centered on the construction of the campus building, yet the collaboration goes further and the organizations already have a system for sharing classrooms and other spaces. The learning laboratories forced employees into collaboration across organizations, meaning that they now know each other and communicate across organizations. Establishing a common project management training course has contributed to collaboration in two ways: the training itself and the individual participation has been conditional to offering a course at the following learning laboratory. Another way to facilitate the collaboration was establishing a corps of campus ambassadors, who started the diffusion of local support to the partnering organizations.

The construction project is headed by the local municipality, and around €4 million has been budgeted for the campus building, with yearly operational costs of approx. €250,000. The operational costs will be shared among the partners, not equally, but distributed among the partners based on their economic abilities. The design process was carried out as a joint effort between managers of the seven partners and the municipality, with inputs from architects and other counseling groups. Over time several groups have been formed: the steering committee populated by the mayor as chairman and other politicians as well as chairmen from other partners; the project group populated by all partner managers; an executive committee formed of managers of the four largest partners; the ambassador corps; an idea committee; and counselors to the idea committee. This led to a democratic process of designing the building and also led to many sessions preparing for the ongoing operating partnership starting in
2017. In December 2015 the partners cut the first sod and started construction. The opening of the campus building is projected to be in August 2017.

*Biodiversity* is the outcome of a defiant action by the Natural History Museum Aarhus, as they realized no other project in the initial round of ECoC funding would be focusing on nature. Some would say it is peculiar for a cultural program to be sponsoring a project focusing on nature as culture might be considered the opposite of nature. However, the focus on nature is through cultivating the human species. Denmark is committed to stopping the decrease in biodiversity by 2020 and this project operationalizes this goal by thinking about and giving space to species other than humans. No other species would give away space, as it goes against the instinct of nature, and the project states that it is showcasing the ultimate level of cultivation. The National History Museum Aarhus is the sole owner of the project, and the organization is located close to Aarhus University, with close connections to the department of Bioscience. The museum has a long tradition for researching nature in rural areas, but before starting this project they had little expertise concerning nature in urban areas. It was a museum curator, who is known from national TV, who first drafted the idea around 2012, Figure 2 illustrates the timeline. In collaboration with one of the museum vice-directors, he found that the idea of focusing on biodiversity and urban habitats was very well received by Aarhus 2017.

![Figure 2. Timeline of Biodiversity project.](image)

The museum applied for and received funding for starting up activities in 2014 and in 2015. They received additional funds as a strategic project in the Aarhus 2017 project portfolio, as depicted in Figure 2. As with most ECoC projects, the museum had to co-fund the project by at least 50%. Over time this has led to Biodiversity becoming an umbrella project consisting of four subprojects: the original project activities grouped in one subproject; a subproject concerning “the taste” of Aarhus, where the museum incorporates nature; a project on making
one specific street in the old part of Aarhus greener and more sustainable; and, most recently, a major photo exhibition that will take place in the year 2017 based on photos from citizens taken around Aarhus in 2016. The project is aiming to spread joy, as no one dislikes seeing nature, and the project claims that nature presents a very good narrative. The original project activities follow three tracks: dissemination, physical changes and knowledge, which are divided into six types of events.

The project was initiated with little manpower, but in 2015 a project manager was hired. Deliberately, the job was given to an individual who was eager and interested in nature rather than to a middle-aged proven project manager without a passion for the subject. The project manager was in charge of communicating the project at conferences and other events focused on partnering up with interested organizations. The local municipality is one of the organizations that developed into an important partner, as the showcasing would involve their acceptance and some manpower, not to mention use of machinery. Companies became interested when the project representatives could tell how much money could be saved if they were to stop mowing lawns almost every week or changed them entirely to fields of flowers to be mowed only a few times a year. Aarhus School of Architecture is no stranger to the project, as they receive lectures on incorporating nature into urban planning, and in addition the school will move to a new location close to the old goods terminal in Aarhus, where some areas have been untouched for decades. Hence, this area has many rare species and it will be interesting to see how the architects will handle the dilemma of placing a modern building here and contributing to biodiversity. Consulting engineers are also interested, and after the project showcased, for example, the many rare species in untouched areas, biodiversity is now a part of the consultancy. While this paints a pretty picture, the widespread focus and lack of portfolio management maturity combined with no project management training for the project manager resulted in a too heavy workload leading to sick leave, and another project manager had to be found. The project is therefore developing the maturity of the organization when it comes to project, and especially portfolio, management. The museum is going through a significant change as they start developing consultancy capabilities, which also widen their funding options. They have little experience in offering their consultancy to the business world, yet their knowledge is highly relevant for businesses too. This is a break with the museum’s usual way of doing business as it usually offered its services free of charge, as it is a self-governing organization primarily funded by public money.
Value creation activities

The two projects have now been introduced in their entirety, and in the following we show and explain specifically four value-creating activities identified in our analysis. While we focus primarily on the creation of value, we also briefly address what we label “missed value”.

Developing infrastructure

Here, infrastructure is meant figuratively, it is the network ties (Brass, Galaskiewicz, Greve, & Tsai, 2004) developed across the project partners, which will be a platform for collaboration throughout and after the project is finished. Biodiversity have established collaborations with various organizations, extending bilateral collaboration to whole networks. In Campus, both bilateral and common collaboration across all organizations take place, which extends the networks of individuals across the seven partners by creating more weak ties (Granovetter, 1973) e.g. through an employee ambassador group. For Biodiversity, which is a less committed network, they work closely with the municipality to apply knowledge of biology and the habitats of rare species for the municipality to support an increase in biodiversity. The development itself is a learning experience for those involved (Huemann & Winkler, 1998), and the organizations develop a capacity to engage in interorganizational collaboration, such as project networks.

Creating knowledge

Both of the projects are engaged in prototyping new solutions; for Campus it is learning laboratories and for Biodiversity it is demonstrations. The learning laboratories for Campus are training in the use of a building that is not yet there, and thus the participants are already acquiring the skills for making use of the building by imitating the future situation. In preparation for the learning laboratories the coordinators of courses attend a project management course, and in that respect they are also acquiring new skills. Biodiversity create knowledge through demonstrating how new urban habitats may be created, and as they have done little research on urban nature the demonstration projects serve two purposes. There is learning for the project and their partners in taking part in prototypes, but there is also a dimension of showcasing e.g. when working with municipalities to change lawns into flower beds alongside major roads in urban areas. The collaboration across different organizations serves as integration of professional competences that may foster creativity and thus lead to new and unexpected solutions.
**Changing minds**

The focal point of both projects is changing mindsets, habits and how people work and act. Educating the public and storytelling are some of the various means of communication employed by the projects. Biodiversity are engaged in changing the often habitual thinking among civil servants in the municipality of Aarhus, and later the focus will be on other large municipalities in the region. Biodiversity also disseminate knowledge on biodiversity to a broad public audience through open events and to relevant stakeholders. Campus is seeking to change the mindsets of the employees, to think of Campus as a network, not only a building. A yearly one-week learning laboratory is a key part of the activities, along with the engagement of change agents called “ambassadors”, which has ensured a self-sustaining interest for offering more courses in the learning laboratory. The change is anchored in each of the organizations due to the organizational setup, where managers from each partner are part of a so-called project group placed in between the project manager and the formal steering committee. Hence, the partner managers are always updated and they essentially define the course of the project.

**Managing for value capture**

The two projects focus on value for stakeholders in different ways, but both are keen on not only delivering an output. In Campus, much work has been done by the managers of the partner organizations. Thus, change, ownership and value for each of the organizations has been the focus all along, and the existence of bodies between the project manager and steering committee has built trust and has allowed for the discussion of payment and legal obligations after the project, which essentially is a negotiation of who will capture the value. Biodiversity are less focused on a negotiation, but rather seek to create as much value for as many people as possible. Biodiversity are also developing their own business to be able to profit from their competences through offering services and perhaps opening latent markets.

**Missed value**

We include a brief description of what we call “missed value”. This is to point towards the absence of value-creating activities or conditions that may obstruct value creation, leading to value being missed. If no actors engage, there can be no activities for creating value i.e. someone has to put the output to use in order to create value. Thus, the producers should of course consider whether they have the resources to support the use, but a balance needs to be struck, as extensive use will lead to some not being able to capture the value they intended to.
We summarize the four value-creating activities and findings on missed value in Table 6, where we also address the implications of the activities. The implications are discussed in relation to Figure 3, a conceptual model on value creation in project networks.

### Table 6. Value creation activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Sub-activities</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing infrastructure</td>
<td>Establishing networks and communication channels</td>
<td>Operant resources, such as skills and competences, are created through learning, which suggests that organizations engaged in interorganizational project networks create capabilities for this type of project. The learning may be a kind of internalization of experience into tacit knowledge (Nonaka, 1994).</td>
</tr>
<tr>
<td></td>
<td>Believing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allowing high ambition and emergence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishing common interest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversity brought together</td>
<td></td>
</tr>
<tr>
<td>Creating knowledge</td>
<td>Disseminating knowledge /new application</td>
<td>Projects are integrators (bridging) of fields or industries, bringing professional competences together. Knowledge and innovation may flow between trades in projects that are free from bureaucracy.</td>
</tr>
<tr>
<td></td>
<td>Prototyping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gaining new skills</td>
<td></td>
</tr>
<tr>
<td>Changing minds</td>
<td>Giving language</td>
<td>Without knowledge or the language of nature one cannot perceive the value. This suggests that Bildung (Bruford, 1975) is important.</td>
</tr>
<tr>
<td></td>
<td>Storytelling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Branding the project</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accessing the press/media proactively</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ambassadors spreading the word</td>
<td></td>
</tr>
<tr>
<td>Managing for value capture</td>
<td>Establishing operating organization</td>
<td>Managing for value capture is focusing on the continuous service flow (Vargo &amp; Clavier, 2015). While we see few limits to value, disparate stakeholders should not be left in the dark.</td>
</tr>
<tr>
<td></td>
<td>Building trust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Planning operating model and payments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussing scenarios of use and future government</td>
<td></td>
</tr>
<tr>
<td>Missed value</td>
<td>Lacking resources</td>
<td>Both actors and resources have to be available to co-create value.</td>
</tr>
<tr>
<td></td>
<td>Lack of use / too much use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(overcapacity/lack of capacity)</td>
<td></td>
</tr>
</tbody>
</table>

We have summarized the value-creating activities and the related implications in Table 6, and our results suggest that the two projects enact these activities in different ways. This leads us to suggest two types of project network value constellations in the following discussion, where we also present a conceptual model for the project value creation process.

**Constellations for value creation**

By combining the value and activities, we find that the two projects have different foci, in terms of primary beneficiaries. Campus is primarily focused on the network to create and
capture value for itself, while Biodiversity is focused on both organizations in the project network and stakeholders outside the network.

Campus forms the basis for suggesting a *consortium* as a type of value constellation. The consortium is a committed partnership between a number of organizations, where value is primarily created value for themselves and members of the other partner organizations. The consortium governance is consistent with shared network governance (Provan & Kenis, 2008), as it is an equal partnership with a strong commitment. The commitment goes beyond a moral commitment of being engaged in a project network, as the partners are engaged both economically and legally through their part in operating the building that manifests the collaboration. The consortium fits the descriptions of previous research on project networks focused on construction projects (e.g. Artto et al., 2016; Matinheikki et al., 2016). This points to the suggestion that it is a typical feature of the consortium to encompass construction activities, which usually means that there will be a buyer–seller relationship, while with development activities only, projects might not fit this relationship. The consortium creates value from complementary resources, suggesting that partners of similar types of organizations create less innovative solutions than different types of organizations. This type of value constellation may be related to projects that will transfer into operations (Artto et al., 2016), as it delivers the needed body for managing operations.

Inspired by Biodiversity, we suggest the *facilitating network*. This type of value constellation seeks to create value for both organizations in the network, the facilitator and others, but there is also a strong motivation for creating value for others – facilitating. The facilitator is expected to lead the network, which we find fairly consistent with lead organization governance (Provan & Kenis, 2008). The facilitator will collaborate with a range of other organizations, and the somewhat loosely coupled collaboration (Kreiner, 1995) allows them to change collaboration partners over the course of the project. Collaboration partners may be easy or difficult to find, but essentially it is the facilitator who defines the project focus, and thus the facilitator will be seeking funding and attracting collaboration partners. The focus is on doing something for others, especially that of future stakeholders or disparate stakeholders (Koontz, Hoag, & DeLong, 2013). We note that the course of the project also leads to value for the facilitator, and therefore the motivation may not be all altruistic. In general, we might expect that facilitating networks are adopted more by non-profit organizations than for-profit organizations, even though triple bottom lines are gaining attention in the for-profit sector.
The two specific forms of enacting value creation activities in project networks lead us to suggest a conceptual model of the value creation process illustrated in Figure 3. The process is not inherently different across the two projects; rather it is the enactment of the individual parts and the different foci that sets the two projects apart.

The value creation process consists of three parts that we can divide analytically: the production, the valuation and the capture. In practice, the three parts might happen almost simultaneously. The model is iterative in nature, as in some outputs – the value propositions – will be ready and valued before others, thus the model follows the value not the project process.

**Figure 3. Project value creation process.**

The value generation is the production of output(s) – the project activities might lead to one or more outputs. An output could be a building, which is a value proposition to the potential users. The value proposition(s) are then subjectively valued (Helgesson & Muniesa, 2013; Vatin, 2013) by existing and optionally new actors, who may then choose to engage in co-creation the value. By engaging in this process an actor can capture value for themselves, but co-creation is always a negotiation with other actors (Bowman & Ambrosini, 2000).

From the model we may derive three categories of value: value of the project process, value created among existing actors, and value created with and among new actors. Our research suggests that all projects generate value, such as learning from the project process, while it is not a given that any stakeholders will value the project output(s) expressed in by the value proposition(s). The three types of value points towards the difference of the two value
constellations: Consortiums will focus on co-creating value and not share with new actors, while facilitating networks will seek to invite many new actors to co-create value.

**Theoretical implications**

The model breaks with some existing understandings in theory value creation by introducing value capture to projects. Benefits management has been the primary source of inspiration on the process after producing the project outputs, and the literature suggested that benefits should be actively managed, measured and realized i.e. it has been argued that only if a benefit is measureable, will we be able to realize it (Bradley, 2010). However, as depicted in the model, our research suggests that process value such as learning and competencies are sources of value creation i.e. it is beneficial to a stakeholder beyond the costs (Laursen & Svejvig, 2016; Morris, 2013). But process value such as competencies may be employed without prior measurement as they are internalized (Nonaka, 1994).

Timing is often regarded to be linear (Ward & Daniel, 2012) i.e. that the realization of benefits, and value especially, takes place after project execution. The collaboration and the network that are created take place as soon as the project is initiated and allow for future value to be created during the project and after the project is finished. The reciprocal and continuous exchange suggested by S-D logic highlights this focus on value being created and realized throughout the project execution and operations phase (Vargo & Clavier, 2015). New individuals at the schools will co-create value for many years to come, based on the value proposition that was co-produced by constructing the campus building.

The concepts of value creation and value capture are mainly grounded in strategic management and marketing literature on the basis of product creation (Bowman & Ambrosini, 2000; Grönroos & Voima, 2013; Lepak et al., 2007), and the concepts are also applied for S-D logic (Lusch & Vargo, 2014) through the concepts of use value and exchange value. However, our study shows not all projects will have buyers, sellers and economic exchange, yet this has been the foundation for previous conceptual models (Fuentes & Smyth, 2016; Razmdoost & Smyth, 2015). Our model may fit a wider range of projects, such as organizational change, where the integration of resources takes place without economic exchange.
Practical implications
Beyond the implications for theory of the model, our study has implications for practice in relation to project value creation: Firstly, for Campus, the group of managers between the project manager and the steering committee has ensured commitment and a management group for post-implementation operations. This approach of strong management engagement could be employed by similar project networks; secondly, the division of value into three main categories may serve as input to future project appraisal by especially emphasizing the process value (e.g. new competences) of engaging in projects. This may lead to discussions expected value and strategies for negotiation for value co-creation. Discussing value capture during production could lead to other value proposition designs for targeting specific actors in capturing value. Our final point concerns the strong and weak ties of the networks (Borgatti & Halgin, 2011). The interviews emphasized that the innovation of Campus only holds for as long as the organizations are independent, and based on the theory of strong and weak ties (Granovetter, 1973) this view is largely supported – one want networks of people with different competences to be connected through weak ties. Thus, for Biodiversity and other projects where several project participants in the initiating organization share competences, it would be advisable to engage with collaboration partners with other competences and also to engage project participants that will allow the project to access other networks where complementary competences are available. The underlying assumption being that this can lead to in many ways better e.g. more innovative value propositions.

Conclusion
This paper presents the results of a case study that explores project networks as constellations for value creation. The projects we studied are drivers for establishing new interorganizational networks – through projects and the organizations combining competencies in new ways that they would not have otherwise done. Thus, if two actors want to start collaborating, they might wish to start with a project. We contribute to project management research by presenting four value-creating activities and their implications, and we present a conceptual model of project value creation that focuses on the process and outlines three types of value. Specifically, it emphasizes the value from the project process that previous theory on project benefits has neglected.
Future research
As the two identified constellations for value creation might not be exhaustive, we suggest more research on value creation in both project networks but also in other types of value constellations within temporary organizing. When value is created and perceived to be created in different types of projects, it would be interesting to see further elaborations, as this might influence the definitions of success and this in turn might change the picture of the often mentioned extreme failure rates for projects.

We suggest research into how heterogeneous public perceptions of value are handled by publicly funded projects or event organizers as well as the sponsors. Also in the sphere of public project networks, it would be interesting to see research on why and what makes public organizations start collaborating, for example what are the aids and the obstacles.

Limitations of study
It should be noted that this study does not cover the final part of the two projects’ entire lifecycle. As the projects are still ongoing, we cannot rule out that other dynamics could surface later on, and similarly, the project participants will continue to learn throughout the projects. Thus, new sources of value will continue to emerge. This study covers two projects, and in spite of the convergence of some characteristics, we do not suggest generalizing the results for all projects or across project types.

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References


Ramírez, R., & Wallin, J. (2000). *Prime movers: define your business or have someone define it against you.* J. Wiley.


Declaration of co-authorship

Full name of the PhD student: Markus Laursen

This declaration concerns the following article/manuscript:

| Title: | Taking stock of project value creation: A structured literature review with future directions for research and practice |
| Authors: | Markus Laursen, Per Svejvig |

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