UC Santa Barbara

UC Santa Barbara Electronic Theses and Dissertations

Title

The Value of Civil Society Networks: A Probe into a Case of Cross-Border Network Partnership in Technology Capacity Building

Permalink https://escholarship.org/uc/item/7dq4k2nf

Author Zhang, Xiaoyi

Publication Date 2020

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Santa Barbara

The Value of Civil Society Networks:

A Probe into a Case of Cross-Border Network Partnership in Technology Capacity Building

A Thesis submitted in partial satisfaction of the requirements for the degree Master of Arts

in Global Studies

by

Xiaoyi Zhang

Committee in charge:

Professor Aashish Mehta, Co-Chair

Professor Richard Appelbaum, Co-Chair

Professor Cynthia Stohl

March 2021

The thesis of Xiaoyi Zhang is approved.

Cynthia Stohl

Richard Appelbaum, Committee Co-Chair

Aashish Mehta, Committee Co-Chair

December 2020

The Value of Civil Society Networks:

A Probe into a Case of Cross-Border Network Partnership in Technology Capacity Building

Copyright © 2020

by

Xiaoyi Zhang

ACKNOWLEDGEMENTS

My deepest gratitude goes first to my committee co-chair Aashish, who has been a wonderfully supportive advisor. I am grateful for the dedication, patience, and enthusiasm that he always shared with me, and specifically, for connecting me to the internship at TechSoup, for guiding me through the planning and methodologies, and for many in-depth conversations throughout the entire thesis writing journey. This project could not have been accomplished without his constant encouragement and guidance.

I am deeply grateful to other members of my committee. Thank you, Rich, for your mentorship and for providing practical and concrete advice for data analysis and collection methods, such as the importance of looking for non-model responses and extending the duration of the interviews in an unrestricted way whenever necessary. Thank you, Cynthia, for guiding me through the design of hypotheses and the discovery of the wealth of knowledge in network theories, which helped lay down a firm theoretical groundwork for this thesis.

I also would like to address my special thanks to Erica, my internship supervisor and friend at TechSoup and a former alumna of Global Studies, for being so supportive of my research and work at TechSoup in every way possible. You have always been kind, thoughtful and attentive. It was among my greatest experiences meeting and working with you.

My appreciation goes to the interview participants: thank you for supporting me and believing in the value of this research project, for spontaneously sharing your opinions and for volunteering to stay longer than the scheduled duration of the interview. Our conversations were thought-provoking and instrumental in helping me understand not only the nuts and bolts of the Network but also the ways NGOs operate in different socio-cultural contexts.

I would like to acknowledge the professors in Global Studies: thank you for your wonderful lectures and for the inspiring conversations with you that I benefited immensely from. I want to thank my fellow graduate students; it was great to have classes with you together and to be surrounded by your friendship and support.

Finally, my special thoughts and thanks go to my family in China, for your unconditional support and love, and to my husband Chunxiao, for always being my best friend and a pal for my reflective journey of whom I often bounce ideas off.

Once again, thank you all - you make my everyday life wonderful despite the challenging times. Together, let's make the globe a better place in 2021.

ABSTRACT

The Value of Civil Society Networks:

A Probe into a Case of Cross-Border Network Partnership in Technology Capacity Building

by

Xiaoyi Zhang

Networks as a distinctive organizational logic have been widely studied at several analytical levels and from a variety of theoretical perspectives since the 1990s. While previous research has highlighted network structural characteristics that benefit or constrain individual organizations, there has been less attention to the influence of different network processes.

This thesis aims to better understand what process patterns of an interorganizational network generate most added value for individual organizations. Through an exploratory case study of the TechSoup Global Network, a technology-oriented civil society partnership, the research combines network structural characteristics with network processes to explain where the network value is located, what the types of network value are, and how these different types of network value are delivered.

The research consists of 23 semi-structured interviews with the TechSoup Global Network partner NGOs over the course of three months. Interviews were broadly structured in accordance with three initially hypothesized value-addition processes: coordination of joint actions, access to organizational resources, exchanges of information and knowledge. Data collected from the interviews were coded and subsequently mapped to a list of pertinent conceptual frameworks regarding network value and value-addition mechanisms including social capital, structural holes, network closure, and transaction costs economics.

Results indicated that network value in the TechSoup Global Network case mostly stemmed from coordination of joint actions on a global scale, as opposed to access to organizational resources or exchanges of information and knowledge. The processes of efficient joint actions, which required transaction costs to be reduced, in turn activated the structural advantages of the network. Specifically, joint actions enabled network actors to bridge across structural holes between nonredundant groups of organizations across borders and sectors; these collaborations also created value by providing a certain level of network closure in the forms of trust and interconnectedness and serving as a signal of organizational credibility and capability. Furthermore, this case study demonstrated network value added not only from weaving ties within the boundaries of the network but also from establishing connections with third parties and beyond.

Conceptually, this research enhances our understanding of the interplay among network processes, structural features, and network outcomes while providing further evidence for Burt's 2000 assumption that brokerage across structural holes is the source of added value whereas network closure contributes to realizing the value buried in these structural holes. From a practical standpoint, these findings have significant relevance for professionals working with global interorganizational networks in the civic sector: jointly implementing projects at the network level can activate certain structural advantages that are critical to the success of a network partnership.

TABLE OF CONTENTS

I.		Introduction1		
	A.	Res	earch Background	1
	B.	Glo	bal Context and Scope Conditions	2
		1.	Tracing the path of civil society networks in global governance	3
		2.	Delineating the scope conditions of the TSGN case study	9
	C.	Met	hods	16
II.		Literat	ture Review on the Added Value of Interorganizational Networks	21
	A.	Sub	stance of Added Value of Interorganizational Networks	22
		1.	Information and knowledge exchange	23
		2.	Learning, adaptation, and innovation	26
		3.	Coordination of joint action and service delivery	28
		4.	Access to funding and additional organizational resources	30
	B.	Mechanisms of Value Addition within Interorganizational Networks		32
		1.	On the theory of structural holes and network closure	33
		2.	On the theory of ego-centric and alter-centric uncertainties	36
		3.	On the theory of transaction costs	39
	C.	Con	clusion	40
III.		Case-s	study on the TechSoup Global Network	42
	A.	Res	earch Site	42
	B.	Res	earch Background	44
		1.	Internship Project at TechSoup	44
		2.	Project Data Collected	47
	C.	TSC	GN in a Nutshell	50
		1.	What is the TSGN?	50
		2.	Who are the TSGN partner NGOs?	55
		3.	What is unique about the TSGN?	58

IV.	Repo	rt and Discussion on Key Findings from the TSGN interviews	60
A.	Re	sults Overview	60
	1.	Features of the TSGN partner organizations	60
	2.	Assessment of the TSGN value addition processes	65
B.	Co	ordination of Joint Actions	69
	1.	Responses regarding benefits from engineered joint actions	71
	2.	Responses regarding benefits from emergent joint actions	79
	3.	Comparative analysis between engineered and emergent joint actions	81
C.	Inf	ormation and Knowledge Exchange	84
	1.	Responses regarding the flow of information and knowledge	85
	2.	Responses regarding PNGO connections within the TSGN	88
D.	Ac	cess to Financial and Non-financial Resources	90
	1.	Responses regarding financial resources	90
	2.	Responses regarding non-financial resources	92
V.	Conc	lusion	94
A.	Su	mmary of Findings	94
B.	Lin	nitations	97
C.	Im	plications and Future Research	97
Refere	ences		99
Apper	ndix A.	TSGN Interview Question Guide	106
Apper	ndix B.	Excerpt of Interview Raw Datasheet	108

LIST OF TABLES

Table 1. Tapscott's (2013) Taxonomy of Multi-Stakeholder Networks and the TSGN
Table 2. Waddell's (2010) Taxonomy of Interorganizational Networks
Table 3. Summary of Hypothesized Value Addition Processes 17
Table 4. Excerpt of Interview Raw Datasheet in Excel 19
Table 5. Research Hypotheses 20
Table 6. Key Differences between Closure and Brokerage in a Social Network 35
Table 7. Structural Holes and Status Addressing Egocentric and Altercentric Uncertainties. 38
Table 8. Selected PNGOs' Program Activities
Table 9. Participants' Responses regarding the Most Valuable Network Process(es) 66
Table 10. Features of the TSGN Emergent Programs 80
Table 11. Regional and Cross-regional Tie Formation Comparisons

LIST OF FIGURES

Figure 1. Project Design Chart	.46
Figure 2. TSGN Landscape Mapping Survey	.47
Figure 3. Strategic Area Stakeholder Matrix	.48
Figure 4. TSGN Landscape Map via Kumu	. 49
Figure 5. Simplified Illustration of Ties inside and outside the TSGN	. 62
Figure 6. Percentages of Benefit Types Reported on Engineered vs. Emergent Joint Actions	s82
Figure 7. Percentages of Value Delivery Mechanisms for NTM vs. Additional Programs	. 82

I. Introduction

A. Research Background

Recent decades have witnessed accelerating pace of global transformation and technological breakthroughs. Transitioning from printing press to social media, from analog transmission to digital controls, from telegraphy to information highway, the world has been rapidly reshaped and globally integrated in terms of production, communication, cultural identities, and social interactions, to name but four. It is under such circumstances – often described as the third wave of globalization – that social movements have increasingly assumed a unique logic of organization that is more communicative, flexible, interconnected, and open-ended: *networks*.

Network forms of organization in global civil society have soared since the 1990s. As voluntary and not-for-profit entities, civil society organizations (CSOs) often face a variety of constraints in achieving their organizational mission. Many CSOs, nowadays, have partnered with other organizations or have become members of one or more networks to gain competitive or collaborative advantages through the processes of, inter alia, knowledge sharing, access to funding opportunities, joint program development, and collective actions. This research aims to explore the added value that a global network of civil society organizations generate for individual organizations. More concretely, the main questions that will be addressed throughout this research are as follows: From which network process(es) do organizations in a network derive the most added value? What are the different types of network value? How are these different types of network value delivered?

The inspiration for this research originates from my internship experience working on a global CSO network analysis project at a nonprofit specialized in technology capacity building. This particular CSO, TechSoup Global (TechSoup), is a registered 501(c)(3) nonprofit social enterprise located in San Francisco, California, operating in partnership with 61 independent CSOs from five continents. By means of a single case study of the TechSoup Global Network (TSGN), I hope to identify ways in which different theories and methodologies may help investigate the burgeoning networked dynamics of global civil society, and, by doing so, better understand the scale of impact and added value that these new forms of organizing have.

B. Global Context and Scope Conditions

Literatures and theoretical debates on the subject of networked logic of social organizing and global civil society appear to have gained steam almost simultaneously. What is civil society? How should we apprehend network forms of social organizing? What are the enabling conditions for the rise of civil society networks across the world? What is the role of civil society networks in global governance, in comparison to government networks and other network actors? How do civil society networks function as part of the organized private voluntary sector in addressing social issues? Since the 1990s, a growing body of research has sought to respond to these questions. The following sections will draw on theories and literatures from a range of disciplines, such as organizational behavior, communication, political science, economics, management, and international relations, with a view to contextualizing the research problem and thence delineating the scope conditions of this study.

1. Tracing the path of civil society networks in global governance

Network forms of organization and human interaction are nothing new. If we look back in time, networks of kinship and friendship, intellectuals, small businesses, and trade instantly spring to mind, a notable example being the Silk Road, a network of trade routes connecting core areas of Eurasia and East Africa that dates back to around 200 BCE. The transatlantic anti-slavery network and the international alliance for women suffrage in the 19th century are among other prominent cases of network mode of cross-border organizing in the not-toodistant past, which have been often regarded as "historical precursors to modern transnational advocacy networks (Keck and Sikkink 1998). Network forms of organizing, albeit an ancient pattern of human society, have only been entered on the research agenda around the 1990s. Ever since then, there has been increasing knowledge production and ongoing debates on this reinvigorated logic of social organization.

The organizational sociologist Walter W. Powell may have been one of the first scholars to discuss network forms of organization as a specific social arrangement contrasting with market and hierarchical governance structure. In his pioneering work "Neither Market nor Hierarchy", Powell argues that networks as a distinctive mode of economic arrangement had not yet been satisfactorily analyzed by existing approaches at the time (1990, 296). Departing from Ronald Coase's theory of the firm and Polanyi's perspective on the antagonistic relationships between actors in market transactions, Powell posits that conventional forms, i.e., hierarchies and markets, had fallen short of capturing the diverse and intricate patterns of economic activities (ibid., 296-302). A spectrum of horizontal business alliance, global or local, is a case in point. Outplacing the states as trading units in the world market, as illustrated by Castells ([1996] 2010, 115), transnational corporations have

increasingly engaged in alliances or joint ventures with other large companies (Powell 1990, 316), joining forces in collective industrial research or setting up global production networks in various exporting countries (Dicken 2003, 307; Held and McGrew 2003, 300; Castell [1996] 2010, 123). Meanwhile, on a parallel track, a number of industries have experienced vertical disaggregation in various countries (Dore 1983; Wilkinson 1983; Powell 1990; Castells [1996] 2010). Local businesses, from various industries and geographic locations with vastly different socio-cultural traditions, have also long been forging reciprocal ties with other local firms¹. Resonating with Castells's assumption, Dicken et al (2002, 91) go far as to express that networks have seemingly become "the foundational unit of analysis for our understanding of the global economy, rather than individuals, firms or nation states".

Similar to Powell's discussion, literatures in International Relations highlight the checks and balances between markets and state hierarchies as a key organizing feature of the 1980s and networks as an emerging organizing pattern since the 1990s (Kahler 2009, 2; see also Mann 1996, 1960). In the subsequent decades until today, networks as an intensified organizational logic have flourished in multiple academic fields and across different sectors. Government networks that consist exclusively of state actors (Sikkink 2009, 229) exemplify a horizontal model of global governance (Slaughter 2003, 201). Epistemic communities bringing together professionals from multiple fields with shared values and a common style of reasoning signify "a dynamic for persistent cooperation independent of the distribution of international power" (Haas 1992, 4). Clandestine criminal and terrorist networks pursuing violent ends have

¹ See Powell (1990) on the Emilian Model (which refers to socially integrated, decentralized production units) in Italy; Chung and Hamilton (2001) on the Guanxi network in China; Dore (1983) and Powell (1990) on the Japanese textile industry.

emerged as a menacing actor against nation states since the outset of the century (Kahler 2009; Kenney 2009). Transnational advocacy networks and grassroot movements, a force to be reckoned with in global problem solving, epitomize what can be called global civil society networks.

When taken as a form of global social organizing, networks have generally been studied within the broader or related conceptual framework of globalization and governance. Theoretically, network approaches to analyzing global governance tend to be found in the transformationalist school of thought in the globalization debate (Axford 2013, 134), which posits that globalization is associated with new patterns of global stratification, reshaping or reconstituting the power and authority of nation states (Held et al. 1999, 8). In addition to a recasting of sovereignty regime, transformationalists also assume that non-territorial forms of social organization are emerging (be it multinational corporations, international regulatory agencies, or transnational social movements) in the global domain, in which "there is no longer a clear distinction between international and domestic, external and internal affairs" (ibid., 9). Manuel Castells's critically acclaimed work on the network society in a way reflects this transformationalist line of thinking, on the grounds of his para-making hypothesis of a new social morphology driven by information technologies, i.e., a global network society, that transforms space, time, and the material foundations of our time across all walks of life (Castells [1996] 2010, 500 and 507). Castells's analysis as regards the "network state", nevertheless, are sometimes criticized for his "one-size-fits-all model of social change", through which network forms of social organization in the Information Age are the solution to

all socio-economic problems in global governance (Axford 2013, 87).² In a slightly different vein, the sociologist Michael Mann³ articulates in a paper concurrent with Castells's work on network society that global networks are indeed strengthening but in "multiple, variable and uneven fashion" while rejecting a singular systemic principle of global interaction (Mann 1997, 495). Moreover, Mann's assumption that global networks are segmented by the specificities of nation-states in the global North (ibid.) should be taken into account in my investigation of the case of a transnational social sector partnership.

Interestingly, but perhaps not unexpectedly, it was also around the 1990s that scholarly work around the concept of a global civil society emerged. In a UNDP report published in 1999, "the global networks of non-governmental organizations (NGOs) and other groups that transcend national boundaries" are listed by the United Nations as new actors of global governance⁴. Indeed, global civil society and network are oftentimes bracketed together as interrelated themes in the study of globalization and global governance⁵. As depicted by Barrie Axford (2013, 134), "linked to the theme of democratizing world politics through the trope of 'global civil society', network interaction bears directly on the changing nature of governance in the millennial period of globalization." When it comes to issues of governance, a notion

² Nonetheless, I have one small reservation concerns Axford's argument: globalization and network forming, both driven by progress in information and communication technologies, appear to be mutually reinforcing processes in Castells's account (see Castells [1996] 2011, 502-506).

³ I think that Mann's assumptions can be bracketed as transformationalist as well, in that he cautions against both "a single global society" (1997, 495) and "the more enthusiastic of the globalist and transnationalist" (ibid., 494).

⁴ UNDP. 1999. "Human Development Report 1999: Globalization with a Human Face." UNDP. http://www.hdr.undp.org/en/content/human-development-report-1999.

⁵ According to Axford (2013, 141), the study of transnational civil society organizations began to be associated with the still novel notion of global governance in the 1990s.

that is widely bruited nowadays, the political scientist R.A.W Rhodes (1996) raises an unconventional interpretation that blurs the distinction between state and civil society by accentuating the role of self-organizing interorganizational networks. In Rhodes's model, these networks, complementary to markets and hierarchies in public service delivery, form the prime example of "governing without government" (ibid., 667). In various accounts, global civil society, configured to various degrees by individuals, communities, organizations, and networks, is regarded as a burgeoning actor in global governance, sometimes referred to as the third sector or the civic sector, and serves as a complement to the institutions of world society rather than displacing them (Lechner 2009, 149).

It has come to my attention that the concept of global civil society, vigorously debated in the academic realm notwithstanding, has already been used in the day-to-day operations by practitioners in the nonprofit sector across the globe. And if we shelve the question of whether there exists a genuine global civil society, it remains essential to clarify what this term entails and implies in a given setting. From a purely descriptive sense⁶, Mary Kaldor, leading scholar in the field of global governance, indicates that,

[w]hat we might describe as global civil society would be the interaction of those groups, networks, and movements who provide a voice for individuals in global arenas and who act as, to paraphrase a well-known dictum, the transmission belts between the individual and global institutions (2000, 109) ... Global civil society is not a model or a blueprint; it is a contested process, in which different views about the world's future can be expressed. (ibid., 114)

⁶ As opposed to normative or analytical categories that are also often applied in the scholarship of global civil society.

Kaldor's interpretation is no doubt an encompassing one, in which global civil society is not to be taken as a static sphere of society but rather a dynamic process of multi-leveled social interaction. To cite a more empirical analysis, Margaret E. Keck and Kathryn Sikkink's pioneering work Activists beyond Borders (1998) zooms in on a revealing example of global civil society in action – transnational advocacy networks. Such transnational and cross-cultural forms of activism connect people from around the world to pursue shared goals, whether for humanitarian assistance or for tackling issues such as trade agreements, maritime orders, crossborder diseases, and so forth. These networks, marked by dense information exchange, find their way to cohere around a shared discourse and endeavor to instigate socio-political changes in a world where nation states and international organizations predominate (ibid., 2). The concept of transnational advocacy network expresses, as the authors put it, "a view of multiple pathways into the international arena, a view that attributes to domestic actors a degree of agency that a more state-centric approach would not admit" (ibid., 217). Actors in a transnational advocacy network range from advocacy organizations, research institutes, the media, churches, and foundations to parts of intergovernmental organizations and branches of governments (ibid., 9), from which we can observe the essential and indispensable role of nonstate actors, in particular NGOs⁷, along with a certain degree of states' involvement. This line of thinking not only reflects Kaldor's interpretation of global civil society as a contested process, but also echoes Rhodes's governance model of "governing without government" that features networks' increasingly important role in multi-stakeholder problem solving. The authors highlight the role of, inter alia, NGOs as central and indispensable to all advocacy

⁷ According to Keck and Sikkink, NGOs is central and indispensable to all advocacy networks, whose significance was once unaccounted for in the scholarship of international relations (1998, 6).

networks, which apparently was once unaccounted for in the scholarship of international relations (ibid., 6). It can also be observed that transnational advocacy networks mostly consist of non-state actors but are open to states' involvement.

Twenty years have passed since the publication of this spearheading work on a crossborder network form of social organizing. Today, civil society networks continue to proliferate and actively engage in the problems and issues faced by our global society today: global warming, environmental pollution, global pandemics, transnational labor issues, gender equality, responsible consumption, global poverty, among others, the impact of which reaches far beyond any organizational and national boundaries.

2. Delineating the scope conditions of the TSGN case study

The spectrum of civil society networks can be categorized from multiple perspectives, such as function, stakeholder, organizing level, rationale, legal framework, issue area, etc.

In a white paper published in 2013 "Global Solution Networks: Understanding the New Multi-Stakeholder Models for Global Cooperation, Problem Solving and Governance", the author, Don Tapscott, proposes a taxonomy of the emerging non-state networks from a functional perspective. In particular, Tapscott's unit of analysis is interorganizational networks that aim at social change and problem solving. Tapscott refers to these networks as "Global Solution Networks". His scope of analysis applies to a broader umbrella of multi-stakeholder and multinational networks that seek to "improve the state of the world through developing new policies or new solutions" (Tapscott 2013, 18). Tapscott's goal of the taxonomy is to provide a comprehensive framework that encompasses all networks, albeit with categories that are not completely mutually exclusive (ibid., 21). These overlapping features might be

inevitable (considering that one network can have several functions) but are in fact one of the shortcomings of this taxonomy. Another caution that should be made is that Tapscott focuses on multi-stakeholder networks, some of which are cross-sector partnerships that might be beyond the scope of the TechSoup Global Network case, which I will explain in detail in Chapter III. For now, the TSGN is, in a nutshell, a network of 61 civil society organizations across the globe that manage a range of technology capacity-building and other programs to serve communities worldwide.

The table below references Tapscott's (2013) taxonomy of multi-stakeholder networks for global problem solving, with my notes apropos the TSGN at the end of each network type.

Network Type	Description	Examples Provided	N.B.
Knowledge Networks	The primary function of Knowledge Networks is to develop new thinking, research, ideas and policies that can be helpful in solving global problems. Their emphasis is on the creation of new ideas, not their advocacy.	Wikipedia; TED; Stockholm International Peace Research; Global Network for Women's and Children's Health Research	The TSGN has some features of a knowledge network as it reaches out to more than a million local grassroot and community organizations to build their technology capacity. Digital transformation in the civic sector is a major knowledge theme of the TSGN.
Operational and Delivery Networks	These networks deliver the change they seek, supplementing or even bypassing the efforts of traditional institutions.	<u>The Red Cross; Crisis</u> <u>Commons; Digital</u> <u>Democracy; World</u> <u>Wildlife Fund; Kiva;</u> <u>The Microcredit</u> <u>Summit Campaign;</u> <u>Keep a Child Alive;</u> <u>Random Hack of</u> <u>Kindness</u>	The TSGN fits in this category in that it provides subsidized access to technology and capacity building for nonprofits around the world. Essentially it delivers services and programs that serve nonprofits as well as local communities as a catalyst for social change.
Policy Networks	Some policy networks support policy development or create an alternative for policy. Policy networks also exist to create and encourage discussions on policy issues.	International Competition Network; Internet Governance Forum; Principles for Responsible Investment;	Note the difference between policy networks and advocacy networks in that the former seeks to create policy while the latter seeks to change the agenda or policies.

		<u>Renewable Energy</u> <u>Policy Network</u>	The TSGN is not a policy network.
Advocacy Networks	Advocacy Networks seek to change the agenda or policies of governments, corporations or other institutions. Hundreds of Advocacy Networks are listed at <u>WorldAdvocacy.com</u> .	<u>Avaaz.org;</u> <u>Conscious Capitalism</u> <u>Institute; Keep a</u> <u>Child Alive</u>	Note that Keep a Child Alive is considered to be in both advocacy and operational & delivery categories according to Tapscott. The TSGN is not an advocacy network.
Watchdog Networks	These networks scrutinize institutions to ensure that they behave appropriately.	<u>Human Rights</u> <u>Watch; Amnesty</u> <u>International; The</u> <u>Global Reporting</u> <u>Initiative</u>	The TSGN is not a watchdog network.
Platforms	Some networks seek to provide platforms for other social actors to organize. Platforms include some kind of technology but also organizational capability that facilitates collective action. Some platforms hold a promise of further dropping the transaction costs of global problem solving.	<u>Ushahidi;</u> <u>Change.org;</u> <u>Code for</u> <u>America</u>	The TSGN also falls into the category of platforms and helps drop the transaction costs in cross-border collaborative actions and service delivery.
Global Standards Networks	Non-state based organizations that develop technical specifications and standards.	Internet Engineering Task Force (IETF); World Wide Web Consortium	Global Standards Networks can overlap with Knowledge Networks. The value they generate can also include advocacy and policy development. The TSGN is not global standards network.
Governance Networks	These are multi-stakeholder networks who have achieved or been granted the right and responsibility of non- institutional global governance.	International Organization of Securities Commissions; Forest Stewardship Council	Governance Networks, albeit registered as nonprofits, tend to have more say in governing global issues and resources, such as forest and water. The TSGN is not a governance network.
Networked Institutions	Some networks provide such a wide range of capabilities they could be described as Networked Institutions. They are not state-based but rather true multi-stakeholder networks. But the value they	World Economic Forum; Global Water Partnerships; The Clinton Global Initiative;	This category seems much broader and includes more globa organizational networks. Also, note that the World Economic Forum is more of a business-led

	generate can range from knowledge generation, advocacy and policy development to the actual delivery of solutions to global problems.		entity with limited extent of nonprofit engagement. The TSGN is not a networked institution.
Diasporas	One of the functions of many of today's diasporas is to address and help solve common, global problems.	International Diaspora engagement alliance; African Diaspora Marketplace	The TSGN is not a diaspora network.

Table 1. Tapscott's (2013) Taxonomy of Multi-Stakeholder Networks and the TSGN

In accordance with Tapscott's taxonomy based on network functionality, the TSGN can be considered, first, a platform which helps improve other nonprofits' organizational capabilities and reduce the costs of global problem solving via the Nonprofit Technology Marketplace⁸. Through this platform, eligible organizations around the world are able to receive donated and discounted software, hardware, services, and training – digital resources (cf. Nonprofit Product Catalog⁹) that TechSoup has obtained from over 100 technology companies such as Microsoft, Adobe, Cisco, DocuSign, Zoom, etc. For example, an eligible nonprofit registered with and validated by either TechSoup or a TSGN partner organization can acquire an Office 365 product for free from the local Nonprofit Technology Marketplace¹⁰ website in their country. In conjunction with the Marketplace, the TSGN offers validation and

⁸ TechSoup. n.d. "TechSoup – Technology for Nonprofits, Charities, and Libraries." Accessed May 7, 2020. http://www.techsoup.org/?ts_cs_selection=84.

⁹ TechSoup. n.d. "TechSoup Product Catalog." Accessed May 7, 2020. http://www.techsoup.org/get-product-donations/product-catalog.

¹⁰ Nonprofits' eligibility is defined by each donor company. For example, Microsoft's donations serve 501(c)(3) organizations in the US (and equivalent organizations in other countries) that advance education, provide relief to the poor, preserve or restore the environment, etc., but not museums, libraries, UN entities, healthcare organizations, etc.

data services for corporate charitable giving, ensuring that recipient organizations are valid and legally recognized in their country.

A similar platform network is Ushahidi, a social enterprise based in Nairobi whose mission is to "help people raise their voice and those who serve them to listen and respond better" through open-source mapping tools and mobile apps¹¹. Ushahidi was initially created to map reports of violence in the aftermath of Kenyan crisis in 2008 and has since developed into a large organization and catalyzed the Ushahidi Ecosystem (ibid.). Comparatively, TechSoup and Ushahidi are both grant funded and revenue generating nonprofit organizations with a similar thematic focus on enabling technologies for other social sector activities to organize; a key difference lies in the way each network is structured and governed: the TSGN with about 50 contractual partners and the Ushahidi Ecosystem with 6 catalyzed organizations that operate independently of each other¹².

The second functional designation of the TSGN is an Operational and Delivery Network, in that it delivers the change it seeks on the ground through a variety of projects and programs. Meet and Code, run by the TSGN's regional hub TechSoup Europe, is one example of on-the-ground actions taken by the Network: twenty four TechSoup Europe partner CSOs have joined forces working to promote coding and digital education events for children and young adults aged between 8 and 24 in their respective countries, aiming to bridge the digital

¹¹ "About Ushahidi." n.d. Ushahidi. Accessed May 7, 2020. https://www.ushahidi.com/about.

¹² Having searched for all available online information, I have found little on the Ushahidi Ecosystem, only that these organizations are catalyzed by Ushahidi and form an association to create technology that solves global problems. (<u>https://docs.ushahidi.com/ushahidi-platform-user-manual/about-ushahidi</u>)

skill gaps among young European citizens¹³. Other TSGN operational examples include, inter alia, Tech4Stories, which aims at communication skill-building to combat radicalized discourse spread across Central and Eastern Europe, ¹⁴ and NetSquared (in-person events every month in 60 cities for nonprofit staffers, technologists, and activists)¹⁵.

Keep a Child Alive is similar example of an Operational and Delivery Network, with a mission to "improve the health and well-being of vulnerable children, young people, adults and families around the world, with a focus on combating the physical, social and economic impacts of HIV/AIDS.¹⁶" Similar to the TSGN, their work is delivered through partnering with local organizations in different countries. Keep a Child Alive operates on a smaller scale and the partners are more loosely connected compared with the TSGN, but in both cases, the partner organizations within the networks have shared understanding of commitments and common values.

In addition to applying the above mentioned taxonomy based on network functions, it is also necessary to account for the structural characteristics of the TSGN. Steve Waddell, founder and Executive Director of the Global Action Network Net, puts forth a way to classify

¹³ "Meet and Code." n.d. Accessed May 7, 2020. https://www.meet-and-code.org/gb/en/about.

¹⁴ "Tech4Stories – Tech4Stories: DIY Program Helps Activists to Create Engaging Social Campaigns." n.d. Accessed May 7, 2020. http://www.tech4stories.techsoupeurope.org/.

¹⁵ "What Is NetSquared? | NetSquared." n.d. Accessed May 7, 2020. https://netsquared.org/about.

¹⁶ "ABOUT KCA: Committed to Empowering Children and Young People." n.d. Accessed May 8, 2020. https://www.keepachildalive.org/about-kca/.

interorganizational networks by their level of organizing. Table 2 references Waddell's taxonomy (2010, 25).

	Interpersonal	Organizational	Inter- organizational partnership	Inter- organizational network	System
Legally distinct entities	Many	One	Small to modest	Very large	All stakeholders
Organizing structure	Information	Hierarchical	Hub and spoke	Multi-hub	Diffuse
Organizing logic	Personal	Administering/ Managing	Coordination	Coherence	Diverse self- direction
Operating focus	Relationships	Organization	Task	System	Definitional
Participation	Open	Closed	Highly controlled	Loosely controlled	External

Table 2. Waddell's (2010) Taxonomy of Interorganizational Networks

Structurally, the TSGN is primarily to be considered an inter-organizational partnership, which is portrayed by Waddell as such:

Partnerships are defined as task oriented – they have a relatively limited and welldefined objective such as producing a report or constructing a water system. The main rationale behind them is to coordinate activities, resources, and skills. There are perhaps as many as a couple of dozen participants, a small enough number for people (or organizational representatives) to know each other and coordinate activities. They are organized on a hub and spoke model, with a central coordinating committee or organization of some sort. (ibid.) As a network, the TSGN is task-oriented and its central coordinating organization is TechSoup US. TSGN partner organizations run the technology marketplace in different countries and their shared goal is to enhance efficiency in reaching more local communities and grassroot organizations, given that every partner has experience and expertise in their respective geographic areas. The organizing objective is to realize benefits of scale, as all partners aggregate efforts in both technology donation procurement and validation service provision.

Overall, the TSGN is representative of a medium-scale nonbusiness and nongovernmental global network of independent CSOs with common language and commitments partnering to achieve shared goals. It is an inter-organizational partnership, one that hinges on the Nonprofit Technology Marketplace and is increasingly reinforced through multiple on-the-ground programs and projects (e.g., Meet and Code, NetSquared, etc.).

C. Methods

This study is designed to explore the added value of being a partner organization of a global CSO network and to formulate a list of working hypotheses about the ways in which such a network helps each independent organization navigate their challenges and better achieve their mission. I conducted semi-structured interviews with 24 TechSoup Global Network partner organizations (PNGOs) to collect qualitative data on their experience within this inter-organizational network partnership. Adopting a single case study approach, I aim to explain where the network value is located, what the types of network value are, and how these different types of network value are delivered.

Prior to contacting any PNGOs, I outlined my initial hypotheses around three types of network value generating processes based on my preliminary research on the characteristics of the TSGN. Table 3 lists three initial hypotheses around: (1) coordination of joint actions, (2) access to financial and nonfinancial resources, and (3) exchanges of information and knowledge.

Initial Question	From which network process(es) do network partners derive the most benefits?		
	H1 A global CSO network primarily benefits network partners through <i>coordination of joint actions</i> (e.g., collaborative projects or programs)		
Initial Hypotheses	H2 A global CSO network primarily benefits network partners through access to financial and nonfinancial resources (e.g., funding, in-kind resources, staff)		
	H3 A global CSO network primarily benefits network partners through <i>exchanges of information and knowledge</i> (e.g., operationally useful information, knowledge transfer, learning)		

Table 3. Summary of Hypothesized Value Addition Processes

Having submitted all required documents via the ORahs portal and received exemption status of this research from the UCSB Human Subjects Committee, I contacted directors and/or board members from each of the 44 TSGN PNGOs via e-mail to introduce the background and purpose of this research. This resulted in contacts with participants from 26 of the 44 TSGN PNGOs (response rate = 59%). Over the course of three months, I carried out semi-structured interviews with 24 of the 26 PNGOs that responded, 2 of which were interviewed together during 1 interview (sample size = 55%). While the average duration of interviews was 77 minutes, the lengths overall ranged from 43 to 168 minutes.

The interview question guide was designed and structured in accordance with the three abovementioned hypothesized value addition processes (cf. <u>Appendix A</u>). In the first section of the interviews, participants were asked about experiences working with network partners on various joint initiatives (H1). The constructed part of this section covered questions about the origin of joint initiatives, the impact of these joint initiatives on PNGOs' mission and

performance, relationships with TechSoup and other network partners, and challenges encountered during collaborative courses of action. The unstructured part gave interviewees space to provide reasons for their answers and express their opinions towards various types of joint actions. Moreover, I organized questions in this section around two types of joint actions: first, the network cornerstone program – the Nonprofit Technology Marketplace (cf. III.C.1) – and second, any additional joint initiatives implemented by different cohorts of PNGOs outside the Nonprofit Tech Marketplace.¹⁷ In the second section, participants were asked about both financial and non-financial organizational resources that their organization was able to access for being in partnership with the TSGN (H2). The unstructured part gave interviewees space to express their perspectives on the TSGN as a potential resource channel. In the third section, participants were asked about informational value of the TSGN (H3). The constructed part of this section covered questions about communication between PNGOs, knowledge acquisition and learning processes, and additional informational benefits brought by the TSGN partnership. The interviews would conclude with several general questions which asked the participants to assess the network organizing structure, the most beneficial network processes within the TSGN, and comparison of the TSGN to other civil society networks that their organization had joined or worked with.

Given the exploratory nature of this study, I did not formulate a full set of hypotheses prior to conducting the interviews; instead, I sought to generate hypotheses from different patterns recognized from the collected interview data and their connections to pertinent empirical and theoretical literature on interorganizational network value (cf. Chapter II).

¹⁷ Collaborative initiatives that either include or exclude the participation of TechSoup.

Chronologically, this process began with a verbatim transcription of the 23 audio recordings, review and examination of the transcripts, sorting and displaying of the interview data (i.e., participants' responses in each of the three sections) using an Excel workbook. Since the interviews were semi-structured, I was able to collect comparable data according to the grouping of topics and questions from the interview guide. Throughout the entire interview process, a few questions were dropped from the initial interview guide and additional ones were added. After several iterations, I was able to sort out 20 categories of participants' responses in total, each addressing a specific question area. Table 4 is an excerpt of my raw datasheet in Excel for one interview participants (also see <u>Appendix B</u>).

#	Research Objective	Response Categories	Comment Summarized	Initial Code	Summary Code
1	Joint Action	a. Benefit of the NGO Technology Marketplace	The donation program has been very important for the organization's finances	Financial sustainability	\$
1	Joint Action	a. Benefit of the NGO Technology Marketplace	The donation program is a common ground which allows collaboration to flow	Common ground	Interconnectedness
1	Joint Action	b. Origin of other joint project/program collabo	TechSoup Global Network Summit 2019	TSGN Summit	TSGN Conferences
1	Joint Action	c. Examples of other joint projects/programs di	Festival of Innovation and Independent Social Technology (FITSi) - Wingu & CDI	Regional program	Between PNGOs
1	Joint Action	c. Examples of other joint projects/programs di	Nodo Ká - Makaia & CDI Chile	Regional program	Between PNGOs
1	Joint Action	c. Examples of other joint projects/programs di	Donar Online - Wingu & CDI Chile	Regional program	Between PNGOs
1	Joint Action	d. Benefit of other joint project/program collab	Learning from other network partners who have many tools and experience	Learning from others'	Knowledge & Learning
1	Joint Action	d. Benefit of other joint project/program collab	Launching other network partners' programs in their country and engage more	Expansion & localization of	Upscaling
1	Joint Action	e. Challenges encountered in joint action	Lack of experience of holding online events	Technical difficulties	
1	Financial & Other Resources	f. Description of fundraising methodologies	N/A		
1	Financial & Other Resources	g. Benefit from accessing financial resources	Previous program collaboration leads to a grant opportunity from the Internati	Regional grant opportunities	Regional \$
1	Financial & Other Resources	g. Benefit from accessing financial resources	Being part of the TSGN allows them to work with big tech companies such as M	From big tech companies	\$ From tech companies
1	Financial & Other Resources	g. Benefit from accessing financial resources	Being part of the TSGN allows them to co-apply for grants on a regional level.	Regional grant opportunities	Regional \$
1	Financial & Other Resources	h. Benefit from accessing non-financial resource	Volunteers from abroad	Human resources	
1	Financial & Other Resources	i. Concerns about competiting for resources	Mainly indirect competition with local NGOs as resources are limited from the	Competing for resources with	
1	Financial & Other Resources	j. Challenges encountered in accessing resource	Approaching the private sector through their own training programs rather that	Local legal specificities	
1	vledge and Information Excha	k. Communcations after joining the TSGN	Mainly regional partners but also two PNGOs from another region (ATN, Wingu	4 regional partners + 1	Regional + Other
1	vledge and Information Excha	k. Communcations prior to joining the TSGN	Knew one PNGO director from another network but hadn't worked together	No communication before	No
1	vledge and Information Excha	k. Description of PNGO communications	Newsletters, mails, concrete notifications about a product offer, strategy-relate	Multilevel communications	
1	vledge and Information Excha	 Benefit of Information and knowledge exchar 	Invitation to another global CSO association	Global connection	New Affiliation
1	vledge and Information Excha	 Benefit of Information and knowledge exchar 	Initiatives such as webinars are great to generate more engagement and know	Network engagement	Learning
1	vledge and Information Excha	m. Types of Information Content	Mostly around the TechSoup donation program	TS donation program	NTM Program
1	vledge and Information Excha	n. Challenges encountered in information & kn	The challenge will be to really sit down and understand.	Better understanding of other	Lack of Strategy
1	General Questions	o. Most valuable benefits of the network	Program co-implementation	Program collaboration	
1	General Questions	p. Level of network coordination (outlook)	Between regional and global; regional strategies because of the shared langua	Global + Regional	
1	General Questions	q. Difference from other CSO networks	TSGN is by far the most concrete network because compared to other network	Concreteness of collaborative	

 Table 4. Excerpt of Interview Raw Datasheet in Excel

Applying this workbook, which consists of 533 rows of summarized responses in total, was instrumental in my data analysis processes, as it allowed me to familiarize myself with the wealth of data collected and recognize patterns and connections across lines of responses. While populating this workbook, I assigned an initial code to each one of the responses to improve the efficiency of the pattern recognition process. Upon completion of the workbook,

it proved to be essential to draw from preexisting empirical and theoretical research to reconfigure the initial codes. By mapping the most relevant responses collected to a list of reconfigured summary codes, I was finally able to generate a list of hypotheses to address the remaining research questions, including "what are the concrete types of network value" and "how are these different types of network value delivered". A full set of hypotheses to be tested are presented in Table 5.

From which network process(es) do network PNGOs derive the most benefits?	What are the concrete types of network value?	How are these different types of network value delivered?
	Social Capital	Network improves efficiency.
Coordination of Joint Action		Network serves as a signal of quality.
Coordination of Joint Action	Human Capital	Network improves learning.
	Financial Capital	Network increases income.
	Access benefit	Network provides access to information.
Exchanges of Information and knowledge	Learning benefit	Network improves learning.
	Referral benefit	Network provides referrals.
	Funding resources	Network serves as a signal of quality.
Access to financial and nonfinancial resources	In-kind resources	Network provides in-kind resources.
	Training resources	Network provides training resources.

 Table 5. Research Hypotheses

II. Literature Review on the Added Value of Interorganizational Networks

In Chapter <u>I.B.1</u>, I have briefly discussed network forms of social organizing as burgeoning actors in global governance; this chapter focuses on the structural approach to inter-organizational networks. In this approach, networks are not treated as actors – specific institutional arrangements with a degree of agency (see Keck and Sikkink 1998; Powell 1990; Rhodes 1996; Kahler 2009); instead, they are treated as a set of entities (i.e., nodes) connected by a set of linkages (i.e., ties), creating a structural environment that serves to provide opportunities for or constraints on individual actions (Wasserman and Faust 1994, 4; Kahler 2009, 5; Raab 2018, 1136).

For the purpose of this study, interorganizational networks are defined as "the aggregate of the formal and informal relationships between the organizations as independent entities and the formal and informal relations between their members, if they act at least partially in their function as organizational members" (Raab 2018, 1137); these networks are "engineered"¹⁸, in other words, consciously established either by a lead organization from the top down or by a group of organizations in a bottom-up manner for the pursuit of a common goal, rather than occurring serendipitously (see Kilduff and Tsai 2003; Raab 2018).

¹⁸ Raab (2018, 1137) denotes two types of interorganizational networks based on the nature of interorganizational relationship – emergent and engineered – the former refers to networks as social systems with participants not necessarily in direct contact with each other (e.g., policy networks or company alliances), whereas the latter refers to networks as conscious arrangements of independent organizations usually created for a common goal.

Conceptually, the nature and scope of my research problem align with the structural approach to network analysis. The concrete questions to be addressed throughout this study include: In what aspects can working in partnership with a CSO network be of help in addressing individual organizational challenges? What are the mechanisms by which these networks add value at the level of individual organization? This chapter is devoted to a review of pertinent theories and empirical evidence that will elicit a set of viable answers to each of these questions. Thus it is structured in the following way: the first section outlines the substance of added value of interorganizational networks mainly based on empirical findings, with a view to providing a general overview of the specific kinds of value that these networks seek to add; the second section examines multiple theoretical frameworks that are germane to the value-addition processes in a social network and explains the mechanisms by which network relationships deliver value; the final section concludes and evaluates the extent to which these arguments are applicable for the scope of this research.

A. Substance of Added Value of Interorganizational Networks

Reflecting upon Powell's discussion on network forms of interorganizational relations, we note that one key differentiating factor of networks from markets and hierarchies is the non-measurability of the value of the exchanges or the flows taking place within a network. In terms of the flexibility of exchange activities, networks seem to strike a balance between markets (marked by spontaneity and efficiency) and hierarchies (characterized by reliability and accountability) and are more effective especially "for the exchange of commodities whose value is not easily measured" (i.e., qualitative matters), taking into account the "open-ended and relational features of networks with their relative absence of explicit quid pro quo behavior" (Powell 1990, 304).

At the level of individual organization, a probe into the substance of added value points us to specific types of connections and the content of flows between network participants. This section takes stock of the benefits acquired from interorganizational networks and presents, in concrete and discernible categories, illustrative examples of value engendered by these networks.

1. Information and knowledge exchange

Information and knowledge is one example of a non-quantifiable asset that is hard to place a price tag on. According to Powell (1990), the most useful information or know-how is rarely acquired through hierarchical governance structures or markets; rather it is obtained from trusted and reliable contacts. The intangibility and mobility of such an asset make it such that it is not easily traded on a market or dictated through a hierarchical structure (ibid.). Accumulating empirical studies on social networks highlight the flow of information and knowledge as a crucial asset marked by reliability, reciprocity, and efficiency.

In a widely cited empirical study of interfirm strategic alliances in the biotechnology industry in the U.S., Powell et al. (1996) illustrate how biotech firms grow by being connected to interorganizational research and development (R&D) networks as they benefit increasingly from network ties to "enhance the inflow of specific information, resources, and products" (Powell et al. 1996, 143). In a sector as rapidly changing and innovative as biotechnology, both timely access to knowledge and individual organizational positioning in those networks are found to be essential for a firm to stay abreast of the most promising scientific or technological developments (ibid., 119-20).

Similar network advantages can be observed in the civil society sector, notwithstanding certain dissimilarities of network goals and techniques between the sectors. In Keck and Sikkink's (1998) influential work on transnational advocacy networks (TANs)¹⁹, *Activists Beyond Borders*, one of the key network tactics identified is "information politics", which refers to "the ability to quickly and credibly generate politically usable information and move it to where it will have the most impact" (Keck and Sikkink 1998, 16). In particular, nongovernmental organizations (NGOs), many of which cannot afford to maintain staff across different countries, rely on their access to information to drive changes in policies and decision-making (ibid., 22). As illustrated by Keck and Sikkink:

A good example of the new informational role of networks occurred when U.S. environmentalists pressured President George Bush to raise the issue of gold miners' ongoing invasions of the Yanomami indigenous reserve when Brazilian president Fernando Collor de Mello was in Washington in 1991. Collor believed that he had squelched protest over the Yanomami question by creating major media events out of the dynamiting of airstrips used by gold miners, but network members had current information faxed from Brazil, and they countered his claims with evidence that miners had rebuilt the airstrips and were still invading the Yanomami area. (ibid., 21)

Echoing this "information politics" network pattern, Schrama (2019) demonstrates, in a recent comparative case study of policy monitoring CSO networks in the European Union, that CSOs can compensate for their lack of funding, access to domestic policy-making, and human resources by "building a more informal network of trusted exchange of information with government officials, politicians, CSOs and experts" (Schrama 2019, 138). In some cases,

¹⁹ Admittedly, Keck and Sikkink's investigation takes a "networks-as-actors" approach (Kahler 2009, 47) and treats TANs as a specific institutional form as opposed to other actors in global governance. It nonetheless touches upon specific information benefits made possible through TANs at the level of individual organization.

CSOs in the Central and Eastern European (CEE) member states, despite their lack of formal access to domestic policy-making, are still able to engage in monitoring activities through the use of their networks or by exchanging information directly with the EU Commission. As suggested by Keck and Sikkink (1998), being members of a transnational advocacy network brings informational value to CSOs in different ways: it allows them to collect facts and testimony from the field, keep informed on routine developments across countries in a timely but cost-effective manner, and eventually broaden their legitimacy in the international policy arena.

One similar feature between information flows in a TAN and that in a R&D alliance (cf. Powell et al. 1996) is the source of information being dispersed, whether it be across countries or across an industry, hence the importance of connection and sharing between organizations pursuing the same goals. What stands out in the TAN case is that NGOs not only benefit from inflows of information but also depend on networks to get their information out to reach a broader audience (Keck and Sikkink 1998, 22).

In his seminal book published in 1992, *Structural Holes: The Social Structure of Competition*, Ronald Stuart Burt identifies three forms in which information benefits occur: *access* (network as a screening device for pertinent information), *timing* (timely access or early warnings received through networks), and *referrals* (endorsement of information legitimacy), all of which are noticeable from the empirical cases referenced above. These forms of information benefits seem to underscore an analytical view of networks as channels and conduits (see Owen-Smith and Powell 2004). In addition to the transmission of information and knowledge, networks provide other types of advantages to individual participants, sometimes correlating with or generated by information benefits.

2. Learning, adaptation, and innovation

It has often been assumed that, as organizations accumulate experience and knowledge from different information clusters to which they have access, they tend to learn faster and be more productively creative in their field (Burt 2000b, 366). Many case studies analyzing information and knowledge benefits of networks also touch on the learning, adaptation, and innovation outcomes of network partnerships. This can be explained by the definition and dimensions of the concept of *learning*, or "absorptive capacity" – a term introduced by Cohen and Levinthal (1990) to depict "the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends" (Cohen and Levinthal 1990, 128) – which involves not only information processing but also cognitive or behavioral changes (Newig et al. 2010).

In the previously discussed case of R&D alliances in the biotechnology industry (cf. Powell et al. 1996), timely acquisition of information that is otherwise unavailable is the key first step to assimilating, utilizing, and building on such information for innovative activities. Working with diverse network partners, a firm is not only valued and tested by its internal capacity as an actor, but also becomes a recipient of the skills and expertise that network learning brings (ibid.). These biotech firms, in fact, are found to have expanded their individual competencies through interdependent R&D alliances in preference to independent development by vertical integration. The reason behind such dynamics is the complexity of relevant knowledge and the dispersiveness of sources of expertise in a field of rapid technological development. Powell et al. (1996) thus draw the conclusion that interorganizational networks, rather than individual firms in a sector as such, become the cradle

of new knowledge generation and innovation – collaborative benefits that are not easily accessible inside the boundaries of a firm or through market transactions.

In a study of public governance networks for environmental management, Newig et al. (2010) zoom in on the processes of learning as an essential dimension of network governance that involves information transmission and deliberative processes. They analyze how different forms of learning processes function in cross-sector social networks consisting of administrative entities, business organizations, and citizen's initiatives. An interesting remark here is that network models are considered more effective than hierarchical or market-based governance because of their "potential to foster learning both on an individual and on a collective level" (Newig et al. 2010, 6). In the context of environmental management, in particular, there exist crucial needs for effective means of communication to resolve conflicting societal values and interests as well as for integration of different kinds of expertise provided by network members from both the public and private sectors (ibid). To explain the latter, Newig et al. cite an example of the necessity of joint deliberation within transnational bureaucracy networks in global chemical safety and local agricultural nitrate reduction:

One revealing example... is that of bovine spongiform encephalopathy (BSE) spread through conditions of cattle breeding. Regulations demanding the removal from cattle carcasses of potentially hazardous body parts (such as the spinal cord) made assumptions about the conditions of work in slaughterhouses, conditions that inspectors found it impossible practically to ensure. (ibid., 6)

Judging from this case, we observe a potential added value of network forms of organizing in promoting joint learning and the inclusion of local community-level knowledge, when network

27

members engage in deliberative processes by way of group interactions in which perceptions change through persuasion and creative solutions are generated.

Learning, adaptation, and innovation, premised on access to relevant knowledge, constitute a second type of interorganizational network advantage. Regardless of the sectors in which networks operate, these processes are activated as "one organization causes a change in the capacities of another, either through experience sharing, or by somehow stimulating innovation" (Ingram 2005, 657).

3. Coordination of joint action and service delivery

Studies have shown that interorganizational projects, i.e., multiple organizations working jointly on a shared activity or service delivery, are increasingly used to coordinate complex product and services in uncertain and competitive environments, such as advertising, biotechnology, film, financial services, to name a few (Jones and Lichtenstein 2008, 232). Such is the case, again, of R&D alliances in the biotechnology industry investigated by Powell et al. (1996), where networks serve as a platform for diverse types of activities that "cannot be reduced to a simple process of information acquisition" (Powell et al. 1996, 120). They note how formal and contractual project collaborations are often found to be built from a myriad of handshake deals and informal relations. Indeed, access to relevant information and knowledge is conducive not only to learning and innovation but also to the coordination of joint projects and more formal collaborative courses of action. Here, we apply Malone and Crowston's definition of *coordination* as "the act of managing interdependencies between activities performed to achieve a goal" (Malone and Crowston 1990, 361).

Community-based service delivery networks in the U.S. are illustrative of how interagency networks can improve efficiency in a traditionally fragmented, uncoordinated, and rigid human services system (cf. Page 2004, 595-596). In this context, Chen and Graddy (2010) explore a case of a nonprofit lead-organization network – an increasingly popular model of cross-sector interorganizational partnerships in which "public funding agencies develop a single contracting relationship with a lead organization and encourage creation of a community-based network of service providers" (Chen and Graddy 2010, 406). As individual social service agencies often face complex programmatic needs and various operational constraints in the delivery of public services²⁰, forming effective dyadic ties within a network can be of value for a lead organization in different aspects. Through a case study of family preservation services in Los Angeles County, it is found that joint decision-making mechanisms and inter-partner coordination prove to be important contributing factors to the lead organization in acquiring additional provision capacity for case overload, specific service expertise, geographic coverage, local knowledge and access to targeted clients, as well as cultural and linguistic competence (ibid., 416).

Disaster response operational networks represent another compelling example of the advantages of network coordinating joint action in extreme events, during which the management of interdependencies among organizations is complex but of crucial importance for a more rapid restoration of the social systems to pre-disaster levels (Kapucu 2005, 46). As extreme events trigger greater density of communication and interaction among independent actors, an intensive coordinated effort occurs and interorganizational networks are formed to

²⁰ Such as limited number and types of services, spatial restrictions (not being able to cover a large geographic area), lack of local access to targeted clients, etc. (Chen and Graddy 2010, 408)

facilitate the flow of information, share risks and responsibilities, and improve access to resources among network members (Hossain and Kuti 2010; Kapucu 2005).

The above empirical studies show how interorganizational networks offer the benefit of task-oriented coordination and joint delivery of services, bringing together complementary competencies while balancing the needs and outcomes between member entities sharing the same goal. It is also interesting to note from many cases that networks come into being in order to meet a social or business need of interorganizational coordination. As argued by Kogut in discussing the emergence and intentionality in network structure:

Networks are rarely formed by design, but rather they emerge initially in response to the institutional and technological opportunities of an industry or field. During this process of formation, relationships develop out informational properties that drive a matching process among firms. However, over time, knowledge that is initially information gradually becomes encoded in persisting structures that influence subsequent behavior in two distinct ways: as a conduit of information and as the basis of coordinated action. (Kogut 2000, 413)

What is more, it is also worth noticing that access to relevant information and network coordination are in many instances imbricated, which can, either independently or jointly, contribute to the strengthening of an individual organization's capacity.

4. Access to funding and additional organizational resources

I have thus far identified types of value of interorganizational networks that are mostly intangible, such as knowledge and skills. Serving as channels and conduits, networks facilitate different types of resource flow in addition to that of knowledge and information. Chen and Graddy (2010), in the case study referenced above (i.e., a nonprofit leadorganization network in family preservation service delivery), suggest that affiliating with other reputable organizations provides a competitive advantage for a nonprofit social service organization in terms of access to funding, as public funding agencies increasingly favor a partnership plan as a condition to receive service delivery contract (Chen and Graddy 2010, 408). An organization appears to be more likely to receive public funding when it is perceived as legitimate, reputable, and congruent with the prevailing norms in its institutional environment (ibid.) – such perceptions can be influenced by the status and image of its partnering organizations.

The formation of partnerships can be beneficial for CSOs requiring legitimacy and relational benefits to compensate for the lack of more classical measures of civil society resources, i.e., funding, staffing, volunteers, formal access to policy-making (Schrama 2019, 128; Petrova and Tarrow 2007). When recognized as legitimate through bridging ties with other relevant actors from both within and outside of the civil society sector, CSOs may also increase influence and their ability to put information to action (Schrama 2019, 125).

Indeed, civil society organization networks at large help individual CSOs in the cultivation of external relations with key stakeholders, for instance, foundations, companies, individual donors, and governments (Appe 2017, 133). This claim is substantiated by the empirical analysis of an American youth sport nonprofit network by Jones et al. (2017), in which they demonstrate how formalized partnerships engender "collective political, economic, and social value that could be deployed in negotiations with external actors" (Jones et al. 2017, 156). This finding is in line with the assumption that an organization can gain power over resource providers by forging alliances with other organizations (Hillman et al. 2009). In the

context of youth sport nonprofits, interorganizational networks help alleviate competition over fixes commodities (such as pools, fields, equipment) by creating a broad census on network-level goals for the youth sport sector (Jones et al. 2017, 150), which in turn helps reduce transaction costs for each organization in acquiring these resources given that many youth sport nonprofits share similar operational processes that could be integrated (ibid., 156).

Whether by improving reputation and legitimacy or by stabilizing the institutional environment in which they operate, organizations benefit from network partnerships by accessing resources that might otherwise elude them when operating independently (Hillman et al. 2009; Jones et al. 2017).

B. Mechanisms of Value Addition within Interorganizational Networks

This section describes the mechanisms by which interorganizational networks provide the types of added value just enumerated. To be more specific, the key question to be addressed is: How and under what condition can interorganizational networks provide these different types of network advantages, through information and knowledge exchange, joint action coordination, access to mission-critical resources?

In the subsections below, I will briefly review the structural holes theory and transaction costs theory, both of which are prominent theoretical frameworks in the study of interorganizational network partnerships. I will also discuss the contingent effects of structural holes and network status in two types of market uncertainty – egocentric and altercentric uncertainties. These are widely cited analytical techniques and are instrumental for deciphering the mechanisms for value generation within an interorganizational network.

1. On the theory of structural holes and network closure

The bulk of the literature with regard to network benefits and outcomes at the level of individual organization pertains to applications or adaptations of social network theory (Raab 2018, 1137), such as the case for all of the empirical studies referenced above. Ronald Stuart Burt's (1992; 2000) structural holes theory and James Coleman's (1988) conceptualization of network closure have been described as major theoretical framework in this field.

The notion of network closure is first introduced by Coleman as a "property of social relations on which effective norms depend" (1988, S105). Coleman attributes the lack of societal norms (which arise to limit negative external effects or encourage positive ones) to the lack of closure of the social structure. More specifically, network closure refers to the interconnectedness (clustering) within a social structure, which consequently guides behavior and creates trustworthiness. Closure of the social structure plays an important role in generating social capital in the forms of obligations, expectations, as well as social norms (ibid., S95). There exist two benefits of network closure: access to information and reduced risks for people in the network to trust one another (Burt 2000b, 351).

Burt's structural holes theory tells a different story about how social capital originates from a social structure. He explicates a theory about competitive advantage engendered by access to structural holes, that is, gaps between two individuals with complementary information or resources (Burt 1992). Burt builds his proposition upon an account of the three kinds of capital that a player brings to the competitive arena: human capital, financial capital, and social capital. What differentiate social capital from human capital and financial capital are that first, social capital is jointly owned by the parties to a relationship and second, it concerns the rate of return in the market production equation because of the acquisition of opportunities to transform financial & human capital into profit (Burt 1992, 9). It is assumed here that social capital, i.e., relationships with other players, is a critical variable particularly when human and financial capital are abundant (ibid., 10). That is to say, the rate of return on investment hinges on the network of contacts that a player has in the competitive arena (ibid, 45). More specifically, there are two kinds of network benefits: information²¹ and control, which can be maximized when these 3 network parameters – size, diversity, and trust – are optimized. A player's contacts are considered redundant when they provide the same information benefit to the player. Building on this idea of contact redundancy, Burt introduces his core theory: a structural hole is the separation between a player's nonredundant contacts and brings additive rather than overlapping information benefit to the player (ibid., 18). There are two empirical indicators of structural holes: cohesion and structural equivalence; the former refers to direct connection between players while the latter refers to indirect connection by mutual contacts (ibid., 19).

The structural holes that generates information benefits also yield the other type of network advantage in negotiating relationships – control benefit. One of the components of control benefit, *Tertius Gaudens*, emerges from a third party acting as a broker between other players (ibid., 32); another component is *entrepreneurial motivation*. When a player is motivated to act or behave as a tertius (for instance, a seller to generate profit from being between two buyers), this player becomes an *entrepreneur* (ibid., 34). Therefore, structural holes can be understood as an expression of competitive advantage that players hold because

 $^{^{21}}$ Burt's (1992) conceptualization of the three forms of information benefits – access, timing, and referrals – are referenced in my discussion of network benefit in <u>II.A.1</u>.

"they know about, have a hand in, and exercise control over, more rewarding opportunities" (ibid, 49).

These two network mechanisms – network closure and brokerage across structural holes – are both critical sources of social capital but function in different manners. Based on Burt's (2000b) explanation, Table 6 summarizes the key differences between closure and brokerage:

	Denegletai tes og 1900, on 11a anages	Sharesy Suggester
Brokerage	Those who build bridges across cohesive group	Locate a position at the edge of 2 groups & build relations between dissimilar people
Closure	Those who belong to a cohesive group	Locate a group & close ranks with like- minded people

Beneficiaries of Network Advantages Strategy Suggested

Table 6. Key Differences between Closure and Brokerage in a Social Network

Simply put, brokerage across structural holes allows a player to obtain valuable social capital as an entrepreneur occupying an advantageous position between two otherwise disconnected groups, whereas network closure among players in the same group allows them to better coordinate and enhance trust. For the purpose of this study, the former theory provides a clear explanation of how an individual organization can derive value from interorganizational networks by both brokering the flow of information and exercising control over more rewarding opportunities. For instance, it is found that bridging structural holes enhances an organization's absorptive capacity and makes it more productively creative (Burt 2000b, 366). In parallel, the idea of closure helps understand the processes of networks' value addition with regard to the coordination of joint action and service delivery, as well as gaining legitimacy and influence by closing ranks with other players of shared interests or identity. For instance,

Schrama (2019) points out that, in the case of policy monitoring CSO networks in the European Union, the source of social capital for these networks is the combination of closure and openness, which are to be treated as alternative indicators for civil society strengths, compared to the more traditional ones such as financial and human resources.

Social capital, regardless of its sources, appears to be a fundamental building block in elucidating the value addition processes of interorganizational networks. To Burt (2000a), social capital is a metaphor about competitive advantage, a contextual complement to human capital. What is particularly interesting is how social capital can be conducive to financial and human resources. As exemplified by the policy monitoring CSO networks case:

Those platforms of women's groups that gained formal access to domestic policymaking through consultation and were recognized by their government as a legitimate interlocutor were also more likely to receive government funding and able to spend this on staff. The more funding and better staffed their organization, the more time and resources they could spend on engaging in interactions with various actors to exchange information for monitoring purposes. (Schrama 2019, 138-9)

It is thus equally important to take into account the two other types of capital – human and financial – that might be procured through interorganizational networks.

2. On the theory of ego-centric and alter-centric uncertainties

From a theoretical standpoint, Joel M. Podolny's (2001) analysis combines two alternative ways of conceptualizing networks in sociological research on markets: networks as conduits conveying or transferring resources (i.e., "market stuff" flows) between actors²²;

²² This perspective also echoes Burt's (1992) structural holes and Granovetter's (1973) weak ties theory.

networks as informational cues based on which third parties can make inferences about the quality of the product services that these actors offer in the market. Podolny uses the metaphors of *pipes* (carrying the stuff of the market) and *prisms* (inducing differentiation among actors), suggesting that less attention had been drawn to the latter at the time. Cultivating structural holes is important, admittedly, but if a firm engages in an exchange relation with another that is lower in status, there are negative perceptual consequences that derive from this expansion. Podolny addresses this tension between expansionary and exclusive network formation, in light of potential negative perceptions caused by the prism effect of a network as mentioned above. Network positions are characterized in terms of the volume of structural holes and status (Podolny 2001, 43). A central question in his work is how structural holes and status represent assets for addressing different types of market uncertainty. The two types of market uncertainty are 1) egocentric uncertainty – the focal actor is uncertain about how to create more value; and 2) altercentric uncertainty – the focal actor's partner or customer is uncertain about the quality of the focal actor's products or services. This question can be of significance when a player has to choose between adding structural holes or increasing its status (ibid., 44). Podolny reveals that structural holes help reduce egocentric uncertainty; thus, when there is high egocentric uncertainty, structural holes are particularly beneficial because the focal actor is connected to a large number of disconnected others within the field (ibid., 40). Secondly, the status of an actor helps reduce altercentric uncertainty; thus, when there is high altercentric uncertainty, status is particularly beneficial because it serves as an informational cue on which others reply on to make inferences about the underlying quality of the focal actor. Here is what I have summarized based on Podolny's theoretical framework:

	High egocentric uncertainty (network as pipes)	High altercentric uncertainty (network as prism)
Structural Holes	Useful	
Status		<u>Useful</u>

Table 7. Structural Holes and Status Addressing Egocentric and Altercentric Uncertainties

This theorization also implies, strategically, that actors in a network position with more structural holes can derive more value by sorting into market segments high in egocentric uncertainty; actors of higher status can benefit from sorting into segments high in altercentric uncertainty (ibid., 44). Overall, Podolny's discussion on networks goes beyond intra-network exchanges (ties) and the benefits that are generated from bridging ties (i.e., as pipes). It in fact complements this analytical approach with the perceptual externalities of tie formation (i.e., as prisms). This theory helps inform what factors are restraining the value addition processes within an interorganizational network, by mapping network positions to a specific type of market segment. Ultimately, an organization will be able to assess its effectiveness in generating value from inter-organizational network partnerships.

Partnerships are sometimes deemed to be "an inherently risky endeavor", particularly considering the underlying mutual interdependence and vulnerability to the behavior of others (Chen and Graddy 2010, 410). Empirically, Jones et al.'s (2017) investigation of the youth sport nonprofit network reveals how structural disadvantages limit the potential effectiveness of partnerships, especially for smaller organizations who may not have the capacity to actively look for potential partners or sustain many partnerships. Forging ties among local actors in a competitive environment with unstable resources might prove to be inefficient. In analyzing the relationship between a firm's position in the industry network of interfirm collaborative linkages and its innovation outputs, Ahuja (2000) discovers that structural holes serve two

contradictory roles: expanding the diversity of information but increasing the firm's exposure to potential malfeasance. In fact, one of his key findings is that increasing structural holes actually decreases a firm's innovation output. Ahuja's (2000) research demonstrates that there is no simple, universal answer to what types of network structure are conclusively beneficial.

3. On the theory of transaction costs

Transaction costs theory is another useful framework to analyze interorganizational networks. Historically, Ronald Coase, as an institutional economist who worked within a modified neoclassical framework, was the first scholar to apply the notion of transaction cost to explain the raison d'être of modern corporations – a governance structure. In an economic system coordinated by price mechanism in a specialized exchange economy, Coase (1937) theorizes that as opposed to many individuals who contract with each other, a firm comes into being to organize and limit transaction costs, saving time and energy in a bargaining process.

The theory helps understand why, in an earlier era, firms chose to pursue a strategy of vertical integration in order to derive benefits from economies of scale and risk reductions (Chandler 1977; Powell 1990, 319). At around the outset of the 1990s, the opposite patterns – vertical disaggregation – occurred as firms started to shrink their operations in response to the liabilities of large-scale organization (Powell 1990, 318). According to transaction costs theory, a firm's decision to collaborate is intrinsically "a variant of the make-or-buy" decision – whether to produce in-house or purchase from other firms (Powell 1996, 117). Interestingly, as networks formally entered the research agenda around the 1990s²³ as a distinct mode of

²³ Previously, networks or alliances are described as a hybrid mode between markets and hierarchies. (cf. Williamson 1991)

organizing, the make-or-buy decision expands to make, buy, or partner. Kogut suggests that interorganizational partnerships (e.g., networks, joint ventures, alliances) "offer the benefit of both specialization and variety generation" (Kogut 2000, 407). As further described by Barringer and Harrison (2000):

Firms in the network benefit from specialization, which can lower overall costs. Opportunism on the part of network participants is minimized through mutual trust and a desire to remain in the network. Mutual trust emerges in a network when the parties involved have successfully completed transactions in the past and perceive one another as acting in good faith and complying with norms of equity. If the network is perceived as positive, a desire to remain in the network discourages firms from engaging in narrow, self-serving opportunistic behavior. (Barringer and Harrison 2000, 371-372)

Transaction costs theory, as outlined above, helps explain the advantages of interorganizational partnerships in, first, helping improve efficiency as costs and risks are dispersed, and second, minimizing opportunistic behavior through mutual trust. Nonetheless, the theory may not be applicable to explain other types of network benefits such as learning, legitimacy, and other relational benefits.

C. Conclusion

Drawing upon empirical and theoretical literature from a variety of disciplines, this chapter explores the implications of interorganizational networks at the individual organizational level of analysis.

A myriad of empirical studies touch on the benefits of interorganizational alliances and networks in a multitude of contexts – businesses or nonprofits, within-sector or cross-sector, domestic or global – as can be seen from the cases discussed in the first section (cf. II.A).

Based on the selected empirical evidence, I identified four distinct types of added value driven from network partnerships for network participants: 1) information and knowledge exchange, 2) leaning, adaptation, and innovation, 3) coordination of joint action and service delivery, 4) access to funding and additional organizational resources. These types of added value, whether tangible or intangible, often occur in conjunction with others, as can be observed from the R&D alliances case in the biotechnology industry (knowledge exchange, innovation, coordination), the family preservation service delivery network (coordination, access to funding), policy monitoring CSO networks in the CEE (information exchange, legitimacy), and so on. The imbrication of network value corroborates Burt's claim that:

[T]he information and control benefits that are relevant to gaining an advantage in negotiating relationships are multiplicative. They augment and depend on one another, and together emerge from the wellspring of structural holes in a network.

Overall, interorganizational networks create added value at the organization level by both strengthening its internal capacity (through knowledge exchange, learning, and joint actions) and channeling resources (i.e., financial, human, and social capital) critical to their survival and growth. Of particular significance is that networks create a sense of community as members work toward similar goals with shared responsibilities and costs, which are rare to find in a market or a hierarchical governance structure. Additionally, networks can serve as informational cues based on which third parties can make inferences about the quality of the product or services that these focal actors offer in the market.

Methodologically, it is not unusual to apply multiple theoretical frameworks to approach interorganizational relationships and network dynamics (cf. Doerfel and Taylor 2004; Jones et al 2017; Raab 2018). This research is framed from the theoretical perspectives of social capital, structural holes, network closure, and transaction costs economics, with a view to interpreting the mechanisms by which interorganizational networks produce added value. Transaction costs theory illustrates the ways in which horizontal expansion reduces costs and gains efficiency in coordinating activities and achieving shared goals whereas structural holes and network closure account for the sources of social capital when a player holds certain positional advantages. The concept of social capital entails different dimensions and may be difficult to define (King 2004); throughout this review, social capital is perceived to assume a variety of forms such as influence, ideas, values, trust, reputation that are made possible through relationships with others. It is independent of but can be conducive to financial assets or human resources.

An interorganizational network is intrinsically a structure of social interaction and entails certain uncertainties in the participation. Brokerage across structural holes or network closure imply different outcomes under different circumstances. It is therefore indispensable to distinguish how network advantages are affected differently by different types of market uncertainties.

III. Case-study on the TechSoup Global Network

A. Research Site

This case study draws upon my internship experience working on a global CSO network analysis project at a nonprofit specialized in technology capacity building. This particular CSO, TechSoup Global (TechSoup), is a registered 501(c)(3) nonprofit social enterprise located in San Francisco, California, with offices in Warsaw, London, and Corinth, Mississippi. Through partnerships with 61 civil society organizations (CSOs) from five

continents, TechSoup equips CSOs and changemakers around the world with technology resources and skills they need to improve lives globally and locally.²⁴ With missions focused on capacity building, TechSoup's services towards global CSOs can be clustered into the following categories:

- <u>Nonprofit Tech Marketplace</u>: operated in partnership with the TechSoup Global Network (TSGN) partner organizations in 50 countries, the technology marketplace offers donated or discounted software, hardware, and other technical services to eligible nonprofits, libraries, and foundations across the globe. It is the core of TechSoup's social enterprise business model and the underpinning of the TSGN partnership, which will be explained in detail in a subsequent section. (cf. <u>III.C.1</u>)
- 2) <u>Global Validation and Data Services</u>: in parallel to the technology marketplace, the TSGN offers value-added data services in connecting corporations' philanthropic resources to legitimate and eligible charities. With its presence in 236 countries and territories²⁵, the Network helps companies verify and validate an organization's nonprofit status, in order to reduce operational complexity and risks in corporate charitable giving to local grassroot CSOs. (cf. <u>III.C.1</u>)
- Grant-funded Programs: TechSoup mobilizes grants and donations from governments, private companies, foundations, and individuals to implement localized programs, such as defending open civic space through trainings and workshops, improving access to

²⁴ "About Us." n.d. techsoup.org. Accessed April 13, 2020. <u>http://www.techsoup.org/about-us</u>.

²⁵ "Meet TechSoup – What We Offer." techsoup.org. Accessed April 15, 2020. <u>https://meet.techsoup.org/what-we-offer</u>.

safe shelter for human trafficking survivors by developing a mobile app, helping young people develop digital skills such as creative coding, building disaster resiliency and preparedness programs for communities, promoting open data culture in air quality monitoring, etc. It continues to build on these established programs and services through a variety of future-oriented initiatives in bridging the digital divide in global civil society.

B. Research Background

1. Internship Project at TechSoup

Over the course of the internship, I worked with TechSoup's Strategic Development and Fundraising team in San Francisco, whose main efforts revolve around engaging external and internal stakeholders in strategy formulation and raising funds locally and globally in identified strategic areas. My overall intervention, in the form of research and outreach, attempted to map potential collaborative opportunities and outcomes across the TSGN as well as increase institutional knowledge of the sector. On a day-to-day basis, I was responsible for digesting and reporting on fundraising opportunities, supporting TechSoup's Growth Capital Campaign process, and assisting with drafting and editing of funding proposals, concept papers, and reports. In conjunction with these daily activities, my major internship mission was to capture the unrealized potential and programmatic capacity of the TechSoup Global Network so that partner organizations can better collaborate and pilot larger-scale, cross-border programs. Essentially, the project goal entails two practical dimensions:

- a) to bridge the opportunity gap between the TSGN's reach and access to grassroot global civil society, data, knowledge, communication capacity and the resources secured so far from various large-scale funders;
- b) to catalog how nonprofits within a global network can effectively deploy technology solutions to solve global issues and how it can better contribute to global civil society as a whole.

The initial idea of this project traces back to a fundraising workshop at the TechSoup Global Summit in March 2019. My internship directors met with partners from different countries to discuss the ways in which TSGN can fully leverage philanthropic resources as needed to build local programs.

I was responsible for both the design and implementation of the project, which I conceived primarily as a two-branch process (cf. Image 1): 1) data collection, analysis, and visualization; 2) outreach to global network partner organizations through surveys and interviews to uncover their urgent needs.

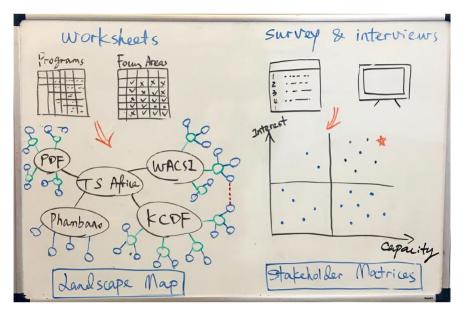


Figure 1. Project Design Chart

Following an in-depth research and analysis on each TSGN partner's activities portfolio and strategic foci, I created an interactive data visualization tool via the Kumu platform to display and organize all the information collected, aiming to better understand the complex web of interests, strengths, and alignment of all TSGN partners around key issues and programs on both global and local levels. The datasets include project description, issue/focus areas, target population, countries served, SDG references, program partners (foundations, companies, or other nonprofits and networks), as well as supplementary materials and records of TSGN partners' public benefit activities.

Subsequently, I designed and implemented a survey to collect opinion-based data and quantitative data. To fully and effectively engage TSGN partner organizations, I hosted two webinars to present to them the progress and findings of the landscape analysis project and gave a demo of the Kumu map of TSGN's programmatic landscape. Our discussion with global partners was particularly productive and thought-provoking, as their engagement is key to applying this tool as a learning ground for organizations working on similar issues. It was also one of my project goals that the project deliverables would not become obsolete but remain sustainable and useful in the long run.

Having laid the groundwork for engaging the partners, I started conducting one-on-one interviews with partners to brainstorm potential strategic plans and exchange ideas on collaborating more efficiently and effectively. By the end of the internship, 23 partner NGOs participated in the project demo webinars, 36 survey responses had been received, and 12 partner interviews conducted.

46

2. Project Data Collected

a) Summary Report for TSGN Landscape Mapping Survey

TSGN Landscape Mapping Survey		
Dear TechSoup Global Network Partners,		
bear recibioup biobar recibio k rainers,		
As a key component of the TSGN mapping initiative that came out of the Fundraising workshop held by Chris and Erica at the Summit in March, this survey helps collect information on each partner's grant-funded programs and projects outside of the TechSoup donations program.		
We hope to map how we can start having more collaboration around projects that could be aligned and realize the vision that the TSGN will be able to fully leverage philanthropic resources when and as needed to build local programs.		
Your participation in this survey is essential and greatly appreciated. Please do not hesitate to reach out to Elena (ezhang@techsoup.org) if we can help provide guidance in filling out the survey.		
1. What is the name of your organization? *		
2. What is your main responsibility in your organization?		
3. What are the core competencies or key programmatic areas of your organization? (Check all that apply.) *		
Digital Transformation		
Civil Society Strengthening / Civic Space		

Figure 2. TSGN Landscape Mapping Survey

Survey questions were designed to collect opinion-based and quantitative data about each partner organization's degree of interests and skills in different program focus areas as well as their organizational strategic directions. For example, one of the key questions asks: *"Looking at grants and contract focused work, are there any strategic and forward-thinking projects that you believed in doing but had to abandon for one reason or another?"* Another pertinent question asks the partners what they think the most important program is that the TSGN can provide for global civil society as a whole. The data points collected have been visualized via matrices and maps (see below image 3 and 4).

b) Strategic Area Stakeholder Matrices

Digital & Media Literacy Stakeholder Matrix

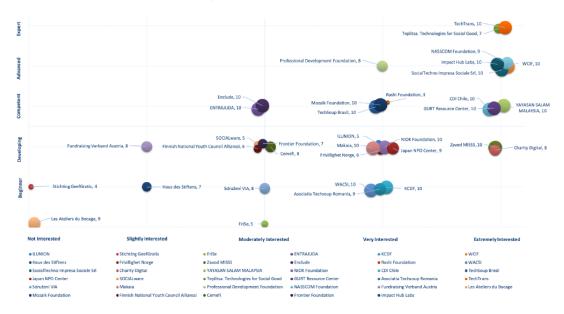


Figure 3. Strategic Area Stakeholder Matrix

The above chart provides an example of the matrices created to map which organizations have high or low capacity and interest in a certain type of project. Organizing them into each quadrant makes it easy to see who needs resources and who can be monitored with less effort in different strategic areas. The data used to create matrices were collected from the survey based on individual organization's response.

c) TSGN landscape map



Figure 4. TSGN Landscape Map via Kumu

This interactive map visualizes all programs and projects within the TSGN and facilitates drawing connections between these programs and the Network partners, which is useful in analyzing the network's collaborative patterns and linkages between different partners and helping better understand the specific network structure of the TSGN.

d) Partner interviews

The partner interviews conducted during November and December 2019 helped establish one-on-one contact with 12 TSGN partners NGOs. The questions addressed during these interviews were aimed at improving the understanding of each of the partners' program strengths, assessing the difficulties faced, and adjusting the initial assumptions from the survey. In addition, several emerging trends surfaced across the TSGN, which are summarized as follows:

- There has been a scarcity of funding for the civil society sector in various countries for different socio-political reasons.

- While CSOs have traditionally relied on grants or loans from governments and foundations to develop their programs, there has been an internal concern about being too donor-driven and an inclination to become more financially self-reliant.
- Being part of a network is instrumental for a CSO as they are able to partner with and establish relationships with other network partners which is beneficial particularly in the long term.
- There exists to a certain degree concerns about competitions with other organizations when applying for government grants or other types of philanthropic resources.

C. TSGN in a Nutshell

1. What is the TSGN?

The TechSoup Global Network is a unique joint service delivery network of 61 independent CSOs with a programmatic focus on civil society capacity building across six continents. The mission statement and impact on the TSGN website read as follows.

TechSoup Global Network partners manage a range of technology capacity-building programs to serve communities in nearly every region of the world. Each network partner tailors its program to the needs of its community and shares insights with other network partners to better serve communities worldwide. Together we've reached 1.2 million organizations and delivered US\$13.5 billion in technology tools and philanthropic services. The TechSoup Global Network is committed to continue this significant impact and develop next generation programs and services to navigate an increasingly digital world.²⁶

²⁶ "Meet TechSoup – TechSoup Global Network." n.d. Accessed August 28, 2020. <u>https://meet.techsoup.org/about-us/techsoup-global-network</u>.

As described in a previous section (cf. III.A), the Nonprofit Technology Marketplace (i.e., the TechSoup donation program), which offers donated or discounted software and tech services to eligible nonprofits, libraries, and foundations, is the underpinning of the TSGN network partnership. Through this Tech Marketplace, eligible nonprofit organizations and charities around the world are able to receive donated and discounted software, hardware, services, and training – digital resources (cf. Nonprofit Product Catalog²⁷) that TechSoup has obtained from over 100 technology companies such as Microsoft, Adobe, Cisco, DocuSign, Zoom, etc. A nonprofit entity or charity, once identified by the Validation team at TechSoup as legally registered and eligible, can request donated or discounted software by adding them to a cart and going through a checkout on the TechSoup marketplace website. TechSoup charges an administrative fee for each donation or discount request to cover the cost to process donations while supporting additional services, programs, trainings for nonprofits, charities, and libraries.²⁸ The validation process is set up to verify the nonprofit or charity legal status of an organization and, additionally, because certain corporate donors have eligibility requirements and restrictions of product requests (e.g. organizational types and mission, anti-discrimination policy, annual expenses, quantity requested per year, territories, etc.).²⁹ For example, Microsoft's donations serve 501(c)(3) organizations in the US (and equivalent organizations

²⁷ "TechSoup Product Catalog." n.d. Accessed May 8, 2020. <u>http://www.techsoup.org/get-product-donations/product-catalog</u>.

²⁸ Webb, Marnie. 2019. "TechSoup Admin Fees to Increase for Selected Discount and Donation Programs." TechSoup. November 2019. <u>https://blog.techsoup.org/posts/techsoup-admin-fees-to-increase-for-selected-discount-and-donation-programs</u>.

²⁹ "Nonprofit Eligibility Requirements and Donor Partner Restrictions." n.d. Accessed August 28, 2020. <u>http://www.techsoup.org/restrictions</u>.

in other countries) that advance education, provide relief to the poor, preserve or restore the environment, etc., but not museums, libraries, UN entities, healthcare organizations.³⁰

Around 2006, TechSoup started to expand its donation program to serve nonprofits outside of the U.S. and now operate the Technology Marketplace globally in partnership with Partner NGOs (PNGOs) based in different countries across the world. Engaging in a contractual agreement with TechSoup, PNGOs verify the legal status and eligibility of local nonprofit entities in their countries or regions and get a portion of the profit from product requests. For example, a French nonprofit needs to get validated by Atelier du Bocage – the PNGO in France – in order to request an Office 365 product via the French Tech Marketplace website. By virtue of this global network of independent NGOs, TechSoup is able to reach hundreds of thousands of nonprofits in 236 countries and territories and support them in their digital transformation journey.

In conjunction with the donation program, the TSGN offers validation and data services for corporate charitable giving, ensuring that recipient organizations (i.e., nonprofits or charities) are valid and legally recognized in their country. Similar to the marketplace validation process for donated software, TechSoup has established standards to verify that the nonprofits in different countries are in good standing for local laws. What is different here is that these companies are able to connect NGOs with their donation or discount directly through their own sites (instead of the TSGN websites), as TechSoup and other PNGOs manage the

³⁰ "Office Standard 2019." n.d. Accessed August 28, 2020. <u>http://www.techsoup.org/products/office-standard-2019-ls-48332-</u>.

back-end nonprofit validation processes for them. As explained by a program manager at Google for Nonprofit:

Google for Nonprofits offers a suite of Google products at no charge to nonprofits across the globe. We are in 50 countries and the reason that we are able to do that is because of the Global Network of validation services that TechSoup offers... Some of the things that you will run into trying to do this yourself is just the scalability. Having partners in-network that know the language, know the law of being a nonprofit, are well integrated into that country and that region – that's just something that is not easy to scale at all...Without TechSoup, it would be years and years of work and cost.³¹

Executive Director at Okta for Good makes a similar comment:

It's really inefficient and quite frankly impossible for us to have our staff and our sales reps collecting documentation to prove an organization's nonprofit status... For us, TechSoup was the right partner to both reduce the operational complexity of validating an organization's status, then also to de-risk it so that we know when we are delivering a donated piece of technology to an organization whether they are here is the U.S., or in Brazil, or in the U.K., or in Japan, we know that that organization is really fulfilling a mission to improve its communities and make its communities stronger, and that feels great for us.³²

The TSGN therefore acts as a broker, or an entrepreneur (applying Burt's structural holes theory), between the companies that seek to scale their philanthropic or CSR activities globally and the nonprofits or charities around the world that are in need of both financial and non-financial resources. This case perfectly exemplifies how bridging structural holes becomes a

³¹ *How TechSoup Validation Services Helps Power Global Corporate Philanthropy*. 2019. https://www.youtube.com/watch?v=DLacQAMUtb4.

³² Ibid.

social capital – a critical source of added value – for the broker, as the TSGN locates a position at the edge of two otherwise disconnected segments (i.e., corporate donors and local nonprofits) and derives both information and control benefits from taking the initiative to develop the opportunity (cf. Burt 1992).

In addition to the Tech Marketplace and Validation Services, a variety of collaborative activities can be observed across all TechSoup program areas. Structurally, the PNGOs are grouped into four regional hubs – TechSoup Africa, TechSoup Americas, TechSoup APAC, and TechSoup Europe – which pilot and manage regional initiatives. Meet and Code, run by TechSoup Europe (a TSGN regional hub), is one example of on-the-ground actions taken within the Network: twenty four TechSoup Europe PNGOs have joined forces and support annual coding and digital education events for children and young adults aged between 8 and 24 in their respective countries, aiming to bridge the digital skill gaps among young European citizens³³. Other TSGN operational examples include, inter alia, Tech4Stories, which aims at communication skill-building to combat radicalized discourse spread across Central and Eastern Europe,³⁴ and NetSquared (free, in-person events every month in 120 cities across 41 countries for nonprofit staffers, technologists, communities and activists to have peer-to peer exchanges around a host of relevant community topics)³⁵.

³³ "Meet and Code." n.d. Accessed May 7, 2020. https://www.meet-and-code.org/gb/en/about.

³⁴ "Tech4Stories – Tech4Stories: DIY Program Helps Activists to Create Engaging Social Campaigns." n.d. Accessed May 7, 2020. http://www.tech4stories.techsoupeurope.org/.

³⁵ "What Is NetSquared? | NetSquared." n.d. Accessed May 7, 2020. https://netsquared.org/about.

2. Who are the TSGN partner NGOs?

Partner NGOs of the TSGN are independent civil society organizations that are specialized in an assortment of both NGOs capacity building programs and community-facing initiatives. Digital inclusion and transformation and civil society strengthening is a major theme shared by many PNGOs, in addition to education, volunteering, gender equality, innovation, among others, to build an inclusive and resilient global civil society.

Collaborative activities within the TSGN, as described in the previous section, usually constitute a branch of a PNGO's program portfolio. They each have their own distinct mission, vision, and values when it comes to building an empowered civil society. To illustrate the spectrum of partner organizations' competencies and mission focus, I select one PNGO from each regional hub and list their program objectives and target beneficiaries using the following table:

PNGO & Program Activities	Objectives	Target Beneficiaries
Kenya Community Development Foundation (Kenya, TechSoup Africa)	Community Sustainability & Grant-making	
Livelihoods	Facilitate communities to mobilize resources and invest in community driven interventions that enable vulnerable communities to generate and diversify their income, enhance their physical and economic access to food supply while promoting sustainable natural resource management with the overall aim of improving their quality of life	Low-income communities; CSOs
Environment and Natural Resource Management	Climate change and mining activities	
Education, Youth and Children	Education & youth programming, capacity development, policy enhancement and promotion of entrepreneurship for out-of-school youth	Youth; children
Effective Governance	Enhancing the growth of philanthropic work and its impact on communities, as well as working to influence policies	CSOs

Institutional Effectiveness E-learning	 that help expand the civic space which has been restrictive in recent years. KCDF will also, in this area, pay attention to the strong connections that exist between democratic governance especially at the National and County Government level and progress towards sustainable development pathways in community development. Build significant capital – endowment - whose returns will enable KCDF to make grants to credible institutions working with communities, in perpetuity Use E-learning as an effective training tool at a lower cost to reach a wider target audience and engage learners who 	Communities
The Hong Kong Council of Social Service - Hong Kong, TechSoup APAC	have difficulty attending conventional classroom training Social Welfare Service and Capacity Development	
Service Development	Hong Kong's economic and societal composition has undergone rapid change over the years. Our current challenges include aging populations, employment equilibrium discrepancy, structural change of the family system and increase in mobile population. We stand by our society in facing these challenges by working closely with the sector to initiate up to date services. Sustainable solutions and the development of society	Youth; Children; Communities; Elderly People; Ethnic Minority and Immigrant Groups; People with Disabilities
Policy Research and Advocacy	require in depth and reliable research. We strive to recommend the most appropriate policies that are well- researched with adequate data and facts. Research results are reviewed and discussed amongst our fellow members and stakeholders of all backgrounds. Our current research and advocacy focuses include poverty, social security, employment, housing and social development. Our Poverty and Social Security unit is a dedicated team working on poverty issues and the Social Innovation and Social Entrepreneurship was specially established to promote social enterprise.	Elderly People; Low-income Communities; CSOs; Children; Youth; Communities; Public; Social Entrepreneurs;
Sector and Capacity Development	Social service plays a vital role in social development and the quality of these services relies on the capacity and human resources of the sector. HKCSS as the engine behind the social service of Hong Kong dedicates resources to our people for them to excel in management of finance, human resources, information technology and public relations. We also connect ourselves internationally to facilitate learning and sharing of issues and best practices.	CSOs; Elderly People
Public Engagement and Partnership	Sustainable social development requires everyone's effort. We see the importance of interacting with the general	Companies; Public

	public. We promote care of community, social	
	responsibility and philanthropy culture while raising	
	awareness and comprehension on different social issues	
	amongst the general public.	
GURT Resource Centre - Ukraine, TechSoup Europe	Civil Society Communication and Capacity Development	
Making Civil Society Sound	Become Civil Society Media Portal; Increase legitimacy of Ukrainian CSOs'	CSOs
Re-forming Ukraine	Pilot policy making projects in Ukraine and promote best practices; Create local change agents Community of Practice	CSOs
Strengthening the Foundation for Civil Society	Promote volunteer activities through involving 10% of adult Ukrainian citizens to volunteering and introducing professionally managed volunteer programs in CSOs Stimulate local community giving initiatives among small business	CSOs; Communities; Social Entrepreneurs
Developing Local Communities	Become Civil Society Media Portal; Increase legitimacy of Ukrainian CSOs'	Communities; People with Disabilities
Centre for Social Innovation - Canada, TechSoup Americas	Accelerator & Incubator for Social Innovation	
Acceleration Programs	 From CSI Summits designed to spark new collaborations, to acceleration programs such as Agents of Change, to microloans and free consultations with experts, our mission is to help get you to impact. In particular, Agents of Change is one of CSI's flagship acceleration programs. Every program is different, but the goal is always the same: to accelerate the success and amplify the impact of a cohort of high-potential projects. The program includes unlimited use of workspace and all the benefits of membership plus events, mentorship, workshops and access to capital. 	Social entrepreneurs
Thought Leadership & Incubated Projects	CSI has taken an active role in incubating certain projects like ONN. Some of these projects have fizzled out while others have spun out of CSI to form their own organizations. We're proud of our support of previously incubated projects including: the Enterprising Nonprofits Program, Green Enterprise Toronto, STEPS, FPYN, and others.	Communities; Social Entrepreneurs
Publications & Videos	CSI has published extensively in the areas of social entrepreneurship & innovation.	CSOs

Table 8. Selected PNGOs' Program Activities

3. What is unique about the TSGN?

The TSGN can be considered, first, a platform which helps improve other nonprofits' organizational capabilities and reduce the transaction costs of global problem solving via the Nonprofit Tech Marketplace platform³⁶. It is also an operational and delivery network which delivers the change it seeks on the ground through a variety of services and programs. As a network, the TSGN partners collaborate to coordinate activities in different countries and increase efficiency in reaching more local communities and grassroot organizations, given that every partner has experience and expertise in their respective geographic areas. The organizing objective is to realize benefits of scale, as all partners aggregate efforts in both technology donation procurement and validation service provision. The TSGN is task-oriented and its central coordinating organization is TechSoup in the US.

Overall, the TSGN is representative of a medium-scale nonbusiness and nongovernmental global network of independent CSOs with common language and commitments partnering to achieve shared goals. It is an inter-organizational partnership, one that hinges on the Nonprofit Tech Marketplace – a platform for other civil society actors to better organize – and is increasingly reinforced through multiple on-the-ground programs and projects (e.g., Meet and Code).

Generally speaking, PNGOs across the TechSoup Global Network have played an increasingly important role in the provision of certain public goods and/or merit goods: some implement programs in disaster prevention and relief assistance, some in installing low-cost

³⁶ TechSoup. n.d. "TechSoup – Technology for Nonprofits, Charities, and Libraries." Accessed May 7, 2020. http://www.techsoup.org/?ts_cs_selection=84

air quality monitors, some in developing apps for human trafficking and domestic violence survivors, others in digital knowledge dissemination, promoting gender equality, or building public media literacy skills, to name but a few. To more sufficiently finance these services, various resourcing strategies have been explored by these organizations. Grants from governments have been one of the main sources, as traditionally practiced. Foundations and corporations invest significantly in specific types of programs and projects that correspond to their agenda. For partners across the Network, revenue from operating the Nonprofit Technology Marketplace represents an independent source of income. Last but not least, TechSoup has recently been testing the waters for impact investing, offering debt securities to individuals and local communities with a view to building more self-sustaining programs and not being heavily reliant on the private or public sectors' funding.

The TSGN provides a unique window into a burgeoning phenomenon in global development processes – the increasing role of social partnerships and civil society networks in global governance and international collaboration. What is particularly interesting about the TSGN case is that it connects 61 independent organizations from across the world through a nonprofit marketplace with a vision to collaborate on multiple fronts, such as, exchange of best practices, scalable programming models, and resourcing strategy coordination. My internship project to some extent served as a building block for this vision. The realizability and implications of it, nevertheless, are what is left to be explored.

IV. Report and Discussion on Key Findings from the TSGN interviews

It was hypothesized that a global CSO network partnership would add value through three different ways: coordination of joint actions, access to financial and non-financial organizational resources, information and knowledge exchange. In this chapter, I summarize the collected data from the TSGN case study and discuss my findings in light of previous empirical studies and the theories cited in Chapter II. Given the amount and range of data gathered from 23 semi-structured interviews, I will begin my story by presenting an overview of the results in Section A and provide a more detailed analysis of each of the three aforementioned hypotheses in Sections B, C, and D accordingly.

A. Results Overview

1. Features of the TSGN partner organizations

To fully understand the value of the TSGN, it is essential to first discern the features of network partner organizations – the PNGOs, articulate the connections facilitated by the network, as well as explain the market conditions under which the TSGN mainly operates.

In Section III.C, I outlined the collaborative Nonprofit Technology Marketplace (NTM) as the underpinning of the TSGN and introduced selected PNGOs' profile based on my preliminary research. The semi-structured interviews enriched these initially collected data with more in-depth information on the features of the TSGN and PNGOs. As was expected, the NTM program collaboration proved to be the glue that holds the network together as well as the main source of network value. At the center of this collaborative marketplace is essentially the participation of mainly US-based technology companies, who donate or offer discounted technology tools and solutions to NGOs. Rather unexpectedly, I discovered that

only 11 of the 24 PNGOs interviewed (46%) had already worked in technology-related areas prior to joining the TSGN while 11 others interviewed (46%)³⁷ were not particularly tech-centric organizations.

"So, our theme, or whatever we do is actually foster culture of giving... for private individuals and for corporates. And what we try to achieve this actually is that more resources, never mind if it's tech, if it's knowledge, if it's money, flow to civil society organizations in order to reach the global goals. So, there is, I would say, *we have a strong tech theme thanks to the TechSoup partnership* and digitization and all that is very relevant to us, but *above that our theme here for the whole organization at [PNGO name] is to drive a culture of giving and corporate engagement for social good.*"

What I found intriguing is that the prerequisite for the network formation was not tied to a thematic focus on technology; instead, it was the organizational connections and affinity to the local NGO community. As one participant explained why their organization replaced the previous PNGO in the network,

"[Name of the previous PNGO] is an IT centric organization. But you see, when you are dealing with nonprofits, you have to understand the psyche and the journey of nonprofits... If you don't resonate with those kinds of things..., then it becomes really difficult for you... So, *we are... actually part of the people that we are trying to appeal to*, as opposed to [name of the previous PNGO], who is very far removed from the day to day operations of nonprofits. So that's where the issue was. So, *they needed an organization that was almost in constant contact... with nonprofits* in [region name]."

The above findings highlight different sets of entities (i.e., nodes such as technology companies, NGOs in different countries, TechSoup US, and network PNGOs) and different

³⁷ The remaining 2 PNGOs interviewed were created for implementing the NTM program, therefore not included in either of the aforementioned two groups.

sets of linkages (i.e., ties – or lack thereof – between these entities) both inside and outside the TSGN. Figure 5 illustrates a simplified version of ties and positions of the entities involved. In this illustration, solids lines represent existing linkages while dashed lines represent gaps between nodes.

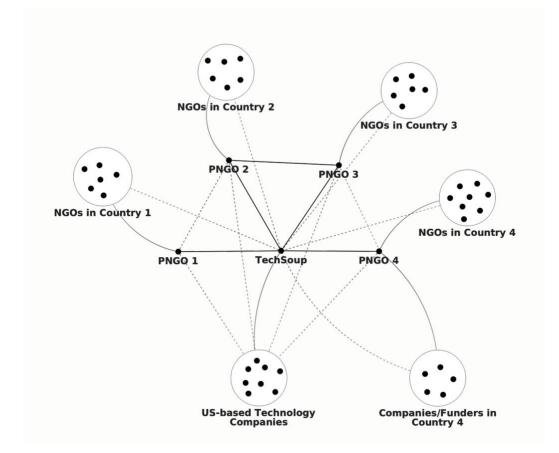


Figure 5. Simplified Illustration of Ties inside and outside the TSGN

Applying Burt's (1992) conceptualization of networks to the TSGN case, a primary feature of the PNGOs (including TechSoup agencies) can thus be summarized as the *tertius* who build bridges between disconnected groups of entities across countries:

- 1) TechSoup playing the role of *tertius* between:
 - o US-based technology companies and PNGOs

- Nonredundant PNGOs (e.g., PNGO 1 and 2 or PNGO 3 and 4)
- 2) PNGOs playing the role of *tertius* between:
 - TechSoup and NGOs in their countries (e.g., PNGO 1, 2, 3, 4)
 - TechSoup and companies/funders in their countries (e.g., PNGO 4)

Mapping out the structure of the TSGN in accordance with Burt's theory is instrumental in locating the sources of value generated from different types of network processes. Of equal importance are the market conditions under which the TSGN operates. During the interviews, 9 of the 24 PNGOs described a series of recent challenges working in a field like technology capacity building for CSOs at large. For instance, in some countries – surprisingly from both global South and global North – the civic sector was shown to be at the beginner level of digitalization:

"From a macro point of view, I would say that *technology is always a challenge for the organizations and for the people in the field*. It is changing now. But we used, maybe like 10, 20 years ago, to have older people running the civil society organizations... I mean, they need to know how to... develop social cohesion or find a cure to something or develop a community center or new programs of education or... ways to lead with disabilities, but they are not thinking technology really is improving the final results that the organization is doing to help the community, that link was kind of challenging, especially... for smaller and older organizations. That has changed, but it is still something that is out there that we have to deal with everyday"

Some participants commented on challenges related to the adjustment to a new business model of subscription-based services:

"I think that there is definitely a challenge about the whole *change to subscription* economy, and there needs to be some kind of... an adjustment for the subscription

economy... it's also very difficult to explain to the organizations... why do they have to pay once a year, and also, even the validation is the same tool, the products, why the amount then differ, ... if the organization has already been validated, why do we need to pay extra for Zoom and less for Microsoft Office?"

"It is also an added value to enter the thinking into services. The basis is of course the donation program. Nothing else would work without this element, but *we do not know what is the future, because of the shift from providing software to other services.*"

Moreover, some challenges are associated with the boundary-spanning nature of the TechSoup marketplace. As one participant indicated, the commercial aspect of the network joint efforts could be at odds with nonprofit organizations' conventional programming models (e.g., grant-based work, philanthropic giving, etc.):

"There is a risk that some of the programs [that TechSoup] is launching are viewed as quite commercial... We say it brings value to the community, but basically, they are semi-commercial. I mean, it's not bad, per se... I come from that world. But to get funding, if you're viewed as commercial, selling CSP, selling discounted products, any commercial organization can do it in that way, we have to differentiate... it's a key critical area... to reflect: are we unique? Do we bring value? We are not trying to ...keep ourselves busy. Our mission is to build value. And that is the first question... The second question is: are we unique in some way?"

As can be inferred, PNGOs face some uncertainty in deciding how to strengthen value proposition for the nonprofit sector at the network level. This condition falls into the category of "egocentric uncertainty", in Podolny's term (2001), a market in which the focal actors are uncertain about how to add value for their exchange partners. In the TSGN case, network members are found to be uncertain about what types of projects local NGOs need and what types of projects funders are likely to fund.

In sum, the first set of analyses revealed the "tertius" feature of TSGN network entities, four distinct types of tie-bridging across diverse cliques, and the egocentric uncertainty feature of the market condition faced by network partners, which altogether helped to characterize the PNGOs (including TechSoup agencies) – the focal actors to which network benefits are added.

2. Assessment of the TSGN value addition processes

One of the major findings of this study is that network benefits in the TSGN case mostly stemmed from coordination of joint actions on a global scale. Surprisingly, access to resources (i.e., grants, donations, in-kind resources, human resources, etc.) was considered the least important value-addition process of the three.

To demonstrate the relative importance of the three processes, I have looked at two sets of data: first, my reading of participants' responses to each of the processes (cf. Section B, C, and D); second, participants' direct responses to the question "which one or which combination of the three has brought about the most impactful network benefit(s) for your organization?" (cf. Table 9 below). This method helped confirm my interpretation and inferential statistical analyses of the interview responses presented in the subsequent sections, as the two datasets were found to be largely congruent.

Participant ID	Region	No. of Employees	Most Impacful Network Process(es)	Notes
Н	APAC	~50	Knowledge	
Ι	Europe	~200	Knowledge	
Q	Europe	~50	Knowledge	
U	Europe	~50	Knowledge	
Α	LATAM	~10	Joint Action	
В	LATAM	~50	Joint Action	
F	APAC	~200	Joint Action	NTM
G	APAC	~200	Joint Action	
K	Europe	~10	Joint Action	NTM
L	Europe	~10	Joint Action	NTM
0	Europe	~10	Joint Action	NTM
R	Europe	~10	Joint Action	
V	Europe	~50	Joint Action	NTM
X	Europe	~200	Joint Action	NTM
С	LATAM	~50	Joint Action + Knowledge	
D	APAC	~50	Joint Action + Knowledge	
Е	APAC	?	Joint Action + Knowledge	
J	Europe	~10	Joint Action + Knowledge	NTM
S	Europe	~10	Joint Action + Knowledge	
Т	Europe	~50	Joint Action + Knowledge	
W	Europe	~50	Joint Action + Knowledge	
N	Europe	~10	Joint Action + Knowledge + Resources	
Р	Europe	~10	Joint Action + Knowledge + Resources	
М	Europe	~10	Resources + Knowledge	

Table 9. Participants' Responses regarding the Most Valuable Network Process(es)

As Table 9 shows, coordination of joint action ranked first among all three types of network processes, accounting for 19/24 PNGOs' (79%) choices; 7 of these 19 PNGOs underscored the role of the Nonprofit Technology Marketplace (NTM) program collaboration. Information exchange and knowledge transfer ranked second, accounting for 14/24 PNGOs' (58%) choices. The most striking observation to emerge from the data was that only 3/24 PNGOs (13%) considered access to financial and non-financial resources as most impactful. Additionally, it is noteworthy that 9/24 PNGOs (38%) regarded program collaboration and knowledge transfer as correlated benefits. In fact, interorganizational program collaborations often implied implicit knowledge transfer and learning benefits for participating organizations,

especially in an ever-changing field like ICT adoption for social work³⁸. As one participant put it, "it's not only about delivering a service, or running a program with impacts to a beneficiary, but the beneficiary is also the organization who runs it."

This emphasis on join actions was further substantiated by participant responses to the question "In comparison to other CSO networks you may have worked with, what is different about working with the TSGN?". On top of the more general differences in network scale, mission, and theme, the distinctive attributes of the TSGN were demonstrated to be its "concreteness", "deliberateness", and "business-orientedness".

The term "concreteness" was applied to describe joint collaborative projects between network partners. As one of the interviewees explained,

"And to be very super honest of what I saw and learn, I think what we've done in our TSGN network is by far, by far, the most concrete...development of work, I don't know how to really explain myself but, cause many of these other NGOs and networks of NGOs and even [Innovation for Change] was lot of like nice, very nice, and interesting conversations and reflections about how we need to change the world. Incredible ideas, incredible people for sure right, but I think *none of them really landed in concrete projects or really having experience of developing projects that could change things* right. And that's a big, big difference that we have in our TSGN. I mean we are doing stuff every day, helping hundreds or thousands of NGOs really moving to the digital world with different kinds of services, products, options. *The word "concrete" just comes to my mind all the time, because all these other networks, a lot of collaboration but not action basically*. I mean, talking about collaboration... I always say that: I think

³⁸ This result will be discussed in more detail in Section $\underline{IV.B}$.

it's so important to walk the talk you know like we're going to talk about collaboration and do it."

The second attribute – "deliberateness" – characterizes how network members often interact or coordinate with each other. As argued by one participant,

"TechSoup is this is the most I would say time intense, ... which is fantastic. Because... *we speak often, we'll discuss. we deliberate*... The mission for TechSoup is actually not tech related. It's actually bridge building, or what you might call the interlocutors... So, it's the same with many other networks. In my opinion, the difference between this and the other networks is, I would say, *there is almost a sense of*... *deliberateness, to be deliberate, in terms of pursuing what we are doing.* The other is almost as if, it's a movement... A movement is... opt-in or opt-out. So, it's your interest that determines how you want to participate..., but *a network is more solidified, where our interests are aligned in the full scope of things*... And again, ...it's one thing to be deliberate but it's also another thing to actually put in the resources, put in the man hours to manage, ...not just saying ...we need to do it, but *who is actually facilitating, who is pushing these kinds of meetings, who is providing the space?* TechSoup has played an extremely pivotal role in that."

Several participants also pinpointed the business-like feature of the TSGN, specifically with reference to the Nonprofit Technology Marketplace:

"Because with TechSoup, we have a program that we develop together. Yeah, I mean, we are partners, *we are business partners*, not only partners in knowledge or in events or something like that, in the rest of the networks it's more a network for collaboration."

"We had experience of being part of CIVICUS... I don't see this global network like CIVICUS as something very... impactful. So, for me, it just, you know, political, something with that, is eating a lot of donors' money, with very little outputs; and about outcomes, I don't even want to say, they stopped at the level of outputs that are very poor, to my mind. In terms of TechSoup, so the situation is very different... All these networks that I mentioned, they are very, very civil society, what I like about TechSoup Global Network that *it's not only civil society, it's really, in positive terms, …its business, in terms of doing real things, …we* have very *grounded programs, they are not invented from nothing.* We have needs from our clients, and we serve these needs, and we try to do it as better as possible."

Taken as a whole, the above evidence and claims point to a key conclusion that the TSGN was set apart from other civil society networks because its primary network organizing principle is dedicated to joint production – a process through which the network was found to deliver the most added value for member organizations.

Overall, this section summarized my findings with regard to network focal actors and value addition processes in the TSGN. What follows in the subsequent three sections is a detailed investigation of what the network benefits are and how different network benefits are realized through coordination of joint actions, information and knowledge transfer, and access to financial resources, in order of significance.

B. Coordination of Joint Actions

Coordination of joint actions has been identified as being the process through which the network yields the most benefits. In this section, I explain what these benefits are and how the TSGN enables several mechanisms that add value to a PNGO from the theoretical lenses of transaction costs, structural holes, and network closure.

First, engineered and emergent network processes were shown to co-exist in the TSGN: the former refers to the NTM program since it is consciously created by a lead organization – TechSoup Global – with a shared goal and common identity; the latter refers to any additional collaborative courses of action since these are non-formalized collaborations, implemented by different cohorts of PNGOs with no network-level goals to drive the process of interaction. This distinction allowed me to delineate different network boundaries and juxtapose mechanisms behind value addition in the two categories.

Second, I argue that minimizing transaction costs was not only a relevant concern driving the formation of the TSGN, but also a key network benefit that increases efficiency by reducing the costs of finding collaborators and ensuring mutual trust between collaborators. In fact, these two efficiency-enhancing mechanisms were intrinsically linked to the social capital of structural holes and that of network closure. To be more specific, the TSGN was demonstrated to both help PNGOs locate potential collaborators by creating a network environment rich in structural holes (cf. Figure 5) and ensure that collaboration is incentive compatible for all participants by providing some level of network closure. In other words, the act of efficient joint production (i.e., the NTM collaboration) is the glue that binds the network together; it requires transaction costs to be reduced, by strengthening the social capital of structural holes and that of network closure. This result is in agreement with Burt (2000a) and further supports the idea of a more general model of social capital that reconciles the tension between these two network structures.

Furthermore, a subset of mechanisms creating social capital reflects Podolny's conceptualization of networks as "prisms". Particularly in the NTM collaboration, PNGOs were revealed to benefit from the fact that they run the NTM program to convey their reliability and capability to other exchange partners such as local NGOs and funders. And of course, this mechanism of signaling does not necessarily increase efficiency.

Lastly, coordination of joint production was shown to provide private benefits for the PNGOs in the forms of human capital (i.e., knowledge transfer and learning) and financial capital (i.e., source of revenue from the NTM program). Conceptually, human and financial capital are the property of individual organizations, which are distinct from social capital as it is jointly owned by the parties to a relationship (Burt 1992, 9).

Together these results confirmed³⁹ that coordination of joint actions is where network benefits are most significant and, more importantly, pointed to a second major conclusion that the benefits derived from joint action encompass a full set of social capital, human capital, and financial capital, which was precisely what made this CSO network successful. In the subsections below, I discuss benefits from engineered and emergent joint actions separately and provide a comparative analysis to highlight the differences in value-addition mechanisms between engineered and emergent network processes.

1. Responses regarding benefits from engineered joint actions

As explained in <u>IV.A.1</u>, a key consideration for the TSGN formation was the PNGOs' connections and affinity to the local NGO community. Intriguingly, 8 of the 21 PNGOs⁴⁰ (38%) indicated the role played by their preexisting relationship with Microsoft: they either had already been a local partner of Microsoft or were connected with TechSoup during Microsoft's events for the local NGO sector; in 7 of the 21 instances reported (33%), this collaboration was built from informal conversations and/or development of personal relationships with

³⁹ The results in this section are consistent with the dataset presented in <u>IV.A.2</u> based on interviewees' direct responses.

⁴⁰ Participants from 21 PNGOs in total have been asked this question.

TechSoup's staff. In some cases, the origin of the NTM collaboration was in fact a mix of both factors, as expressed by one participant:

"We arrived to TechSoup, because of the relationship that [PNGO name] had with Microsoft and because this woman that worked with me was hired in Microsoft. And she could see very clearly that the link for Microsoft with civil society organizations have to be [PNGO name] *because they didn't have to start and reinvent some way to approach organizations, they already had it with us*. So, she was the one that said: I can clearly see that the partner for us is [PNGO name]. So yes, *it came from Microsoft, and then from a close relationship, also,* between our executive president with the director of Microsoft [country name] at that time."

This observation, although not directly related to my research questions about added value of the TSGN, shows the ways in which PNGOs' initial social capital helped them establish contact with the TSGN in the first place. Another interesting finding is that there are 2 other instances where the NTM collaboration gave birth to new independent organizations in their respective countries: one was established to implement the NTM program because the original TSGN partner organization⁴¹ in the country had a limited reach in the local NGO sector and that the program could not grow further; the other was initially created as a concept organization to test the viability of such a marketplace:

"[PNGO name] started in a strange way. Because, actually, I was personally supporting the setup of the donation program internationally 15 years ago. And I mean, I just wanted to give the program to an existing organization. I was part of a university so I mean, quite a reasonable set up and it didn't fly at the time, because people were telling me all the time, since that can cannot be sustainable, this cannot be working, and so on.

⁴¹ According to the participant, the original PNGO was a small community foundation which was also created for the NTM program. Because of its geographical limitation, the performance of the NTM program run by this community foundation was limited.

So, I just decided to *create [PNGO name]* as a proof of concept organization initially, and for proof of concept and it evolves into still existing today."

The transaction costs reduction logic can be traced back to the formation of the TSGN: this network was initially established by TechSoup US because joint production enhanced efficiency by outsourcing certain tasks and responsibilities to members of the network who were able to undertake these efforts more efficiently at the local level, due to stocks of social capital that each member holds in their country or region. A similar logic appeared in my findings around benefits that PNGOs derived from the network partnership, along with benefits that do not necessarily enhance efficiency.

When asked to describe the experience and value generated for their organization from collaborating on the NTM program, all 22 participants ⁴² expressed appreciation and satisfaction that their organization was able to launch this program in their country. In particular, participants gave a spectrum of explanations of why they think it had been beneficial to their organization, based on which I discovered three types of benefits that fall into the categories of: (a) social capital; (b) human capital; and (c) financial capital. More than half participants brought up a combination of these three types of benefits. Statistically, social capital was reported by 15/22 PNGOs (68%); human capital by 9/22 PNGOs (41%); financial capital by 8/22 PNGOs (36%).

(a) Benefits of social capital

⁴² Participants from 22 PNGOs in total have responded to this question.

The social capital of organizations resides within the relationships between organizations (Burt 1992). Based on 15 participants' responses⁴³, I identified three network mechanisms for generating social capital in the TSGN. First, 9/15 PNGOs (60%) saw value in serving as a bridge across disconnected groups of stakeholders (i.e., funders, local NGOs, other PNGOs, technology donor companies, etc.). Second, 8/15 PNGOs (53%) expressed their view that running the NTM program increased positive external perceptions or differentiated their organization from other similar entities in the country. Third, 3/15 PNGOs (20%) touched on trust and interconnectedness derived from this collaboration.

(a.1) Social capital as bridging ties with key stakeholders:

The tie-bridging mechanism, which ranks first among all three, is enabled because the TSGN provides its members with access to a larger network rich in structural holes.

"TechSoup plays an important role in *facilitating the connection to the big technology companies*, so because of their presence on their scale, they can have that conversation at the technology headquarter level, whether or not with Microsoft and Symantec or whoever. We could talk locally with Microsoft, and we have found those local conversations are not as good as the conversation that TechSoup can have at the headquarter level... We needed to be connected and we still need to be connected with the technology partners locally where that makes sense, but they have never been particularly fruitful, because their focus is on sales and profit."

"I would say *we had a very narrow target group before we launched the TechSoup program* in [country name]. We were solely addressing those organizations, who did professional fundraising already and who wanted to improve the fundraising. And now we have a lot of organizations that think about starting fundraising, and whom we can

⁴³ Participants from 15 PNGOs in total have mentioned benefits concerning social capital.

offer some tailored education programs on fundraising so that they can really dig deeper into the topic."

"[This partnership has given us] the ability to say you know, if I go to a product company today, I say: you either give me CSR money or if your product is so good, I list you on the TechSoup [marketplace], I'll give you *access to 263 markets across the world*, like what do you say? So, I think those conversations are kind of very empowering in being able to say you know, I go to a meeting I come off either with money or with the ability to make them, so that's the positive side of being in the TechSoup relationship."

These three quotes indicate the same mechanism of brokering across structural holes, as the focal organization (i.e., a tertius) in each case brings together people from disconnected (i.e., nonredundant) groups. In the first instance, TechSoup occupied a brokerage role between PNGOs and US-based technology companies. In the second, the PNGO enhanced its social capital by bridging ties with more local CSOs. In the last one, the PNGO took the initiative of developing opportunities originated from being between local companies and TechSoup. Providing access to a larger network rich in structural holes, by implication, improves efficiency because this helps reduce the transaction costs of finding potential exchange partners or collaborators.

(a.2) Social capital as increasing positive external perceptions:

Of almost equal importance is the mechanism by which a network serves as an informational cue on which third parties make inferences about the reliability and capability of partner organizations (cf. Podolny 2001). In other words, a network provides social capital by improving external perceptions (i.e., branding, reputation, legitimacy, credibility, status, influence, etc.) of the organization.

"I think what has changed a lot is also *our perception among the NGOs*, that earlier, I think that *our seriousness in their eyes has significantly grew*."

"So, it has... completed a cycle or you don't have a missing link... *It makes us very different from other organizations*. Unlike some other organizations, we provide financial funds, we provide other services that would help them through everything, like everything they need is there. And TechSoup is a very different and elite program. So, being part of this of the network, being part of that program, has added a lot of value to [PNGO name] and completed the services, it's like a package that we support NGOs with."

(a.3) Social capital as creating trust and interconnectedness within the network:

Of less significance was the network mechanism of closure, which creates social capital by facilitating norms of reciprocity and trust between PNGOs. A certain level of network closure also helped reduce the transaction costs of ensuring that collaboration is incentive compatible for all and, in doing so, enhanced efficiency.

"[T]he donation program is a *common ground*; I think it allows collaboration to flow a lot easier."

"I would like to underline also the support that you have given us [in running the NTM program] because you have been very, very patient with us, every time we have a new person, you would train the new person, you would have this full patience to understand to hear it to be all the time there for, for helping us in whatever way we whatever we need. So, we are very happy to be partners of TechSoup, we really appreciate the job that you are doing. And we are very proud to be part of TechSoup."

(b) Benefits of human capital

Development of human capital through knowledge transfer was found to be another key benefit for 9/22 PNGOs (41%) among which featured 5 instances where participants highlighted knowledge sharing on technology-related matters driven by implementing the NTM program. For example:

"It has been very enlightening for us because even though we were strengthening civil society organizations and volunteering and corporate social responsibility, and so on and so forth, we did not have anything on technology. So, so it has been a very interesting area to learn about. And it is a very key area to develop in organizations. So, it has been very, very good for us, it has helped us increase our reach and our service to the organizations in [country name]."

Furthermore, in the 4 other instances of human capital acquisition, participants referred to the experience of information exchange and learning more generally, such as exchanging best practices with other PNGOs, hands-on coaching by geographically adjacent PNGOs when launching the program, and even philosophical change in the way the NGO sector operates.

"Retrospectively, I think that joining TechSoup really changed at least my way of the way it should be done, like everything, *I think that I experienced very certain, you know, philosophical change in the way the whole... the NGO business should be made and what is the scope...* The way [TechSoup] sees the validation as a marketable process, because we never thought about it this way, that it's a service that can be standardized... *We've basically indefinitely changed our managerial philosophy.*"

(c) Benefits of financial capital

As I explained in Chapter III.C.1, the NTM is a revenue-generating program for both TechSoup and the PNGOs. The interviews responses provided additional clarification on the value of the revenue generated. 8 of the 24 PNGOs (33%) touched on the importance of the

revenue, because it contributed to the financial health and sustainability of the organizations (e.g., more predictable and unrestricted funds compared with grant money, flexibility, self-sustainability). As expressed by one participant:

"I can tell you last year, the last financial year, without TechSoup [donation program] we would have had very big deficits. So, the amount of money we're able to get almost plugged in some of the deficits that we have, in terms of flexible resources. So, to us it's core, it has been given the weight that it deserves."

For 4 PNGOs interviewed, the amount received from the NTM was considered insignificant as it was not a main source of organizational income but helped in the operation of the program itself. Surprisingly, participants from 4 other PNGOs indicated that the program was not yet financially viable for their organization and the goal had been to break even.

"I think for the first, *until last year, in the last year, we did not have our costs of delivering these services covered, so we've been in the program because we, as an organization, find this important.* We have a mission of supporting civic society organizations in [country name], especially on a local level and we see technology and access to technology as vital... *This focus on technology is not as much there as you would assume in a country like [country name] where we are pretty digital* and people have, looking into civic society expectations of how digital civil society should be. And we're not, *especially the smaller organizations.* That's why we've been kind of sticking with the program *even though it wasn't financially viable for us.*"

"It's not profitable but we do validations mainly to maintain a relationship with TechSoup even if we might be paying for this extra work and even it is far away from our operations as [PNGO name]. We have invested in the relationship with TechSoup and it eventually pays off, because of the additional joint programs like Meet and Code... I hope more will come."

In the first statement, the motivation behind the NTM program was driven by the organization's commitment towards the digitalization of the local civil society organizations, even if the program could be costing money. In the second, network value rested in additional joint program opportunities acquired from maintaining a good relationship with TechSoup. This demonstrated that, in some cases, benefits of additional joint actions with network partners outweighed the costs of running the marketplace.

2. Responses regarding benefits from emergent joint actions

Alongside the NTM collaboration, emergent joint actions within the TSGN were found to occur more sporadically, marked by changing network goals and boundaries⁴⁴. Table 10 lists the types and scopes of these emergent programs, most of which revolve around the promotion of ICT solutions in the civic sector, in keeping with the main themes of the TSGN overall. Network boundaries in this context were configured according to the clusters of PNGOs working on the same programs.

Collaborative Program Type	Geographical Scope	TechSoup Involvement
Social technology & innovation event	Regional	No
Digital platform for CSOs	Regional	No
Online donation platform	Regional	No
Grant-giving for youth digital education events	Regional	Yes
Open civic space and democratic participation	Regional	Yes
Media literacy and responsible journalism	Regional	Yes
Open data and transparency	Inter-regional	Yes
Technology solution for social issues	Inter-regional	Yes

⁴⁴ Given that emergent collaborative projects are carried out by different cohorts of PNGOs each time.

Digital skills trainings and seminars for CSOs	Inter-regional	Yes
CSO database	Inter-regional	Yes
Capacity building for CSOs working in refugee relief	Inter-regional	Yes
IT service and consultancy for CSOs	Inter-regional	No
Youth internship/scholarship program	Inter-regional	No

Table 10. Features of the TSGN Emergent Programs

When it comes to the types of benefits generated from these emergent joint actions, participants' responses also fall into the same three categories of social, human, and financial capital. Statistically, social capital was reported by 7/13 PNGOs (54%); human capital by 5/13 PNGOs (41%); financial capital by 5/13 PNGOs (36%)⁴⁵. Responses that covered human and financial capital were similar to those from engineered joint actions. However, out of the mechanisms by which social capital is created, only two patterns were observed here. First, 5/7 PNGOs⁴⁶ (71%) (some quoted below) underlined mutual trust and interconnectedness between partners when describing experiences working on emergent joint actions.

"It's about trust and equality between partners, even considering the fact that Fundacja TechSoup is much bigger, of course, in terms of funding and personnel, etc. But *the process of transferring responsibility for this particular initiative shows us real attitude to PNGOs, particular to us*, but we assume that the same attitude is practiced to other PNGOs. So, this is a very positive thing I would like to mention."

"Even working together on a grant proposal, it's a good exercise, because... we get to understand more about each other's capacity, the response time, ... what everybody

⁴⁵ Participants from 13 PNGOs in total have mentioned benefits concerning emergent network processes.

⁴⁶ Participants from 7 PNGOs in total have mentioned benefits concerning social capital in emergent network processes.

brings to the table. And...when grants do get approved that we do run the project, *there's a kind of bonding that's success breeds trust and collaboration.*"

Second, 4/7 PNGOs (57%) were found to enhance their social capital by serving as a bridge across disconnected groups of stakeholders. For instance, a PNGO would also connect other local civil society organizations to implement TechSoup projects in areas where the former were not able to participate due to strategic priorities, organizational mandate, or considerations related to internal capacity.

"We received an invitation to participate in that. And then we have to explain that our role is not a grant giver, *that's not something we have capacity to do* ... So... I connected [the project manager] to another [country name] organization... that actually turned into a collaboration. So, they took on the role as the grant giver and they're basically managing that relation now. And that was very positive for us. Because *we do want to create those bridges between [country name] organizations and TechSoup projects*, especially in the cases or areas where we're not able to participate, because it falls beyond our mandate of what we, of our role as an organization."

3. Comparative analysis between engineered and emergent joint actions

Having described what network benefits are and how social capital is created in two types of network joint actions – engineered and emergent – separately, I now juxtapose the datasets presented above. Figure 6 reflects the occurrences (in percentage)⁴⁷ of the three major types of network benefits reported in engineered (i.e., the NTM program collaboration) and emergent joint actions. No significant difference was identified between the types of benefits generated from engineered joint actions and those from emergent joint actions.

⁴⁷ For engineered program benefits, the denominator is 22 (the same dataset presented in <u>IV.B.1</u>). For emergent program benefits, the denominator is 13 (the same dataset presented in <u>IV.B.2</u>).

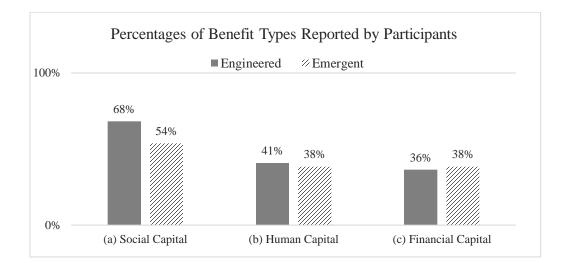


Figure 6. Percentages of Benefit Types Reported on Engineered vs. Emergent Joint Actions

However, the same could not be inferred from the three network mechanisms for creating social capital (i.e., tie-bridging, perception-improving, and trust-building). As Figure 7⁴⁸ shows, the major differences lie in the perception-improving and the trust-building mechanisms.

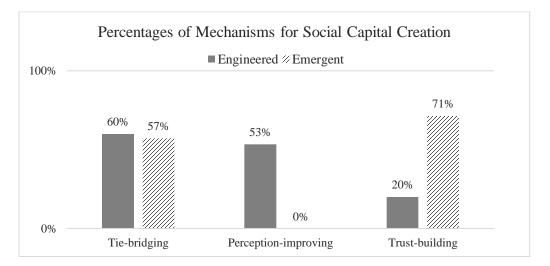


Figure 7. Percentages of Value Delivery Mechanisms for NTM vs. Additional Programs

⁴⁸ For the mechanisms in engineered programs, the denominator is 15 (the same dataset presented in <u>IV.B.1</u>). For the mechanisms in emergent programs, the denominator is 7 (the same dataset presented in <u>IV.B.2</u>).

First, while improving third-party perceptions of the PNGOs was considered important in engineered joint actions (i.e., running the marketplace), it turned out to be irrelevant in emergent ones. In other words, PNGOs are not using emergent joint actions to signal their organizational credibility and capability. This can be explained by the narrower network boundaries and the rare occurrences of emergent joint actions described in <u>IV.B.2</u>. Second, building trust was of particular significance in emergent joint actions but ranked last in engineered ones. As one participant pointed out when discussing the differences between working on the two types of joint actions:

"I found that the partnership with TechSoup is always a partnership. So, so that we are partners to each other, ...but of course, *because of the nature of the [NTM] program, it was not so personal*, we could meet only once a year or twice a year... *We really had the feeling that it is a partnership, but the communication was much more top down, by its nature and the type of the service*; but with the other type of programs, we have to create the programs together and participate in person and meet more in person and create the program elements together. So... *it has the effect to create...a kind of ecosystem of working together*...But these types of collaborations it's really created the potential of doing something really together."

An intriguing result to emerge from the data comparison is that emergent joint actions are efficiency-oriented, because both brokerage across structural holes (i.e., the mechanism of tiebridging) and network closure (i.e., the mechanism of building trust) help reduce transaction costs. Hence, it could be hypothesized that without a formalized or goal-directed network structure, organizations in a network will derive more benefits from joint actions only if they can reduce transaction costs. To conclude my findings above, it is clear that enhancing social capital is the primary benefit of joint actions and is realized by a mix of mechanisms such as bridging ties, improving perceptions, or building trust. As can be seen so far, the TSGN case study goes beyond intranetwork exchanges as it demonstrates value added not only from weaving ties within the boundaries of the network but also from connections with third parties and beyond. This result lends support to Granovetter's (1985) notion of "social-embeddedness". Furthermore, as the TSGN partnership created an enabling environment rich in structural holes, PNGOs have been able to establish mutual trust and draw strength from working with each other both independently and collectively⁴⁹. This provides further evidence for Burt's (2000a) assumption that brokerage across structural holes is the source of added value whereas network closure contributes to realizing the value buried in these structural holes.

C. Information and Knowledge Exchange

As shown in <u>IV.A.2</u>, information and knowledge exchange was considered the most impactful network process by 14 of the 24 PNGOs (58%) interviewed. This section describes the role of the TSGN in facilitating communication and knowledge-sharing between partner organizations. I identified three concrete types of informational benefits in the TSGN (access, learning, and referral) and found that, although most PNGOs were able to establish contact with some other PNGOs since joining the network, there had not been significant increase in connections between PNGOs. This finding further demonstrates that the TSGN is a network

⁴⁹ Independent benefits are knowledge, learning, income, etc. Collective benefits are those that are jointly owned, such as improving efficiency.

rich in structural holes because the level of network cohesion (i.e., direct connection between PNGOs) is still relatively low.

1. Responses regarding the flow of information and knowledge

There were three types of informational benefits that I observed based on participants' responses from 23 PNGOs⁵⁰: (a) access to operationally useful information and knowledge, (b) learning and adaptation of best practices from other PNGOs, and (c) referrals from TSGN partners for additional relationship-building opportunities. Statistically, (a) was reported by 10 of the 23 PNGOs (43%); (b) was reported by 9 of the 23 PNGOs (39%); and (c) was reported by 5 of the 22 PNGOs (17%).

(a) Access to operationally useful information and knowledge

First, the TSGN was considered helpful in providing access or exposure to an assortment of knowledge and information, through email exchanges, network newsletters, conference calls, in-person visits, network meet-ups, and so forth.

When asked about the types of information content accessed, almost all participants spoke of topics around the NTM program as most frequent ones, whether they were technical, financial, legal, or operational. Due to the nature of the NTM program, technology capacity building and digital transformation of civil society organizations across the globe have been an overarching theme of the information flow within the TSGN. Additional themes, such as open grant and funding-related information, interesting program models in other PNGOs, civic sector trends, occurred quite sporadically based on PNGOs' individual needs and interests. For

⁵⁰ Participants from 23 PNGOs in total have addressed questions about informational benefits.

instance, one participant talked about being exposed to new ideas and perspectives that enhanced their understanding of the digital transformation processes:

"I would say that the working with in general TechSoup *really opened our eyes on the whole process of digital transformation... TechSoup's understanding of digital transformation, indeed, is very deep and very important. And we didn't have it before we were part of TechSoup Global Network...* I think that donation program and overall way of thinking about NGOs in the world, I think that this vision was really, really transformative for us."

Another participant described an interesting experience of how they embarked on a joint project from reading a network newsletter:

"[The project] was very interesting because *I came across [project name] in the newsletter of TechSoup*. And I felt that we should be there... because it's so much relevant to our [local] nonprofit organizations. And I contacted TechSoup Europe... we started talking about this project and if it could come to [country name]... actually it was kind of a miracle for us that finally TechSoup Europe decided to choose [city name] as the venue for [project name] and we even got funding to cooperate with them in organizing the conference... so it was really something that we enjoy taking pride and I've learned a lot from it and yeah, actually without TechSoup Europe, we wouldn't be able to do such a high quality and an interesting conference..."

(b) Learning and adaptation of best practices from other PNGOs

Second, learning and knowledge transfer processes were revealed at both individual and organizational levels, often through exposure to better practices followed at other organizations.

"I will put number one, all the support that [TechSoup has] given us in capacity building in [PNGO name], all the training that we have received, or I would say even introduction to the technology world. I mean, it was like discovering a new world. When we first started talking with TechSoup, also, *I personally learned a lot on how to relate with partners*... It was very well organized... And I learned that... and *then I replicated that with my own relationship with our partners here* in [country name]."

"We are very happy to work together with the partner organizations in Europe... and that gives us the chance that we can educate or at least give some additional benefit for our colleagues that they can travel and learn and develop themselves, and with that also developed our organization. Just in the beginning of the year before COVID crisis, we had our learning/study trip to Turkey, to Istanbul and Ankara. What was really interesting and my colleague who is our head of communication, she also could learn new things about communication to get another point of view on the way we do it and also to improve the way we work. And that's quite satisfying, I would say."

In each of the statements above, it is clear that PNGOs became recipients of skills and expertise that others in the network bring and, as a result, both individual and organizational capacities were improved. Moreover, it is important to note that learning benefits occurred both here and in the coordination of joint action ("development of human capital" as described in <u>IV.B</u>). Interestingly, the percentage values of learning benefits engendered by joint actions (engineered – 41% and emergent – $38\%^{51}$) match well with the percentage value of those that are not engendered by joint actions – $39\%^{52}$.

(c) Referrals from TSGN partners for additional relationship-building opportunities

Lastly, the information benefit of referral indicates the role of networks in directing and legitimating information about the focal actor going to others (Burt 1992, 14). Participants

⁵¹ Cf. <u>IV.B</u>: the denominator for "engineered" is 22; the denominator for "emergent" is 13.

 $^{^{52}}$ The denominator here is 23.

from three PNGOs described their experiences of being referred to other civil society networks or being invited to speak at different conferences. For example,

"Giving Tuesday Network, so we are the [country name] leaders of it. And that was actually I think, proposed by a TechSoup member to us. Because we are very much into building the philanthropy culture in [country name] so someone from TechSoup advised us to contact them and be part of that network."

There were also two other instances where PNGOs helped other partners gain information on the NGO sector in their own country by being a local point of contact. For example,

"I remember one or two times where we needed to find some organization in another country or identify a potential partner for some projects outside TechSoup. So, we would usually, firstly, we would ask the TechSoup partner, because we do have this direct contact with them. And or ask them to help us find someone suitable for that."

2. Responses regarding PNGO connections within the TSGN

To better understand the communication pattern within the network, I asked participants whether there had been opportunities for their organizations to communicate with other PNGOs⁵³ (either formally or informally) since joining the TSGN and, if yes, to enumerate these PNGOs. Table 11 below summarizes my findings on the numbers of increased inter-regional ties and of increased cross-regional ties of each of the 22 PNGOs' who provided answers for this question.

⁵³ Ties with TechSoup agencies were not included in the result here because each PNGO is connected to TechSoup given the contractual relationship to implement the NTM program.

Participant ID	No. of Employees	No Increase	Increase in only regional ties	Increase in both regional & cross- regional ties	# of ties increased (Regional)	# of ties increased (Cross- regional)	# of ties increased (Total)
А	~10			Yes	4	1	5
В	~50			Yes	4	5	9
С	~50		Yes		3	0	3
D	~50			Yes	2	1	3
Е	?		Yes		3	0	3
F	~200	Yes			0	0	0
G	~200		Yes		1	0	1
Н	~50		Yes		1	0	1
Ι	~200			Yes	3	2	5
J	~10		Yes		3	0	3
K	~10			Yes	6	5	11
L	~10						
М	~10			Yes	1	2	3
N	~10			Yes	0	1	1
0	~10		Yes		4	0	4
Р	~10		Yes		6	0	6
Q	~50		Yes		0	0	0
R	~10	Yes			1	0	1
S	~10		Yes		1	0	1
Т	~50		Yes		4	0	4
U	~50						
V	~50		Yes		6	0	6
W	~50			Yes		2	2
Х	~200		Yes		1	0	1
		2	12	8	54	19	73
		9%	55%	36%	74%	26%	100%

Table 11. Regional and Cross-regional Tie Formation Comparisons

Prior to joining the TSGN, 17/22 PNGOs (77%) indicated that they had not known or been in contact with other PNGOs within the network. New tie-formation with other network partners increased for most of the PNGOs interviewed after joining the network: 12/22 PNGOs (55%) indicated increase in communication with regional partners⁵⁴; 8/22 PNGOs (36%) indicated increase in communication with both regional and cross-regional partners; 2/22 PNGOs (9%) indicated no increase in communication with any PNGOs but TechSoup agencies. It can also be observed that the increased regional ties outnumbered the increased cross-

⁵⁴ Regional hubs refer to TechSoup Africa, TechSoup Americas, TechSoup APAC, TechSoup Europe.

regional ties by approximately three to one (74% regional ties, 26% global ties). This could be easily explained by factors such as geographical vicinity, language and cultural similarities.

It is important to note that, although most PNGOs were able to establish contact with some other PNGOs since joining the network, clearly there had not been significant increase in connections between PNGOs. In fact, 18 of the 22 PNGOs connected with fewer than or equal to 5 other PNGOs. Given that there are 44 PNGOs⁵⁵ in the network, the level of network cohesion (i.e., the number of redundant contacts, in Burt's term⁵⁶) is relatively low. Therefore, the TSGN is a network rich in structural holes and optimized for information benefits.

D. Access to Financial and Non-financial Resources

In the final section of this chapter, I discuss the role of the TSGN in providing access to financial and non-financial resources, which was considered the most impactful network process by only 3 of the 24 PNGOs (13%). To be more specific, I use the term "resources" to reflect the more classical measures of civil society resources such as funding, staffing, volunteers, in-kind donations, etc.

1. Responses regarding financial resources

In addition to the earned income from running the NTM program which is essentially transactional (cf. <u>IV.B.1</u>), participants were asked to enumerate different instances of accessing

⁵⁵ Plus 17 community partners who do not run the NTM program but are also part of the TSGN.

⁵⁶ In Burt's (1992, 47) conceptualization of structural holes, a network rich in nonredundant contacts is rich in structural holes.

funding opportunities (e.g., grants, donations, etc.) and/or other pecuniary benefits since joining the network.

Participants from 10 of the 22 PNGOs⁵⁷ (45%) expressed their view that being part of the TSGN provided more opportunities for their organizations to obtain financial support from technology companies, such as Microsoft, Adobe, Amazon, Google, etc.

"We do good projects, but I know for sure *it helps to be part of an internationally reputed and established network*. We always say that we are part of a global network, even though we are an independently established [country name] registered organization. We are affiliated with TechSoup Global, which is a sort of *an endorsement and a seal of approval*. I know for sure it mattered to Microsoft. It mattered to Google, I'm pretty Sure. And we've recently had the confirmation from SAP. SAP [country name] has some CSR money they want to give. And they just, *they reached out to us...* But *they did signal that we know who you are, so kind of your reputation... precedes you* because otherwise we wouldn't have called you because there are other potential recipients of our CSR money."

"Whenever, for example, *I tried to fundraise for [PNGO name], from bigger, bigger donors, international donors,* I always feel that *mentioning that we are part of the global TechSoup Network is an asset* or is something that... *they know this brand often* and *this gives us credibility* that we can...provide technology to nonprofit organizations"

In both of these statements, it is clear that the PNGOs were able to access funding because the TSGN affiliation enhanced their social capital (e.g., "endorsement", "reputation", "brand", "credibility", as articulated in the two statements). The mechanism behind financial

⁵⁷ Participants from 22 PNGOs in total have addressed questions about informational benefits.

resourcing is the same one analyzed in <u>IV.B.1.a</u>, by which the network serves as a signal of quality.

It is equally important to note that 11 of the 22 PNGOs (55%) reported no experience of accessing financial support due to the TSGN affiliation. In fact, some of these PNGOs have not actively pursued such a fundraising strategy.

"[The TSGN] helps position us and *it's difficult to say what that means in terms of fundraising, we are not seeing like the direct link of having TechSoup to and using that for fundraising issues or purposes yet.* But *I think that definitely helps* and it's helpful to be able to say that we partner with a global network like *when we speak to politicians and I mean that's a story that works.*"

"If you go into the network, especially the global South, *if you go in because of the resources that you want to get from it in terms of the monies, or the fees, then you start losing it, because it's not big enough to support your core costs*. But if you look at it as part of value add in terms of you pushing the capacity building aspects of your work..., then it's worthwhile."

In other cases, the TSGN affiliation may not be well known to the local communities.

"TechSoup, it's not well known in [country name]. People can't even pronounce it. So, it's very challenging. But before..., whenever we meet with a donor or events, we highlight or talk about TechSoup, it's important... and we try to project how important and how big the organization is. It's not just it's not something minor, but it's not known."

2. Responses regarding non-financial resources

Regarding non-financial resources, the TSGN was found to provide access to in-kind resources to PNGOs, such as freely available content and software licenses.

"On a pragmatic level, we get like free Zoom licenses and free DocuSign licenses; and *that's almost like receiving funding because it's licenses that we would need to pay for.*"

"After what happened in March with the corona situation, it was very helpful to have access to English articles that we could translate... and publish, ...because *we haven't really generated any articles, because that's not something we can prioritize.* So, it's very helpful to have access to those and also the visuals because we're planning on sending out newsletter and we don't have the resources or the funds to develop a visual like marketing materials."

Human capital represented another type of non-financial resources made available across the TSGN. 7 of the 22 PNGOs (32%) mentioned training opportunities and capacity building resources⁵⁸ for their staff. Indirectly, there were also two occasions where the network partnership had potentially helped PNGOs in volunteer recruitment or external guest invitation. Nonetheless, no significant correlation was confirmed between acquisition of human capital and the network partnership.

"We do get human resources... guests or invited trainers, people who will do a webinar for us or a training for us even for free. Yeah, that happens. Now, I'm not sure if that's because TechSoup has a global reputation or because we've worked hard to establish a reputation on a national scale."

⁵⁸ In this section, training and capacity building resources refer to webinars, conferences, materials made available for PNGOs, etc., which are considered as added value in terms of human capital.

V. Conclusion

This thesis set out to investigate the added value that a global-scale interorganizational CSO network generates for individual organizations. Through an exploratory case study of the TechSoup Global Network, this thesis has shed further light on three dimensions of the value of interorganizational networks: enabling processes, value forms, and mechanisms. This chapter summarizes my key findings, evaluates limitations, as well as outlines the implications of this study for both theory and practice.

A. Summary of Findings

As a medium-scale nonprofit and nongovernmental network of independent organizations, the TechSoup Global Network provides a unique window into a technologyoriented network of cross-border social partnerships. Its uniqueness lies in the existence of a joint production arrangement through the Nonprofit Technology Marketplace which binds together the partner organizations across the globe.

Given the nature of this joint production which spans across countries and sectors (forprofits and nonprofits), the TSGN case must be analyzed not only from the lens of intranetwork tie formation and exchanges but, more significantly, by accounting for wider social relations in which the network is embedded and exchanges with third parties and beyond. Specifically, I looked at both the TSGN's internal and external structural features: the former refers to ties and exchanges among network actors; the latter refers to ties and exchanges between network actors and third parties. Moreover, I also distinguished two types of intranetwork collaborative processes, i.e., engineered and emergent, in order to juxtapose different sets of value-delivery mechanisms in these processes, considering that the network actors not only collaborate based on contractual obligations (i.e., in an engineered fashion) but also work together on a variety of initiatives in different cohorts on a voluntary and sporadic basis.

Looking first internally, the TSGN is a network rich in structural holes because the level of network cohesion (i.e., direct connection between network actors) is still relatively low. Although most network actors were able to establish some contact with others after joining the network, there had not been significant increase in connections between network actors. Looking externally, each network actor plays the role of "tertius gaudens" who bridges ties across nonredundant groups of entities (cf. Figure 5). Nevertheless, the TSGN has shown to foster a considerable degree of mutual trust and interconnectedness between network actors, which proves to be particularly beneficial for taking emergent joint actions. Taken together, bridging across structural holes and increasing network closure are concurrent mechanisms behind the creation of structural advantages provided by the network (i.e., social capital), with the former mechanism being more significant than the latter. These findings confirmed Burt's (2000a) conceptualization of a more general network model of structural advantages that reconciles the tension between structural holes and closure. As proposed by Burt (ibid.), the evidence I found points to the conclusion that brokerage across structural holes is the source of social capital whereas network closure contributes to realizing the value buried in these structural holes.

The social capital engendered by structural holes and closure is intrinsically linked to a logic of enhancing efficiency through reducing transaction costs. In the TSGN case, the network helped its actors locate potential collaborators by creating a network environment rich in structural holes while ensuring that collaborations were incentive compatible for all participants by providing some level of network closure. Furthermore, this study draws attention to an alternative mechanism that creates social capital but not necessarily enhances efficiency, through which network actors benefit from improving their external perceptions. Network relationships proved to be instrumental for many organizations to convey their credibility and capability to exchange partners. This finding is consistent with Podolny's (2001) approach to analyzing interorganizational ties as "prisms" that induce market differentiation and serve as a signal of quality.

Building on these sets of evidence, I argue that the value of the TSGN is predominately determined by a variety of entrepreneurs brokering across structural holes between nonredundant groups of organizations across borders and sectors; it also creates value by providing a certain level of interconnectedness and mutual trust, as well as by serving as a signal of organizational credibility and capability. This case study has demonstrated that brokerage across structural holes, network closure, and relational signaling are three coexisting and mutually reinforcing mechanisms that altogether bring about collaborative benefits shared by all network actors, in the forms of increasing efficiency and improving external perceptions. These network structural features and mechanisms, in turn, yielded an assortment of private benefits for individual organizations, in the forms of learning, access to operationally useful information, referrals, additional funding, as well as some fringe benefits such as training and in-kind resources.

In sum, evidence from the TSGN case study led me to conclude that, among the three hypothesized value-addition processes formulated in the Introduction chapter, namely, coordination of joint actions, access to organizational resources, exchanges of information and knowledge, an interorganizational network partnership primarily benefits network actors by facilitating coordinated actions. In the interest of a global-scale civil society network, coordinated joint actions propel the network to evolve organically to assume a structure that becomes a wellspring of both collaborative and competitive advantages.

B. Limitations

A number of limitations need to be considered. First, there are different manifestations of network partnerships within the TSGN and different types and sizes of the PNGOs. For example, some PNGOs operate and provide services solely within their country; some are larger organizations implementing a variety of initiatives; a few are defined by or were created by the NTM program. It was particularly challenging to assess the causal relationship between certain network structural features and organizational performance or to account for which structural positions yielded the most added value for different types of organizations.

Additionally, the current study was also likely to be limited by a self-selection bias. Participants who participated in this study might not have formed a representative sample, as individuals who are more motivated to respond to the interview invitation are potentially those who have stronger opinions or have a closer relationship with other TSGN partners.

C. Implications and Future Research

Network forms of social organization have been widely studied at several analytical levels and from a variety of theoretical perspectives that span across disciplines. Through an in-depth investigation of a case of cross-border social sector partnership, this study has gone some way towards enhancing our understanding of an interorganizational network's effect on individual organizations. First, this study looked beyond network structural features to throw light on the processes involved. Second, the present empirical results helped resolve the controversy between two opposing network mechanisms argued to provide social capital, given that I showed how brokerage across structural holes was the source of social capital whereas network closure contributed to realizing the value buried in these structural holes. Lastly, my approach also incorporated two other opposing perspectives regarding "arm's length" ties and "embedded" ties, given that I looked at both relations within the boundaries of the network and wider social relations in which the network was embedded.

From a practical standpoint, this research could be a useful aid for practitioners working with global interorganizational networks in the civic sector. Since coordinated joint action is where network benefits are most significant, it can be important for practitioners in the field to encourage the development of common projects or programs so that the network partnership is truly effective. At the same time, this case study also suggests that designing a network of closely connected organizations who are each embedded in larger networks rich in structural holes can be critical to the success of the network partnership.

The present case study of the TSGN produced a wealth of qualitative data on interorganizational partnerships, some of which was beyond the scope of this thesis. Further investigations, which take into account the characteristics of network actors, will need to be undertaken to provide a full picture of the TSGN. On a wider level, further research is needed to confirm the validity of the hypotheses put forward in this study. It would be intriguing to determine whether engaging in coordinated joint actions is the most beneficial network process for other cases of interorganizational civil society networks. Another interesting question to emerge from this study is whether network actors will voluntarily engage in joint actions only if these imply transaction costs benefits. The prospect of being able to test the causal relationship between certain network structural features and organizational performance serves as a continuous incentive for future studies.

References

- Ahuja, Gautam. 2000. "Collaboration Networks, Structural Holes, and Innovation: A Longitudinal Study." Administrative Science Quarterly 45 (3): 425–55. https://doi.org/10.2307/2667105.
- Appe, Susan. 2017. "Civil Society Organizations in a Post-Aid World: New Trends and Observations from the Andean Region." *Public Administration and Development* 37 (2): 122–35. https://doi.org/10.1002/pad.1787.

Axford, Barrie. 2013. Theories of Globalization. Polity.

- Barringer, Bruce R, and Jeffrey S Harrison. 2000. "Walking a Tightrope: Creating Value through Interorganizational Relationships." *Journal of Management* 26 (3): 367–403. https://doi.org/10.1016/S0149-2063(00)00046-5.
- Burt, Ronald S. 1995. *Structural Holes: The Social Structure of Competition*. Harvard University Press.
- 2000a. "Structural Holes versus Network Closure as Social Capital." In Social Capital: Theory and Research, edited by Nan Lin, Karen S. Cook, and Ronald S Burt. Transaction Publishers. https://snap.stanford.edu/class/cs224w-readings/burt00capital.pdf.
- ———. 2000b. "The Network Structure Of Social Capital." Research in Organizational Behavior 22 (January): 345–423. https://doi.org/10.1016/S0191-3085(00)22009-1.

Castells, Manuel. 2010. The Rise of the Network Society. Second edition. John Wiley & Sons.

Chandler, Alfred D. 1977. The Visible Hand. Harvard University Press.

- Chen, Bin, and Elizabeth A. Graddy. 2010. "The Effectiveness of Nonprofit Lead-Organization Networks for Social Service Delivery." *Nonprofit Management and Leadership* 20 (4): 405–22. https://doi.org/10.1002/nml.20002.
- Coase, R. H. 1937. "The Nature of the Firm." *Economica* 4 (16): 386–405. https://doi.org/10.2307/2626876.
- Cohen, Wesley M., and Daniel A. Levinthal. 1990. "Absorptive Capacity: A New Perspective on Learning and Innovation." *Administrative Science Quarterly* 35 (1): 128–52. https://doi.org/10.2307/2393553.
- Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal* of Sociology 94: S95–120. https://www.jstor.org/stable/2780243.
- Dicken, Peter. 2003. "A New Geo-Economy." In *The Global Transformations Reader: An Introduction to the Globalization Debate*, 303–10. Polity Press.
- Dicken, Peter, Philip F. Kelly, Kris Olds, and Henry Wai-Chung Yeung. 2001. "Chains and Networks, Territories and Scales: Towards a Relational Framework for Analysing the Global Economy." *Global Networks* 1 (2): 89–112. https://doi.org/10.1111/1471-0374.00007.
- Doerfel, Marya L., and Maureen Taylor. 2004. "Network Dynamics of Interorganizational Cooperation: The Croatian Civil Society Movement." *Communication Monographs* 71 (4): 373–94. https://doi.org/10.1080/0363452042000307470.

- Dore, Ronald. 1983. "Goodwill and the Spirit of Market Capitalism." *The British Journal of Sociology* 34 (4): 459–82. https://doi.org/10.2307/590932.
- Haas, Peter M. 1992. "Introduction: Epistemic Communities and International Policy Coordination." *International Organization* 46 (1): 1–35. https://www.jstor.org/stable/2706951.
- Held, David, and Anthony McGrew. 2003. *The Global Transformations Reader: An Introduction to the Globalization Debate*. Polity Press.
- Held, David, Anthony McGrew, David Goldblatt, and Jonathan Perraton. 1999. *Global Transformations: Politics, Economics and Culture*. Stanford University Press.
- Hillman, Amy J., Michael C. Withers, and Brian J. Collins. 2009. "Resource Dependence Theory: A Review." *Journal of Management* 35 (6): 1404–27. https://doi.org/10.1177/0149206309343469.
- Hossain, Liaquat, and Matthew Kuti. 2010. "Disaster Response Preparedness Coordination through Social Networks." *Disasters* 34 (3): 755–86. https://doi.org/10.1111/j.1467-7717.2010.01168.x.
- Ingram, Paul. 2005. "Interorganizational Learning." In *The Blackwell Companion to Organizations*, edited by Joel A. C. Baum, 642–63. John Wiley & Sons, Ltd. https://doi.org/10.1002/9781405164061.ch28.
- Jones, Candace, and Benyamin B. Lichtenstein. 2008. "Temporary Inter-organizational Projects: How Temporal and Social Enhance Coordination and Manage Uncertainty."

The Oxford Handbook of Inter-Organizational Relations, June. https://doi.org/10.1093/oxfordhb/9780199282944.003.0009.

- Jones, Gareth J., Mike Edwards, Jason N. Bocarro, Kyle S. Bunds, and Jordan W. Smith. 2017. "Collaborative Advantages: The Role of Interorganizational Partnerships for Youth Sport Nonprofit Organizations." *Journal of Sport Management* 31 (2): 148–60. https://doi.org/10.1123/jsm.2016-0118.
- Kahler, Miles. 2009. *Networked Politics: Agency, Power, and Governance*. Cornell University Press.
- Kaldor, Mary. 2000. "Civilising' Globalisation? The Implications of the 'Battle in Seattle':"
 Journal of International Studies 29 (1): 105–14. https://doi.org/10.1177/03058298000290011001.
- Kapucu, Naim. 2005. "Interorganizational Coordination in Dynamic Contexts: Networks in Emergency Management." Connections: Journal of International Network for Social Network Analysis 26: 9–24.
- Keck, Margaret E., and Kathryn Sikkink. 1998. Activists beyond Borders: Advocacy Networks in International Politics. Kindle (2014-02-15). Cornell University Press.
- Kenney, Michael. 2009. "Turning to the 'Dark Side', Coordination, Exchange, and Learning in Criminal Networks." In *Networked Politics: Agency, Power, and Governance*, 79– 102. Cornell University Press.
- Kilduff, Martin, and Wenpin Tsai. 2003. Social Networks and Organizations. SAGE.

Kogut, Bruce. 2000. "The Network as Knowledge: Generative Rules and the Emergence of Structure." *Strategic Management Journal* 21 (3): 405–25. https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<405::AID-SMJ103>3.0.CO;2-5.

Lechner, Frank J. 2009. Globalization: The Making of World Society. John Wiley & Sons.

- Malone, Thomas W., and Kevin Crowston. 1990. "What Is Coordination Theory and How Can It Help Design Cooperative Work Systems?" In *Proceedings of the 1990 ACM Conference on Computer-Supported Cooperative Work*, 357–370. CSCW '90. New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/99332.99367.
- Mann, M. 1996. "Neither Nation-State Nor Globalism:" *Environment and Planning A*, November. https://doi.org/10.1068/a281960.
- Mann, Michael. 1997. "Has Globalization Ended the Rise and Rise of the Nation-State?"
 Review of International Political Economy 4 (3): 472–96.
 https://www.jstor.org/stable/4177235.
- Newig, Jens, Dirk Günther, and Claudia Pahl-Wostl. 2010. "Synapses in the Network: Learning in Governance Networks in the Context of Environmental Management." *Ecology and Society* 15 (4). https://www.jstor.org/stable/26268211.
- Owen-Smith, Jason, and Walter W. Powell. 2004. "Knowledge Networks as Channels and Conduits: The Effects of Spillovers in the Boston Biotechnology Community." *Organization Science* 15 (1): 5–21. https://doi.org/10.1287/orsc.1030.0054.

- Page, Stephen. 2004. "Measuring Accountability for Results in Interagency Collaboratives." *Public Administration Review* 64 (5): 591–606. https://doi.org/10.1111/j.1540-6210.2004.00406.x.
- Petrova, Tsveta, and Sidney Tarrow. 2007. "Transactional and Participatory Activism in the Emerging European Polity: The Puzzle of East-Central Europe." *Comparative Political Studies* 40 (1): 74–94. https://doi.org/10.1177/0010414006291189.
- Podolny, Joel M. 2001. "Networks as the Pipes and Prisms of the Market." *American Journal* of Sociology 107 (1): 33–60. https://doi.org/10.1086/323038.
- Powell, Walter W. 1990. "Neither Market nor Hierarchy: Network Forms of Organization." *Research in Organizational Behavior* 12: 295–336.
- Powell, Walter W., Kenneth W. Koput, and Laurel Smith-Doerr. 1996. "Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology." *Administrative Science Quarterly* 41 (1): 116–45. https://doi.org/10.2307/2393988.
- Raab, Jörg. 2018. "Interorganizational Networks." In *Encyclopedia of Social Network Analysis and Mining*, edited by Reda Alhajj and Jon Rokne, 1136–46. New York, NY: Springer. https://doi.org/10.1007/978-1-4939-7131-2_369.
- Rhodes, R. A. W. 1996. "The New Governance: Governing without Government." *Political Studies* 44 (4): 652–67. https://doi.org/10.1111/j.1467-9248.1996.tb01747.x.
- Schrama, Reini. 2019. "The Monitoring Capacity of Civil Society Networks: A Social Network
 Analysis in the Case of Gender Equality Policy." *Journal of Civil Society* 15 (2): 123–42. https://doi.org/10.1080/17448689.2019.1598628.

- Sikkink, Kathryn. 2009. "The Power of Networks in International Politics." In Networked Politics: Agency, Power, and Governance, edited by Miles Kahler, 228–47. Cornell University Press.
- Slaughter, Anne-Marie. 2003. "Governing the Global Economy Through Government Networks." In The Global Transformations Reader: An Introduction to the Globalization Debate, 189–203. Polity Press.
- Tapscott, Don. 2012. "Global Solution Networks: Understanding the New Multi-Stakeholder
 Models for Global Cooperation, Problem Solving and Governance." White Paper.
 Global Solution Networks. http://gsnetworks.org/wp-content/uploads/sites/4/2013/10/Introducing-Global-Solution-Networks.pdf.

Waddell, Steve. 2010. Global Action Networks: Creating Our Future Together. Springer.

- Wasserman, Stanley, and Katherine Faust. 1994. Social Network Analysis: Methods and Applications. Cambridge University Press.
- Wilkinson, Frank. 1983. "Productive Systems." Cambridge Journal of Economics 7 (3–4): 413–29. https://doi.org/10.1093/cje/7.3-4.413.
- Williamson, Oliver E. 1991. "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives." *Administrative Science Quarterly* 36 (2): 269–96. https://doi.org/10.2307/2393356.

Appendix A. TSGN Interview Question Guide

Section 1. Coordination of Joint actions

- 1. Have you ever collaborated with TechSoup on any programs or projects? If yes, can you describe your experience with these collaborations?
- 2. Have you ever collaborated with other TSGN partners on any programs or projects? If yes, can you describe your experience with these collaborations?
- 3. Based on past experience and your organization's strategic priorities, what are the concrete programs that you currently undertake that you think TSGN could help you to scale up?

Section 2. Access to funding and other nonfinancial resources

- 4. What are the top 3 most effective fundraising methodologies that you have adopted in the past, and why? What are the least effective ones?
- 5. Has being a TSGN partner helped you gain access to any funding opportunities and other resources for your organization? Please describe your experience with respect to each of the following types of resources:
 - a. grant from the public sector, the private sector, individual donations, or any program-related investment
 - b. in-kind resources such as hardware and other materials
 - c. human resources such as recruitment and training
 - d. something else; or some combination of (a)-(c)

If not, what are the programs that most need to be funded in your organization and how can the TSGN assist in this process? What could be the benefits from collaborating with TSGN partners in future?

- 6. If your organization were not part of the TSGN, what would be the resources that your organization could not have accessed?
- 7. Have you ever found yourself competing with TSGN partners for grants? Can you please describe the experience?

Section 3. Knowledge and information exchange

8. Did your organization work or communicate with any PNGOs prior to joining the TSGN? If so, who are the partners? Which PNGOs have you worked or communicated with since joining the TSGN?

- 9. Have you participated in any knowledge exchange activities with TSGN partners? If so, please describe:
 - a. who the partners are;
 - b. what you learned with respect to:
 - i. nonprofit expertise
 - ii. tech and digital knowledge
 - iii. available grants and other funding-related information
 - iv. something else; or some combination of (i)-(iii)
- 10. How have the exchanges helped you to learn? Was it by:
 - a. exposing you to better practices followed at other organizations;
 - b. facilitating peer reflection and critical review of your own working practices;
 - c. something else; or some combination of (a)-(b)
- 11. Did these knowledge and information exchanges improve your organization's working practices? If yes, how? If not, what are the impediments for the improvement process?

Section 4. TSGN strategic outlook

- 12. During the TechSoup Summit in March 2019, partners met to discuss the perceived opportunity gap between what the TSGN has to offer and what it has been so far able to attract in philanthropic resources, and three options were proposed (see below). How would you weigh these options going forward?
 - a. Stay the course: seek grant opportunities sporadically and without coordination.
 - b. Invest in central capacities: TechSoup investing in additional research, development, and coordination capacity to map TSGN programs, and coordinating response to opportunities.
 - c. Invest in regional capacities: TechSoup and the TSGN co-invest in regional strategies and capacities to research and coordinate responses to opportunities.

Section 5. Partnerships within other CSO networks

13. Are you a member/partner of other CSO networks? What are the objectives of those networks? Please describe the membership and your experience working with or as a part of other networks in comparison to the TSGN?

	Joint Action	a. Benefit of the NGO Technology Marketplace	a. Benefit of the NGO Technology Marketplace The donation program has been very important for the organization's finances Financial sustainability	Fina ncial susta ina bility	\$
	Joint Action	a. Benefit of the NGO Technology Marketplace	a. Benefit of the NGO Technology Marketplace The donation program is a common ground which allows collaboration to flow Common ground	Common ground	Interconnectedness
	Joint Action	b. Origin of other joint project/program collabcTechSoup Global Network Summit 2019	TechSoup Global Network Summit 2019	TSGN Summit	TSGN Conferences
	Joint Action	c. Examples of other joint projects/programs di	c. Examples of other joint projects/programs difestival of Innovation and Independent Social Technology (FITSi) - Wingu & CDI Regional program	Regional program	Between PNGOs
	Joint Action	c. Examples of other joint projects/programs di Nodo Ká - Makaia & CDI Chile	Nodo Ká - Makaia & CDI Chile	Regional program	Between PNGOs
1 1	Joint Action	c. Examples of other joint projects/programs di Donar Online - Wingu & CDI Chile	Donar Online - Wingu & CDI Chile	Regional program	Between PNGOs
1	Joint Action	d. Benefit of other joint project/program collab	roject/program collabLearning from other network partners who have many tools and experience	Learning from others'	Knowledge & Learning
1	Joint Action	d. Benefit of other joint project/program collab	d. Benefit of other joint project/program collabLaunching other network partners' programs in their country and engage more Expansion & localization of	Expansion & localization of	Upscaling
7	Joint Action	e. Challenges encountered in joint action	Lack of experience of holding online events	Technical difficulties	
1	Financial & Other Resources	Financial & Other Resources f. Description of fundraising methodologies	N/A		
1	Financial & Other Resources g. Benefit from accessing	g. Benefit from accessing financial resources	Previous program collaboration leads to a grant opportunity from the Internati Regional grant opportunities	Regional grant opportunities	Regional \$
1	Financial & Other Resources g. Benefit from accessing	g. Benefit from accessing financial resources	Being part of the TSGN allows them to work with big tech companies such as M From big tech companies	From big tech companies	\$ From tech companies
1	Financial & Other Resources	Financial & Other Resources g. Benefit from accessing financial resources	Being part of the TSGN allows them to co-apply for grants on a regional level.	Regional grant opportunities	Regional \$
1	Financial & Other Resources	Financial & Other Resources h. Benefit from accessing non-financial resourc Volunteers from abroad	Volunteers from abroad	Human resources	
1 1	Financial & Other Resources	Financial & Other Resources i. Concerns about competiting for resources	Mainly indirect competition with local NGOs as resources are limited from the Competing for resources with	Competing for resources with	
1	Financial & Other Resources	j. Challenges encountered in accessing resource	Financial & Other Resources J. Challenges encountered in accessing resourci Approaching the private sector through their own training programs rather tha Local legal specificities	Local legal specificities	
1 V	wledge and Information Exchak. Communcations after	k. Communcations after joining the TSGN	Mainly regional partners but also two PNGOs from another region (ATN, Wing 4 regional partners + 1	4 regional partners + 1	Regional + Other
1 V	vledge and Information Exchak. Communcations prior	k. Communcations prior to joining the TSGN	Knew one PNGO director from another network but hadn't worked together	No communication before	No
1 V	Indege and Information Excha	vledge and Information Exchak. Description of PNGO communications	Newsletters, mails, concrete notifications about a product offer, strategy-relate Multilevel communications	Multilevel communications	
1 V	vledge and Information Exchal. Benefit of Information	I. Benefit of Information and knowledge exchar	and knowledge exchar Invitation to another global CSO association	Global connection	New Affiliation
1 <	vledge and Information Exchal. Benefit of Information	I. Benefit of Information and knowledge exchar	and knowledge exchar Initiatives such as webinars are great to generate more engagement and know Network engagement	Network engagement	Learning
1 1	vledge and Information Excham. Types of Information	m. Types of Information Content	Mostly around the TechSoup donation program	TS donation program	NTM Program
1 V	Iledge and Information Excha	n. Challenges encountered in information & kno	vledge and Information Exchan. Challenges encountered in information & kn/The challenge will be to really sit down and understand.	Better understanding of other	Lack of Strategy
1	General Questions	o. Most valuable benefits of the network	Program co-implementation	Program collaboration	
1	General Questions	p. Level of network coordination (outlook)	Between regional and global; regional strategies because of the shared langua Global + Regional	Global + Regional	
-	General Questions	q. Difference from other CSO networks	TSGN is by far the most concrete network because compared to other network Concreteness of collaborative	Concreteness of collaborative	
2	Joint Action	b. Origin of other joint project/program collabc	b. Origin of other joint project/program collabdStarted as an informal conversation during the regional meeting where hiere i Informal conversation	Informal conversation	TSGN Conferences
2	Joint Action	b. Origin of other joint project/program collabo	b. Origin of other joint project/program collabd Their project is developed locally and then the partner reached out to compani PNGO to TechSoup	PNGO to TechSoup	PNGO to TechSoup
2	Joint Action	b. Origin of other joint project/program collabo TechSoup Americas regional meeting	TechSoup Americas regional meeting	TechSoup regional hub	TSGN Conferences
2	Joint Action	c. Examples of other joint projects/programs di	c. Examples of other joint projects/programs di Open Data Culture - Makaia and Caravan Studios	Collaboration with TechSoup	With TechSoup US
2	Joint Action	c. Examples of other joint projects/programs di TechSoup Courses - Makaia and TechSoup	TechSoup Courses - Makaia and TechSoup	Collaboration with TechSoup	With TechSoup US
2	Joint Action	c. Examples of other joint projects/programs di	c. Examples of other joint projects/programs di Microsoft Cloud Licenses Webinars - Makaia and TechSoup	Collaboration with TechSoup	With TechSoup US
2	Joint Action	c. Examples of other joint projects/programs di	Nodo Ká - Makaia & CDI Chile	Regional program	Between PNGOs
2	Joint Action	c. Examples of other joint projects/programs di Telecentros - Makaia and ATN	Telecentros - Makaia and ATN	Regional program	Between PNGOs
2	Joint Action	d. Benefit of other joint project/program collab	d. Benefit of other joint project/program collabSharing knowledge that is integrated to the network	Knowledge-sharing	Knowledge & Learning
7	Joint Action	d. Benefit of other joint project/program collab	Benefit of other joint project/program collablocalization of network partners' initiatives (TS Course, Microsoft cloud adoptid Expansion & localization of	Expansion & localization of	Upscaling
2	Joint Action	e. Challenges encountered in joint action	Need for a collaborative methodology in order that people are willing to share Collaboration methodology	Collaboration methodology	
2	Joint Action	e. Challenges encountered in joint action	Lack of understanding of what other PNGOs are doing around the world	Lack of understanding of	
2	Joint Action	e. Challenges encountered in joint action	Challenges are more focused on the project rather than the relationship with p Project-focused difficulties	Project-focused difficulties	

Appendix B. Excerpt of Interview Raw Datasheet