

**Emergence of networks within Public-Private
Partnerships**

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Abstract: This research will attempt to shed light upon the emergence of networks among actors involved in the Public-Private Partnerships (PPP). By adopting the qualitative case study strategy this research will involve semi-structured interviews of selected stakeholders as well as non-participant observations. Such an approach will bring the power structures to forefront and provide a focus on peoples and processes. By focusing on these non-material aspects and emphasize on the construction of meaning, the outcomes of this research will eventually contribute to the fields of social networks as well as to the broader PPP literature and it will project a number of implications for public sector scholars as well as administrators.

Keywords: Public Private Partnerships, Social Networks, Respondent Driven Sampling, Qualitative, Quantitative

1 Introduction

Public-Private Partnerships (PPP) are ventures funded and operated through a partnership of the public sector with one or more private sector companies. All the attempts in the literature for defining PPP, have three main points in common that could constitute an all-inclusive definition. First, PPP involve at least one organization from the private sector and at least one organization from the public sector; second, these organizations share common objectives for the creation of social value; and third, these organizations agree to share both efforts as well as benefits (Reich 2000). Being complex networks (Edelenbos & Klijn 2007) with diverse stakeholders interests and agendas that may entail accommodating co-operation, collaboration and competition, PPP have inherited the characteristics of a network society and are based on the idea of mutual added value.

In projects implemented under the PPP model is required to manage accountability through networks of multiple agents in both horizontal and vertical partnerships and inter-organizational channels. Although management of these networks is not yet well understood (Buono 2003), they confront stakeholders with 'wicked problems', complex coordination tasks and unclear accountability systems (Agranoff & McGuire 1998, van Bueren et al 2003). The managerial challenges in these processes are significant and complicated by the interplay of different social systems on several levels (Sydow & Windeler 2003). A PPP can be conceptualized as a network in which stakeholders are interacting nodes that establish formal as well as informal relationships. Formal relationships tend to be those mediated by work (Nohria &

Spyros Angelopoulos

Ghoshal 1997), where informal relationships are those where actors establish friendships (Kilduff & Tsai 2003). Hence, one can visualize the organizational environment of PPP as networks, and respectively the partnership as a network of networks; a network that inter-relates the networks within the organizations of the public and the private sector.

Networks have specific properties and these are determined by the role of the actors and their established relationship. They are comprised of nodes, which collectively give rise to a structure that emerges from inter-agent connections. These nodes send, receive, transform and transmit information through their ties, which are considered as probabilistic and make the network dynamic (Skyrms 2009). The resulted normative indeterminacy is based on the facts that societies are almost always comprised of heterogeneous actors with sometimes competing interests, as well as when long and short-term societal goals are in conflict (Flack & Krakauer 2009). Different individuals construct different types of networks and can belong to many different networks at the same time. Moreover, different networks have different uses for different types of influence as horizontal networks are more effective for spreading peer influence and supporting the construction and reframing of meaning and vertical are more effective for cascading codified information and passing on authoritative decisions (Rogers 1995, West et al 1999).

The formation and structure of networks can change over time, as not only the membership of different and multiple actors engaged in the networks changes, but also their roles in the networks, as well as their

relationships evolve over time (Merali 2004). Connections with repeated transactions may become stronger and the development of lasting relationships, new connections may appear. On the other hand some connections may atrophy due to a lack of communication, while dying connections may be revived due to a renewed interest in collaboration. A dynamic network topology may emerge, where network constellations are activated selectively as and when needed for particular collaborative and transactional contingencies (ibid). The network is not something that is; it is something that is becoming, and what a network is today, is mostly due to what it was in the past. Hence, the history of the system can provide valuable information for its patterns of behaviors. In describing the history of the system, true understanding will come from describing its configuration of relationships over time (Capra 2002). This suggests studying how actors have related to each other within the network (Anderson et al 2005).

Building a theory for the emergence and evolution of networks requires characterizing the dynamics resulting from the interaction of actors, constraints as well as the architecture of the network, and what is missing from the relevant literature is a question about the dynamical processes and principles that lead to the construction of a set of prescriptive and interacting rules (Flack & Krakauer 2009). There is a further need in understanding how these systems form, how they are maintained, and how they interact with their constituents as well as with other groups (Levin 2009). How is cooperation maintained in

Spyros Angelopoulos

networks? How are institutions, from social norms to civil laws, maintained? How do networks emerge and how do they evolve?

2 Research Question

The relevant literature of social networks has mainly concentrated on ‘who is talking to whom’ by constructing social network maps, but neglected what these actors are talking about. However there is no research conducted on the processes that comprise the initial spark for the emergence of networks. The proposed research focuses on the aforementioned gaps with regard to the impact of networks in the PPP context. Therefore, building on the relevant literature the research questions are the following: Which are the processes underpinning the emergence of networks within PPP? How do these networks emerge? How do they evolve over time? What is happening within the network?

3 Methodology - Research Design

An appropriate methodology for this research should be able to help in defining and determining the different networks, as well as their temporal dimension. This will be done by carefully defining the nodes of the networks, as well as their respective roles and connections with regard to their personal and professional relationships.

This study fits the specific qualitative comparative case study stream due to the fact that the proposed research questions are related to the dynamics and evolution of networks. An alternative data collection

approach will be selected, parallel to the more ‘traditional’ methods. The selected approach will be broadly comprised by open discovery using narratives extracted from stakeholders. By interviewing a diverse range of stakeholders, the researcher will be able to view the case study from multiple points, and focus on experiences rather than statements or opinions. Accordingly, hypotheses are not formed and tested upfront, rather they are created after exploring and analysing obtained data from the selected stakeholders. Moreover, the study of different cases will reveal and emphasize the differences in network composition and dynamics. By using cross-case summary tables and by producing rich primary data from a set of critical the researcher can achieve reduction of primary data and the conclusions drawn evidently will link back to the collected data.

Narratives, documents as well as observational notes will be collected from the subject population and will be self-indexed by its originator in a quantitative format. In consequence, this approach will enable quantitative data to be analysed, and where patterns are detected, the originating narrative will be used to provide context and explanations. The qualitative data can augment understanding how and why emergent relations hold and can *inter alia* provide a good understanding of the dynamics underlying the relation.

4 Sampling Method – Data Types

The approach of this research will require a sampling method that is network-driven with a chain referral approach. Several methods exist

Spyros Angelopoulos

for the mapping of a network that fulfil the aforementioned requirements and the most known are: the snowball sampling (Goodman 1961), the key informant sampling (Deaux & Callaghan 1985), targeted sampling (Watters & Biernacki 1989), the one-wave snowball (Frank & Snijders 1994), the ‘random-walk’ sampling (Klovdahl 1989) and the targeted personal network sampling (Spren & Zwaagstra 1994). However, the one that suits the specific research design is the Respondent Driven Sampling (RDS) (Heckathorn 1997). RDS consists of an enhancement of network sampling (Wejnert 2010) and its characteristics that led to this choice are the fact that it includes less violation of subject confidentiality during recruitment, reduces the effects of volunteerism, estimates asymptotically unbiased population compositions, enables to estimate unbiased sample statistics, provides information for analysis of social structures and last but not least it is cheaper, quicker, and easier to implement.

The sampling will be completed in three steps. In the first step, the sampled population will have to complete a short questionnaire that will enable the researcher to contact Social Network Analysis and map the network of the case study. This step will be accompanied by non-participant observations that will help in understanding the relations between the stakeholders. The second step will include interviews with the sampled stakeholders. The extracted stories will be enhanced by a second wave of non-participant observations. The third and last part of the sampling will require the participants to complete a short questionnaire and by this way provide the researcher with more information related to their network and its history. A third and final

wave of non-participant observation will conclude the data collection process. The types of the data that will be required for the research are introduced and described in detailed in the following section.

4.1 Qualitative Data

The data collection will be conducted on the basis of prompting selected stakeholders into a narrative form of disclosure. The rule for creating a prompting question is to ask an indirect question, which places actors into a familiar context that enables them to narrate a relevant story. This allows the storyteller to disclose material without necessarily taking responsibility for its content. For the purposes of the proposed research design, there is a need for prompting actors to tell stories, and then ideally have those stories indexed by the storyteller, so that patterns could be reported within the indexes that can then be explained by looking at the raw material. When someone is stimulated to provide a story, this means something to him or her as a reflection of his or her experience. However, the story itself does not fully represent that experience and by providing a set of indexes in the form of quantitative data, relating to the general field of research, the storyteller is enabled to add meaning to the story.

4.2 Quantitative Data

Parallel to the qualitative data that will be collected in the form of narratives, a set of quantitative data will be collected in order to augment the process of sense making. This data is going to form a set of indexing tags for the understanding of the collected narratives. Three

Spyros Angelopoulos

types of tags are going to be used, namely: abstract indicators, multiple-choice questions, as well as keyword identification.

4.2.1 Abstract indicators

These indicators will be used to look at issues such as behaviour and values. The measure of these indicators will be conducted with the aid of a numerical scale. Labelling at each end will enable the mid-point to be set as 'ideal' behaviour with the end labels representing the two extremes of that ideal behaviour. Moreover, with the aid of these indicators, the storytellers will be able to categorize their story within the range of two opposite meanings.

4.2.2 Multiple-choice questions

The multiple-choice questions will enable more precise questions to be asked. This set of questions will be generic in nature and will eventually provide useful criteria and points of analysis.

4.2.3 Keyword identification

By identifying keywords within their story, the storytellers select the words with the greater significance. This can be a valuable asset since this decision is made by a human who understands the context of the story and not by software that operates on universal assumptions of the nature of language. The outcome of quantification of this data set will provide valuable information about each story.

Eventually, the collected quantitative data set will augment the understanding of the narratives and give an extra dimension to the sense-making process of this research.

5 Analysis of Data

The data from the initial survey will permit the conduction of Social Network Analysis for the mapping of the network for each case study. The analysis of collected narratives will require the use of analytical and interrogation methods that will enable the recall and interpretation of the collected data and visualize the complex patterns. This will be augmented by a 'manual' analysis that is going to be undertaken by using the transcripts directly, in order to identify key emergent themes, since the transcripts contain a wealth of insights that merit 'traditional' oversight by trawling through them. The transcripts will be scanned for specific examples and vignettes that illustrate and provide evidence for the proposed research theme. The collected data will be analysed per case study and form the basis of a single network report. Comparative analyses will unveil any differences among the networks.

6 Conclusion

This research will attempt to study the importance of networks, their evolution as well as the processes that enable their emergence. By understanding the networks within PPP, the involved actors of both public and private sector will gain a better understanding of the topology of their networks as well as the procedures that take place

Spyros Angelopoulos

within these networks. The outcomes of this research will eventually contribute to the fields of social networks as well as to the broader PPP literature and it will project a number of implications for public sector scholars as well as administrators.

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Spyros Angelopoulos

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