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RESEARCH ARTICLE

Network learning and trust: A case study of a benchmarking network

Lars G. Dietrichson[1] | Per Nikolaj Bukh[2]

[1]Department of Economics and Business Economics, Aarhus University, Aarhus, Denmark

[2]Department of Business and Management, Aalborg University, Aalborg, Denmark

Correspondence
Lars G. Dietrichson, Department of Economics and Business Economics, Aarhus BSS, Aarhus University, Fuglesangs Allé 4, DK-8210 Aarhus, Denmark.
Email: ldietrichson@econ.au.dk

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Abstract

When organizations engage in learning from each other through self-governed networks, they may encounter challenges regarding confidentiality. This is particularly true if external accountability needs of the network participants conflict with internal accountability among participants and/or network-level objectives. This study shows how important it is to have specific agreements about not using findings for accountability outside the network. Empirical evidence comes from a longitudinal case study of a benchmarking project involving six independent public sector companies. Based on reciprocal trust among the participants, the promise of confidentiality was made up front and enforced throughout the network collaboration by the participants themselves.

KEYWORDS

accountability, benchmarking, confidentiality, network learning, trust

1 | INTRODUCTION

In the last decade, interest in the area of organizational learning has been growing. Although much of the research has concerned the private sector, research on learning within the public sector is also attracting increasing attention (Askim, Johansen, & Christophersen, 2008; Moynihan & Landuyt, 2009; Rashman, Withers, & Hartley, 2009; Siciliano, 2017; Visser & Van der Togt, 2016). Whether organizational learning should be defined as change in cognition or change in behavior has been debated, but most researchers, as stated by Argote (2011), have defined organizational learning as a change in organizational knowledge resulting from the experience and the context in which the learning occurs.

The literature typically emphasizes learning from others (e.g., Ball, Bowerman, & Hawksworth, 2000; Bowerman, Francis, Ball, & Fry, 2002; Yasin, 2002), or with others (Kyrö, 2006), when knowledge is transferred in interorganizational learning involving two or more organizations as a network. Further, focus in the literature has been on whether companies learn, and not how the learning process occurs, and learning has been addressed at firm level rather than at network level (Knight, 2002). In relation to the level of learning, Provan, Fish, and Sydow (2007) as well as Phelps, Heidl, and Wadhwa (2012) emphasize the importance of the multilateral collaboration, and Gibb, Sune, and Albers (2017)

state that little is known about learning processes in networks, including how they are governed and the knowledge outcomes at the whole network level.

Trust is frequently identified as critical for network performance (Edelenbos & Klijn, 2007; Larson, 1992; Uzzi, 1997). Following Zaheer, McEvily, and Perrone (1998), we hypothesize that trust is an enabling condition that allows network members in a network with shared governance to pursue a variety of governance mechanisms implying a "positive network level outcome" (Provan & Kenis 2007, p. 230). This leads us to our research question: How and why does trust influence the learning outcome in networks with shared governance?

Besides adding to the literature on learning at the network level, the article complements earlier studies on development and consequences of trust in interorganizational exchange (Zaheer et al., 1998). In addition, it adds to the understanding of learning processes in networks, including how they are governed and the knowledge outcomes at the whole network level as well as how networks may be coordinated and regulated toward performance goals (Gibb et al., 2017).

The empirical part of this longitudinal case study (Yin, 2018) focusses on a benchmarking network involving six Danish district heating companies. The network is characterized by shared governance (Provan & Kenis, 2007), and we focus on how the six organizations learn as a group at the network level. Because the basic relationships among public service companies are noncompetitive by nature, cooperation in networks holds potential for knowledge sharing (Kyrö, 2006). We followed the benchmarking project, which mainly involved managers from the companies, over a period of 4 years, during which we interviewed them and had access to their meetings. Furthermore, we applied these same interviews to learn about and interpret a previous attempt at establishing a similar benchmarking project in the same network nearly 10 years earlier.

In the analysis, we identify three distinct network-level learning episodes (Knight, 2002): "learning how to benchmark," "learning how to interpret the benchmarks," and "learning as shared knowledge is applied." By focusing on these three episodes, we outline the underlying conditions and processes in order to study how and why trust influences the learning outcome in networks with shared governance.

The remainder of the article is structured such that Section 2 reviews the relevant literature on trust and learning in benchmarking networks. This is followed by a description of the methodology underpinning our study in Section 3. We examine how and why learning in networks relates to trust in Section 4 (the first attempt to learn from benchmarking) and 5 (the second attempt to learn from benchmarking). Section 6 contains our discussion, and finally in Section 7, our conclusion and practical implications are presented.

2 | TRUST AND LEARNING IN BENCHMARKING NETWORKS

When organizations intend to learn monitoring and to measure performance relative to others, benchmarking is an important instrument that has gained worldwide popularity, not only among private companies but also within local governments (e.g., Ammons & Rivenbark, 2008; Bowerman et al., 2002; Knutsson, Ramberg, & Tagesson, 2012) and various parts of the utility sector (e.g., Dassler, Parker, & Saal, 2006; Jamasb, Nillesen, & Pollitt, 2004; Jamasb & Pollitt, 2007; Laine & Vinnari, 2014; Lin, 2005; Marques, 2006). A vast number of attempts have been made to define benchmarking, but most often it has been loosely defined, for example by Stephens and Bowerman (1997), who state that benchmarking implies a search for best practices and a subsequent translation of these best practices into use in the organizations involved. Furthermore, Stephens and Bowerman (1997) emphasize that performance statistics are used to identify either areas for improvement or ranking of the companies.

Bowerman et al. (2002) found that benchmarking in the private and public sectors differs, because benchmarking in the private sector is voluntary, whereas benchmarking in the public sector tends to be compulsory and implemented from the top down in an attempt to increase accountability and improve efficiency. However, for exceptions, see Buckmaster and Mouritsen (2017) as well as Laine and Vinnari (2014). Furthermore, the use of benchmarking in the private sector differs from the public sector in that the results are mostly kept confidential for competitive reasons and are often facilitated by a trusted third party. Benchmarking, understood as the mere comparison, seldom gives answers

with respect to what should be done. Rather, the indicators point to challenges that different stakeholders ought to examine more carefully (Johnsen, 2012).

If the interfirm network is within the private sector, the benchmarking is typically administered as a benchmarking club (e.g., Saunders, Mann, & Smith, 2007), in which a third party acts as a facilitator (e.g., a trading association) or a "network administrative organizer" (Provan et al., 2007). This structure is designed to ensure that the information gathered with the benchmarking remains confidential to the organizations within the network, thereby maintaining anonymity and facilitating the exchange of commercially sensitive data. This is crucial because the organizations involved are often competitors, and thus the benchmarked organizations need to trust the facilitating body. We take it as a point of departure that the need for trust is equally relevant for public sector organizations in a network learning setting, because public organizations are often concerned with the production of relational services and outcomes and are reliant on trusted, collaborative relationships (Rashman et al., 2009).

According to Ring and Van De Ven (1994) and others, trust is regarded as a necessary ingredient for establishing and maintaining a cooperative relationship among individuals as well as within groups of individuals. Control has been treated as an opposing force to trust (e.g., Kastberg, 2016), and both trust and control can be seen as ways of reducing complexity (Luhmann, 1979); however, trust opens up more and richer opportunities for collaboration than control. If control is chosen as a tactic, more energy must be expended monitoring for deception (Kastberg, 2016).

Consequently, accountability arrangements are typically introduced both in order to resolve issues in which a certain level of distrust is natural, but also to prevent such issues from arising (Lægreid & Neby, 2016). Further, accountability is in many cases considered unavoidable, for example, within public service (Bovens, 2007) or in public-sector partnerships (ter Bugt & Tillema, 2016), in which the actors have an obligation to explain and justify conduct, the governance system can pose questions and pass judgments, and the actors may face consequences. Additionally, trust affects goal acceptance and performance reporting between organizations, and mutual trust is a central feature of, and indeed a key precondition for, a well-functioning network (Light, 2006).

The relationship between learning and trust has been characterized by many as an interrelated, reciprocal process, exemplified by expressions such as "learning to trust and trusting to learn" found within different areas, including psychology (e.g., DeSteno, 2014), management (e.g., Coopey, 1998), and cognitive science (e.g., Landrum, Eaves, & Shafto, 2015). Similarly, Moingeon and Edmondson (1998) identified that trust plays two distinct roles in organizational learning: trust as an outcome and trust as a prerequisite. Moingeon and Edmondson argued that gaining a certain level of trust can be an outcome of an intervention designed to create learning in an organization. Furthermore, when trust is a prerequisite for embarking on a project of enhancing organizational learning, a minimal level of trust in competence and/or in intentions is required for an organization's members to engage in learning.

Dyer and Nobeoka (2000) define network learning as "(a) knowledge development and acquisition that is useful in a specific network context or (b) knowledge (e.g., a best practice) that is developed or resides within the network and is discovered and documented/codified by a network-level knowledge storage mechanism." Knight (2002) expanded on Dyer and Nobeoka (2000) and proposed that network learning occurs when the members of a network cooperate with each other to learn how to manage knowledge (becoming a learning network) and in the ongoing sharing of operational knowledge (being a learning network). Where the shared knowledge being produced in the network is applied, the learning entity is the organization (Knight, 2002). Following Knight and Pye (2005), if the changes in network practices, structures, and interpretations are widespread and enduring, they can be regarded as outcomes of network learning, even if the changes are not uniform or universal.

3 | METHODOLOGY

The paper is based on a study of a project in which six district heating companies of approximately the same size cooperated in the development of a benchmarking model. District heating is a local monopoly (Wissner, 2014) in which companies serve customers in separate areas. Thus, the companies we examined are not competitors, and they are all

TABLE 1 List of observations and interviews

Source	Type	Date
Six-city meeting, observation 1 (nine persons)	Detailed notes	March 16, 2009
Six-city meeting, observation 2 (10 persons)***	Detailed notes	April 21, 2009
Six-city meeting, observation 3 (10 persons)	Detailed notes	August 18, 2009
Six-city meeting, observation 4 (10 persons)***	Detailed notes	October 6, 2009
Six-city meeting, observation 5	Detailed notes	April 24, 2012
Interview w/manager of Six-city organization A*	Taped/transcribed	November 2, 2009
Interview w/manager of Six-city organization B*	Taped/transcribed	November 4, 2009
Interview w/manager of Six-city organization C*	Taped/transcribed	February 19, 2010
Interview w/manager of Six-city organization D*	Taped/transcribed	November 2, 2009
Interview w/manager of Six-city organization E**	Taped/transcribed	November 5, 2009
Interview w/manager of Six-city organization F**	Taped/transcribed	November 6, 2009
Interview w/manager of Six-city organization A*	Taped/transcribed	May 21, 2012
Interview w/manager of Six-city organization B*	Taped/transcribed	June 13, 2012
Interview w/manager of Six-city organization C*	Taped/transcribed	May 14, 2012
Interview w/manager of Six-city organization D*	Taped/transcribed	June 13, 2012
Interview w/manager of Six-city organization E**	Taped/transcribed	May 21, 2012
Interview w/manager of Six-city organization F**	Taped/transcribed	May 25, 2012
Agendas and minutes of meetings from Six-city meetings	Written	2008–2012

*Present during the 1999 model.
**NOT present during the 1999 model.
***Including one specialist from the association.

nonprofit companies owned by Danish municipalities. We will refer to the group as the Six-city group and the Six-city companies, terms the companies use to refer to themselves. The Six-city companies made their first attempt at developing a benchmarking model in a benchmarking network in 1999 but failed to agree on a model. In 2008, they initiated a new project to develop a benchmarking model, and we had the opportunity to follow this project almost from the beginning.

Previous research on network learning has mostly considered other forms of governance than the one in our study. For example, in their mapping framework for current and future research into interorganizational knowledge transfer, Easterby-Smith, Lyles, and Tsang (2008) consider a dyadic knowledge transfer, and Gibb et al. (2017) study an industrial network governed by a hub firm. The network we study is a self-governed public sector network, which implies that the network itself is considered to be the unit of analysis, and the mode of governance of the network is considered critical for network-level outcomes (Provan & Kenis 2007). This implies that the individual members of the network are regarded as sufficiently similar (homogenous) with respect to the constructs of the theory (Klein, Dansereau, & Hall, 1994).

A manager from each company participated in the network, as shown in Table 1. Observations focus on the learning processes at network level, whereas the individual interviews focus on network members regarding the learning outcomes at the whole network level. To preserve anonymity, we refer to the managers and companies as "Manager A" and "Company A," respectively. To keep track of their development over time, the naming of the companies as well as the interviewees will be kept consistent in the different phases.

The network level observations were conducted at five network meetings, in which one researcher participated as an observer. The first four took place during the design, implementation, and in-use phases in 2009, and the fifth took place in 2012 when the model had been in use for over 2 years. Detailed notes were taken of observations at

the meetings. Further, the managers were interviewed twice—the first six interviews took place in 2009–2010 and the next six interviews in 2012: a total of 12 interviews. The semistructured interviews lasted between 1 and 1.5 hr. Additionally, we studied documents, meeting notes, and so forth from the project, and the corresponding author was included in the e-mail correspondence among the group between meetings.

In the interviews, reliability was ensured by avoiding to ask leading questions and by following up on vital topics. All interviews were tape recorded and then transcribed verbatim. Analyses included inserting descriptive codes into the text. These codes were then repeatedly labeled with subject codes to assist in interpretation and reflection. Essential interview sequences are extracted and used in the presentation of data to enhance reliability.

Validity concerns the soundness of the phenomenon studied and the study method (Kvale, 1996). In addition, one must ensure both internal and external validity. Internal validity mainly concerns the relevance of the conclusions to those who are studied and to readers. A preliminary version of the study analysis was circulated among the interviewees to allow them to comment on the analysis, propose changes in the interpretations, and comment on how their statements were quoted. External validity mainly dealt with the generalizability of the results, which is detailed in the concluding section.

Among the six managers, four were involved in the previous benchmarking project 10 years earlier. They were interviewed in detail about their previous experiences and their impact on the second benchmarking project. In the two empirical sections below, we have therefore conducted separate analyses of the first attempt to develop a benchmarking model from 1999 to 2000 (Section 4) and the new benchmarking model developed in the second attempt from 2008 onward (Section 5). Our analysis of the first attempt is based on documents as well as interviews with participants in the second attempt because we did not interview anyone during the first attempt.

4 | THE FIRST ATTEMPT TO LEARN FROM BENCHMARKING

In 1999, the six companies in the Six-city group gathered to develop a joint model for internal benchmarking. According to Manager D, the project was initiated because the Danish regulatory authorities had announced that they would introduce a price-cap regulation based on best-practice benchmarking of the sector. Consequently, the Six-city members decided to prepare themselves.

Manager A recalled, "the intention was to establish a way to compare costs related to the distribution pipelines." The companies wished to include numerous details, such as standard costs per meter of pipeline, considering local conditions. They also went into detail to calculate the correction factors for the comparison of large and small district heating companies. However, as Manager B explained, this was not only a technical task:

> *We spent a lot of time checking if we had done our accounting similarly to give an accurate picture of how things really were, but it became very political, in the sense that we used the correction factors to achieve good results in the benchmarking. That was more important than learning. (Manager B)*

These findings showed that the Six-city managers displayed trust as a prerequisite (Moingeon & Edmondson, 1998), because they had known each other well from previous Six-city collaborations. The companies felt a need to develop a new way of working together, and it was a joint intention to learn how to benchmark. However, it seems trust in intentions was more important than trust in competence (Moingeon & Edmondson, 1998) with regard to benchmarking techniques.

When Manager B is asked why the strategic behavior would be less important this time than during the first attempt, he answered, "we have decided to keep the information confidential; it may not be released," and furthermore, "that was also the case last time, but nevertheless, the benchmarked result was used externally for publicity by successful organizations." When asked how this could happen, he gave the following answer:

> *Each and every one of us could decide how the model could be put together and used, and I can assure you that I can make any company look either good or bad depending on how I put the key figures together. It's just a matter of mathematics. (Manager B)*

Therefore, even though they were trusted partners, the promise of confidentiality among the companies was not strong enough to overcome the temptation to use the benchmarking results for accountability reasons (Bowerman et al., 2002) outside the network. Although one might assert that the network did learn, the learning outcome was not as originally intended. This was also the finding of a survey of local government benchmarking clubs, which were preoccupied with a need to demonstrate good performance based on cost criteria (Ball et al., 2000).

According to Manager B, everybody engaged in this practice, which led the Six-city benchmarking project to be terminated in 2000:

> *We had to compromise to reach a diplomatic and pragmatic solution in which we made two options: one with a correction factor and one without, and the participants were free to choose. That became the result, and that's why we had many winners and few losers. (Manager B)*

As a consequence, the model proved to be of little use:

> *These correction factors blurred the results completely, as the factors could be set to anything. Not much more came out of it, so it died out. (Manager D)*

One of the big issues in the first benchmarking attempt in 1999 was, as Manager E explained, the eagerness among participants to rationalize and excuse bad rankings as soon as the benchmark results were available, instead of asking, "what can we improve in comparison to our peers?" In other words, it seemed that (poor) performers blamed their performance on exogenous factors or methodological flaws (Knutsson et al., 2012).

However, according to Manager C, the benchmarking exercise in 1999 was "quite useful for explaining to external stakeholders the rationale behind prices. Therefore, I have used the benchmarking results on many occasions over the last 10 years." Thus, despite knowing that the results were blurred and subjectively skewed, managers gave them a long afterlife as convenient explanatory information for external stakeholders, because they were "factual enough" (Chua, 1995) and, therefore, usable for accountability purposes.

Capacity of action might be one of the reasons why they did not use their new knowledge in practice in this first project, because, as March and Olsen (1975, p. 150) state, the "capacity for beliefs, attitudes, and concern is larger than the capacity for action." The results from the first benchmarking project might have been relevant, but it appears that the individuals allocated neither time nor energy for action, as there were probably other competing choice situations with higher expected return. Or, individual beliefs did not lead to individual action because of hindrances (standard operating procedures, role-definition, constraints, etc.), being an example of an incomplete learning cycle as superstitious experiential learning (March & Olsen, 1975).

5 | THE SECOND ATTEMPT TO LEARN FROM BENCHMARKING

Around 2007–2008, benchmarking as a topic became high on the agenda in the Danish district heating association because the Danish authorities were preparing to regulate the sector based on benchmarking. This resulted in several conferences and seminars about benchmarking as well as the establishment of benchmark working groups. Specifically, the Six-city group decided to start a new benchmarking model project, while keeping in mind the experiences from the first attempt 10 years earlier. This time, it was particularly emphasized that the benchmarking project should contribute to network learning; thus, its goals were as follows:

> *The overall aim of the working group is to take care of the members' interests, by carrying out an internal benchmarking on chosen key figures […] the results from this benchmarking shall conclude with many key figures, preferably with supplementary text. These key figures shall subsequently form the foundation of the desired learning process of the district heating companies (that is to say, they should show how the best performers act). Key numbers shall be analyzed leading to fruitful discussion—through this, learning comes into being! (Internal memo from the chairman of the group, dated February 2, 2009)*

It was clear from the beginning that the four managers (including the chairman) who participated in the first benchmarking approach 10 years earlier took the lead regarding rules and practices of the network (see Owen-Smith & Powell, 2004). For example, it was decided up front regarding accounting data and ranking "to keep the information confidential; it may not be released" (Manager B). At the first meeting in March 2009, it was also decided that a standard chart of accounts would be developed "to keep the discussion on a general managerial level, leaving the details to the respective accounting departments" (Manager D).

Although the companies were similar in many respects, they also differed. Some of them had complete supply chains incorporating production, transmission, and distribution of hot water (or steam), whereas others only employed parts of the chain, implying different cost structures. Therefore, cost accounting based on a standard chart of accounts was considered an integral part of the benchmarking model for the following reasons:

> *One of the preconditions of benchmarking, real benchmarking, is that you do your accounting in the same way, that you have a chart of accounts and you agree upon how to calculate costs the same way. Otherwise, it's difficult to benchmark, when you are comparing apples and oranges…It is very important when developing a standard chart of accounts that you also prepare an accounting guideline. That's what we insisted upon. Working with the Six-city benchmark model, the guideline is not always clear and consistent anyhow. When we dived into it, we found some answers, and if we didn't, we just decided, that's how we'll do it (Manager A).*

To compare costs, the chairman of the group sent the spreadsheet used in his company to the other participants, and they all agreed to share the results of comparable calculations with each other. However, the accountant from Company D warned, "there is no single way to interpret them, and two persons will never do the accounting in the same way."

Next, all participants agreed to review their input to the benchmark scheme and resubmit it to prepare an updated version of the comparison that all companies could agree on. The willingness to reveal accounting numbers to others demonstrated the participants' trust in each other. The next meeting was scheduled for October 6, 2009, and according to the Six-city execution plan, it was meant to incorporate "the new benchmark model in use."

At the meeting on October 6, 2009, the agreed-upon benchmarking model was presented with data collected from the participating companies and presented as bar charts for comparison, in addition to an early attempt at presenting "best practices" indicating how the companies went about incorporating the benchmarking model into their learning or knowledge sharing. The agenda of the meeting was to review the input and corresponding output and discuss the results. Additionally, its aim was to discuss the format of the benchmark report, how it was to be updated, and who was responsible for collecting and assembling the data. Finally, participants were to decide on further work on the knowledge-sharing process and decide which areas were the most interesting for further investigation.

The results from the benchmarking are presented as bar charts. Representative examples of this are shown in Figure 1. The immediate reaction from the participants was positive and the report was discussed and commented on around the table in order to reach a consensus on the meaning behind every benchmark number and to come up with suggestions for naming the different bar charts. The participants also discussed how the benchmarking exposed differences in performance among the Six-city companies. Some were surprised to find their rank different from what they had expected, stating "indeed, we have new knowledge after this" (Accountant, Company C).

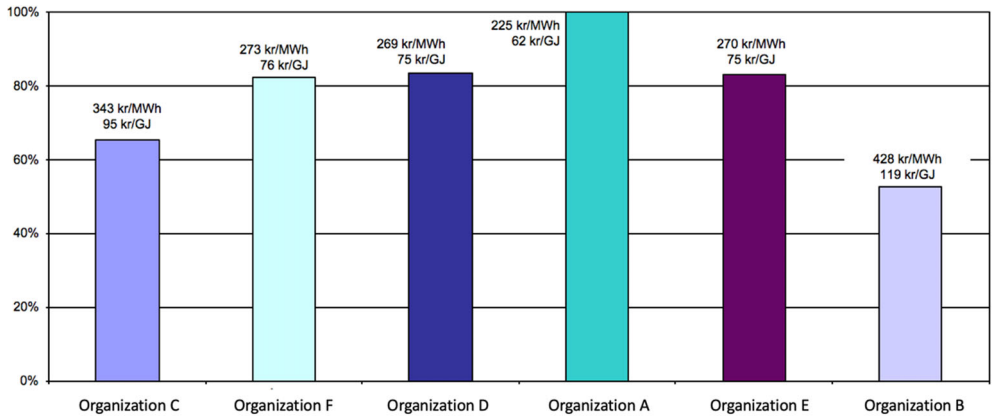

FIGURE 1 Best practice—Production cost relative to produced energy
Source: Extract from the benchmarking report
[Colour figure can be viewed at wileyonlinelibrary.com]

Figure 1 shows the relative productivity of each company, with the best performer ranked as 100%. The names of the companies were concealed in the report to be able to present the results outside the network. Similar bar charts were also produced for other areas such as "overhauled pipelines (km) versus total pipelines (km)" and "heat loss versus produced energy."

Generally, the participants seemed to negotiate consensus on important items throughout the meeting successfully. At the next meeting, on November 10, 2009, the participants decided on specific items to be changed in the final report, as well as the degree to which the final report would be confidential. After the meeting, an anonymized version of the final benchmark report was distributed by e-mail to the participants on November 23, 2009.

The observations from the Six-city benchmark meetings were followed by interviews with the managers from the participating companies. When asked about efficiency, Manager A answered that it was good for them to have someone to compare themselves to in order to ask, "does it look bad or is there something to gain from this?" referring to how they intended to use the new knowledge to negotiate administrative costs, which they had assumed from a shared service center within the municipality, or whether they should buy services externally.

Company F decided to implement an accounting system using the agreed-upon standard chart for the accounting system in parallel to its existing system, because even if they wanted to, they could not switch to another system, as they were obliged to use their municipality's accounting system. However, the company had to show a cost benefit for how much they gained from this system compared to the resources expended:

> *If we have to do it just because someone thinks it's a good idea and we won't benefit from it, then, there is no reason for us to do it. We will use this benchmarking actively to make it easier for us to benchmark ourselves in comparison to others. It's a clear measure of quality to be able to quantify how good we are compared to the others. If you can't do that, it's difficult to prove how good you are (Manager F).*

This quote reflects accountability concerns; however, in their second attempt to make a benchmark exercise from which they could learn, the Six-city benchmarking group managed to keep their rankings confidential from stakeholders outside the benchmarking network.

The next official meeting for the Six-city benchmarking project was held on April 24, 2012. This was a follow-up meeting to reveal further in-use experiences with the system from the original benchmark report (in which they used accounting numbers from 2008) and its effects on their 2010 accounting numbers. At the meeting, participants commented on the preliminary results of the updated benchmark report as well as on how to improve the report itself. They agreed on the importance of having comments in the report explaining the figures.

Once more, they also discussed various definitions related to the different accounting principles they had to comply with and how the benchmarking model would cope in this regard. Ultimately, they negotiated a consensus on common definitions successfully. Manager E commented, "the more we worked on this, the better we can make our case to the authorities on the best way to conduct benchmarking." When asked if they use the benchmark numbers for anything other than just to communicate with peers and superiors, Manager B answered, "we have in fact used them in a management seminar a month ago, where we agreed to split up the overall objectives into the individual sections. Our section leaders will now try to set up some targets. So, it's an ongoing process." This comment was in reference to results from the benchmarking model regarding work processes that "enable employees to deal more effectively with inevitable contingencies" (Adler & Borys, 1996, p. 68).

Manager B also shared the benchmarking data with his superior in discussion. However, until now, they have not used the benchmarking to set targets. Instead, they will use the benchmarking as an indicator to identify top performers. The company then visited them to see how and what they do as a learning process. Further, the manager reported that the benchmarking task itself no longer took up much of his time. The limited amount of time he did spent, paid off by easing his work in preparing the annual report. Additionally, when making a case to his superiors, he went in with a stronger position than if he were only expressing his ideas orally.

When Manager E was asked about the Six-city benchmarking model in use, the manager replied as follows:

> *We use it a lot internally in the department. So, when I sit down with my employees…we have one operational manager and some coordinators who are operationally responsible… when we sit down and talk, whether or not we've done well, we can look at these benchmarks for inspiration. We are quite proud of ourselves, but there are some out there who do it differently to give themselves better results, and then we have a talk about these differences (Manager E).*

This also revealed how Company E used the Six-city benchmarking in an enabling way at an operational level by using standalone key numbers or combining them with other internally produced benchmarks. The manager additionally confirmed, "we also use it as process benchmarking, especially in the cases where we say 'here is something we don't understand, or we cannot understand why we are so different.'" Thus, they used process benchmarking not only to find out why they are different, but also to share knowledge and to dive into the subprocesses to find out how they can become more efficient.

Manager E also used the Six-city benchmarking with the board of directors to explain and present action plans if they performed below par and needed improvement. When asked if the Six-city benchmark had an official status, Manager E replied as follows:

> *Yes, it is a topic at one of our yearly board meetings, where we go through three different benchmarks: The Six-city benchmark for heating, and the two water and wastewater benchmarks. And they get compared in a common presentation and reviewed with the board (Manager E).*

When asked if they were held responsible for the Key Performance Indicators (KPI), Manager E answered, "yes, the KPIs imply responsibility. The action plans, if we don't meet our targets, then… if we fail to meet our targets two months in a row, then the responsible person has to come up with a plan, or we sit down and make a plan together." This showed that subordinates have some flexibility in how to reach their efficiency targets (Ahrens & Chapman, 2004), and that although there is knowledge on performance made available to the network as benchmarks, the network members do not necessarily adopt them.

6 | DISCUSSION

This study considered two attempts in which a group of companies worked together in a network to develop a benchmarking model. From the companies' perspective, the first attempt was unsuccessful, whereas the second attempt was

termed successful. In the first attempt, the network learned how to benchmark at the network level (Knight, 2002), but interpretation of the benchmark results became very political as the rankings were distorted by correction factors. Hence, the first attempt did not result in learning at the organizational level. However, the network members learned as a network how a benchmarking model could be developed. Further, the network members experienced that the process of learning from interorganizational networks is fragile if the performance indicators are disclosed outside the network group.

The failed first attempt did not deter the participants from trying again. In the second attempt, the network members decided that the performance indicators should stay within the network, and the companies as a network learned how to benchmark. This first learning episode occurred through iterations in which the network members refined and aligned their understanding of the situation through interaction and negotiations. In the second learning episode, the network learned how to analyze the benchmark results. This phase in particular demanded network members to agree not only on how to do the calculations, but also on how to interpret the results. These two network episodes required that they agreed on how to coordinate their practices in order for their numbers to be comparable. This coordination required the companies to negotiate and agree upon a standardized chart of accounts to enable a common standardized measure. The trust among the group members allowed them to coordinate their efforts, allowing them to trust the network for handling their accounting information.

In this second attempt, it seems that the shared knowledge was also applied. The four network participants who also participated in the first attempt relate the difference between the two attempts to the network's ability to keep the benchmark results within the network. In other words, in the second attempt they managed to keep the promise of confidentiality, in contrast to the first attempt. The Six-city group is a network with shared governance, and other forms of governance may not need to negotiate confidentiality in the same manner because confidentiality is either not an issue or is taken care of by a lead organization or a network administrative organization.

When confidentiality was mentioned by the interviewees, it was treated as an expression of trust. However, trust does not necessarily imply network learning as it may be influenced by other factors. For instance, Zaheer et al. (1998, p. 155) note that interorganizational trust reduces conflict and may be an enabling condition, allowing exchange partners to pursue a variety of bilateral governance mechanisms that lead to improved performance.

According to Edelenbos and Klijn (2007), Larson (1992), and Uzzi (1997), trust is also seen as critical for network performance, and as network performance is reliant on learning, the results indicate that trust is critical for learning at the network level. However, in our case, trust itself is not enough for the intended learning outcome to be achieved. Therefore, in addition to having a direct and positive relationship with network learning, we propose that trust also has an enabling condition, allowing network participants to pursue multilateral governance mechanisms, for example, to agree on confidentiality as in this case.

The present study shows that although the first two learning episodes, in which the network learned how to benchmark and how to interpret the benchmarking results, are presented as distinct episodes, they are also interconnected as the learning process occurs iteratively. The third learning episode is important for organizations in order to apply the results, but the first two episodes of learning as a network are necessary in order to learn from the others.

As accounting data are subject to interpretation, trust was essential for allowing access to the accounting data for other organization members. Thus, trust served as a prerequisite (Moingeon & Edmondson, 1998, pp. 255–256) for the development of a new form of accounting (Mouritsen & Thrane, 2006, p. 243) and contributed to the Six-city organizations' efforts to develop collaborative benchmarking to identify best practices.

The process followed by the Six-city network has similarities with the process suggested by Elnathan, Lin, and Young (1996, p. 40) with respect to data collection, specifically with respect to how "information sharing agreements should be worked out and data comparability issues have to be resolved." The Six-city companies shared accounting data within the network based on a negotiated and agreed-upon standard chart of accounts, thus following the claim by Elnathan et al. (1996, p. 40) that firms typically "engage in cooperative benchmarking abide by a code of conduct which they agree upon prior to the beginning of the study". The only benchmark report that may be shared outside the network is the anonymized bar charts. As the Six-city companies have conducted this benchmarking project, there is a

high level of trust among them, without which this benchmarking project would not have been possible (Elnathan et al., 1996).

7 | CONCLUSION

By examining the Six-city network, the study presents an in-depth understanding of how issues of confidentiality evolve, how they are governed, and ultimately how collective outcomes might be generated. Consistent with Provan et al. (2007, p. 480), there are four areas to which the study findings can be applied: how collaboration can improve the business environment in a region within a particular sector, how multi-firm innovation can be improved, how clusters of small businesses can become more competitive, and how public services can be improved.

According to Provan and Kenis (2007), there are three main forms of governance, namely, shared governance, lead organization, and network administrative organization. In the last two forms, any issues regarding confidentiality are supposed to be taken care of by construct. However, when having shared governance, as in the Six-city case, the issue of confidentiality must be taken care of by the network governance, that is, the participants themselves. This is particularly important if external accountability needs of the network participants conflict with internal accountability among participants and/or network-level objectives (Provan & Kenis, 2007). This issue of accountability could even be a concern in the two other forms of governance. Further research into the area could make this clearer.

Finally, the results of this study show how trust impacts the learning outcome in a network learning context in which participation is voluntary and with shared governance. These situations may differ in cases where the relationship is hierarchical. Hopefully, the lessons and conclusions drawn from the present study will spur additional research connecting trust, accountability, and network learning in public management and administration.

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DATA AVAILABILITY

The data is not publicly available due to privacy or ethical restrictions.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ORCID

Lars G. Dietrichson https://orcid.org/0000-0001-8121-8252
Per Nikolaj Bukh https://orcid.org/0000-0003-2374-6975

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