Addressing Grand Challenges Collectively: A brief introduction to Impact-oriented Networks

Vandor, Peter; Leitner, Lukas; Millner, Reinhard; Hansen, Hinnerk

Published: 01/01/2019

Document Version
Unknown

Link to publication

Citation for published version (APA):
Addressing Grand Challenges Collectively: A brief introduction to Impact-oriented Networks

Working Paper
1. Introduction

"Networks are present everywhere. All we need is an eye for them" – Albert-László Barabási

In 2002, the physicist Albert-László Barabási made this statement in his book “Linked” which since then has become one of the main references for network thinking. It describes what sociologist Manuel Castells in the early 1990s had labelled as the “network society”: a society in which networks are the primary organizing principle on all levels. Unlike the two other dominant organizing mechanisms – market exchanges and hierarchies – networks favor lateral, often informal relationships and interactions between equal actors and are bound together by norms of reciprocity and trust, rather than transactional thinking or formalized power.¹ While the presence of human networks as a pattern of social relationships is probably as old as human civilization itself, the influence of network structure has been accelerated considerably by the emergence of new information technologies in the past decades. Novel tools for organizing communication, most notably the computer and the internet, have massively decreased the marginal costs of communication. The formation and maintenance of networks of people, organizations and knowledge across geographic and sectoral boundaries have thus become easier than ever, promoting the development of network infrastructure in all walks of life – from social media and platform economies to policy making and public discourse.²

The acceleration of communication through technology has not only increased the importance of networks, it has also given rise to new tools to analyze them. In the 1990s, advances in information processing capacities propelled social network analysis to emerge as a distinct and transdisciplinary field of research. It has helped to move our understanding of networks beyond theoretical considerations by providing instruments to operationalize and measure key characteristics of social networks. Fueled by this “explosion” of networks in everyday life and advances in network theory and analysis, it has become increasingly common to perceive the world in terms of networks. Fields as diverse as management consulting, counterterrorism and epidemiology have started to view their domains through the lens of network theory and to use social network analytics as tools for learning and understanding. Rather than focusing on the agency of individual actors, this perspective puts an “emphasis on the relationships between actors” and the structural patterns of connections among a large number of actors.³

---

¹ Castells (1996), Powell (1990)
² See also Barabási (2002), Castells (1996), Slaughter (2017) and Weyer (2014)
³ Kilduff and Brass (2010), and Van Dijk (2012)
Network thinking has also seen growing popularity in philanthropy and impact-oriented sectors, as witnessed by numerous recent initiatives. For example, Bloomberg Philanthropies co-created and funded the international climate change network, uniting over 1,300 non-governmental organizations (NGOs) in more than 120 countries, which are working to promote governmental and individual action to limit human-induced climate change to ecologically sustainable levels. Similarly, over just a few years the global Impact Hub network has evolved into a “network of networks” in 100 cities, fostering collaboration between impact entrepreneurs from different fields, ages and geographic regions.

Some arguments suggest that network thinking might be particularly well-suited for the domains of philanthropy and social impact. First, the primary motivation of actors in these fields is often to tackle “grand challenges”: sticky, global problems – such as inequality and climate change – that are characterized by enormous complexity and a multitude of stakeholders with diverse interests. Unlike single interventions and actors, networks hold the promise of providing a plurality of answers that match the complexity of the challenges by enabling collective action across the conventional boundaries between disciplines, sectors and institutions. Second, resources, power and information in these domains are typically distributed unequally. Networks can improve the flow of information (e.g. between different foundations in the form of funder collaborations; but also between foundations and the organizations working on the ground; or, between beneficiaries in broader impact networks). They can therefore improve the effectiveness of resource allocation, learning and thus their social impact.

This paper aims to provide a brief introduction to networks from the perspective of philanthropy and social impact. Acknowledging the depth and breadth of the discourse around networks and its terminology, we focus on a particular type of networks – impact-oriented networks – and discuss their key characteristics, value creation and, briefly, their potential role in the philanthropic toolkit. We thereby seek to provide readers with the following insights:

1) An overview of some basic principles of social networks and network theory.

2) An understanding of impact-oriented networks and their typology.

3) An analysis of the different types of value created by impact-oriented networks on the output-level (for society) and the actor-level (for the individuals and organizations represented in the network).


---

4 Montgomery et al. (2012)
5 Buteau et al. (2018); Powell et al. (2019)
6 Cf. Chapter 2.2
2. What is a network?

2.1. SOCIAL NETWORKS: BASIC CONCEPTS AND TERMINOLOGY

"A network consists of a set of actors or nodes along with a set of ties of a specified type that link them"

– Steve Borgatti and Daniel Halgin

This basic definition of a social network outlines its most important aspect: The links between nodes. Network thinkers are less interested in the characteristics of particular actors within a network (be they individuals, organizations or states, in social network analysis they are simply called nodes), than in the connections (links or ties) between them and the qualities of these connections. Social network analysis (SNA) pioneer Mark Granovetter famously differentiated ties according to their degree of strength, depending on the time, intensity, trust, and reciprocity of the connection. On the one side of the continuum, weak ties are characterized by high distance and low contact frequency (i.e. acquaintances, remotely connected organizations), whereas network actors with strong ties have close, frequent and trustful contact and exchange (cf. Figure 1, left).

![Figure 1: The Strength of Ties (Left) and Structural Holes (Right)](image)

The type of ties that actors form has consequences for themselves as well as for the entire network structure. Strongly-tied network actors are more likely to have connections to the same third parties. The political scientist Robert Putnam argued that strong ties tend to create bonding social capital, which is often characterized by cohesion and high levels of trust within a network, but also high levels of homogeneity and an increasing risk of over-embeddedness and group-thinking. Actors with weak

---

7 Borgatti and Halgin (2011: 1169)
8 Granovetter (1973)
9 Powell and Grodal (2005: 61f.)
ties are more likely to take on a **bridging** function within a network, which means that they might provide the only existing path between two points. Therefore, they can span **structural holes** (cf. Figure 1, right) and connect more densely populated parts of networks across countries, industries, classes or political institutions. These connections can add a lot of value to all parties in the network, allowing the exchange of thoughts, ideas and resources among previously unconnected domains. Individual actors who represent the nodes holding bridging positions can also benefit: For example, Mark Granovetter found that people with more weak ties and better access to distant and novel information (through network bridges) received better offers on the labor market.\(^\text{10}\)

Another key idea of network theory is the concept of **network centrality** which describes the position of a node (be it an individual, an organization or a state) in the network – the higher the number of ties, the more central the respective actor. Often, networks contain a small number of nodes with numerous links, so-called **hubs**. The multiplicity of links, their patterns and distributions form the **network structure**. Put simply, the overall number of links defines the **density** of a network. This characteristic often varies across the network, which can make certain parts, so called **clusters**, more densely knit than others. A higher number of clusters within a network indicates a decentralized structure (e.g. social movements) whereas more centralized networks tend to take on a star-like form. Often, these are social networks, which have formed around one person, so-called “ego-networks” (cf. Figure 2).\(^\text{11}\)

In summary, social network analysis provides us with a set of ideas and terminology to describe how individuals and organizations establish relationships beyond markets and hierarchies. Furthermore, it sheds light on how these relationships form larger network structures with distinct qualities. This understanding constitutes a useful background for uncovering the particular role of networks in the context of philanthropy and social impact.


\(^\text{11}\) Barabási (2002), Füllsack (2013)

\(^\text{12}\) Slaughter based on Paul Baran (2017: 82)
2.2. IMPACT-ORIENTED NETWORKS

After providing a brief outline of the basic concepts used to analyze social networks, we close this chapter by introducing our working definition of a specific type of social network: *impact-oriented networks*. Many of today’s biggest unresolved social and ecological problems are characterized by high complexity and scale, and extend beyond geographical, disciplinary and temporal boundaries. Against this background, a growing number of practitioners and academics in the domains of philanthropy and social impact have taken an interest in networks as potential instruments for addressing these “grand challenges”.

Over the last decade or so, scholars and practitioners came up with a variety of concepts and definitions for initiatives in which a heterogeneous group of actors collaborates with the intention to create social impact (cf. Table 2). Popular designations include, for instance, “communities of practice”, “collective impact”, “networking nonprofit”, “global solution networks”, “generative social-impact networks”, “global action networks”, and “learning networks” as well as broader concepts such as “alliances” and “partnerships”. While each of these approaches contributes unique perspectives and has slightly different emphases, they all share a basic interest in networks as a means to create or amplify social impact. While building on these diverse discourses, we have made the deliberate choice to work with the neutral terminology of “impact-oriented networks” and to root our arguments in social network theory. Throughout this paper, we define impact-oriented networks as follows:

An *impact-oriented network (ION)* is a loosely structured set of autonomous and diverse actors (individuals or organizations) seeking to create social impact. It forms around a specific shared purpose, experience or space.

First of all, this means that the actors involved in an ION seek to address some sort of social or ecological problem. Secondly, they are not bound to a superordinate organization, but operate largely autonomously. However, the loose network structure provides a level of ‘embeddedness’ and cohesion that is higher than in market exchanges and lower than in organizational hierarchies. Frequent characteristics of well-functioning IONs, such as a high level of trust, are not part of the definition, but are discussed in Sections 4 and 5. Thirdly, the (individual or organizational) network actors are diverse in the sense that they might work in different fields, sectors, regions, societal spheres and so forth. Finally, the network forms around at least one shared element: a specific purpose, a (past or present) experience or a geographical space (cf. Chapter 3.1).

---

13 Ferraro et al. (2015)

14 For further information on the named concepts, see Table 2 in the Annex.

15 Please note: This is not another attempt to push a new term into a discourse that is already rich in terminology. It is rather a modest try to provide a neutral middle ground between previous discourses and the theoretical base of network theory for the readers of this paper.
3. Distinguishing impact-oriented networks

3.1. RAISON D'ÊTRE: WHY DO IMPACT-ORIENTED NETWORKS EXIST?

As we have seen, impact-oriented networks represent a subset of social networks in which the nodes have an intention to create impact. Such networks are often organized around a shared element: a purpose, an experience or a space. Even though these three elements are sometimes interrelated and overlapping, they provide a useful typology to differentiate different types of IONs.

3.1.1. Shared purpose

Whereas the overall orientation towards social or environmental value creation is a defining characteristic of an impact-oriented network in general, some networks devote themselves to a specific common impact goal or cause. This is closely related to what political scientists call policy networks – initiatives of individual, corporate and state actors who jointly address a public matter. Accordingly, IONs that form around a common impact goal are output-oriented. The network mostly contains diverse stakeholders beyond one nation-state; it gains its cohesion through the common vision of the actors.16

Examples of impact-oriented networks that have their origin in a specific common goal are manifold. On one side, these are hardly formalized civic organizations established online or offline in order to collectively address a specific social or environmental goal. Examples include social movements such as the suffrage movement at the turn of the 19th century, or more recently the Fridays for Future movement, Occupy Wall Street and online networks for ad-hoc engagement such as Avaaz or change.org. On the other side, organizations such as Amnesty International or Human Rights Watch operate rather formalized global networks of local offices, loosely bound volunteer teams and individual (online) activists with the common goal of advocating for human rights. In between, one finds initiatives such as the “Global Covenant of Mayors for Climate and Energy”, co-founded by Bloomberg Philanthropies, which connects both public and private actors in more than 9,200 cities in 131 countries to collectively combat climate change.

16 As addressing a common goal is a frequent reason for launching networks, several similar concepts in literature have entered the arena over the past decade. Most notably, this includes “global solution networks” (Tapscott, 2013), “production networks” (Plastrik and Taylor 2006), and “collective impact” initiatives (Kania and Kramer, 2011). For details, see Table 2 in the Annex.
3.1.2. Shared experience

A second element that can constitute an impact-oriented network is a shared experience. While the aforementioned IONs are bound together by a shared purpose and an aspired future outcome, this type of network either forms around an ongoing and future experience (e.g. professional exchange, peer support, and collaboration in a mutual training program) or is the result of a common past experience (e.g. networks of alumni of such programs). In these IONs, the network attains its cohesion through the trust and reciprocity generated through the common experience.

Accordingly, existing concepts and examples can be divided into two groups: first, communities of practice describes "a group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly". Examples for this type of impact-oriented networks include collaborations between different organizations working on similar tasks, such as philanthropic funders who aim to collaboratively improve their investment decisions (e.g. the "Knowledge for Better Philanthropy" strategy initiated by the William and Flora Hewlett Foundation). The second group of IONs is formed around a shared experience in the past, so-called alumni and professional networks. This presumes the participation in the same educational training or university degree program or the support reception by the same institution (e.g. in the case of fellowships). A shared background of this type connects likeminded individuals and organizations and enables ongoing collaboration and knowledge-sharing among peers. Examples of this type of ION are the Ashoka Fellowship, a global network of social entrepreneurs that learn from each other and work on joint projects, and the Bosch Alumni Network, which connects past and present beneficiaries, partners and staff with the aim to collectively increase the Bosch Foundation’s social impact.

3.1.3. Shared space

Finally, impact-oriented networks can form around a particular geographical space such as a region, city or neighborhood. Examples include the concept of community foundations, public-private partnerships for grant making towards community development, as well as locally-rooted civic organizations, petition initiatives and policy networks. Here, the interrelatedness nature of the three basic elements around which an ION can form, as described above, become evident. Often, networks formed around a specific impact goal also have a spatial dimension, because their goal is connected to a specific space (e.g. providing affordable housing in a particular area). In addition, it should be noted that the spatial dimension of this type of ION is not immutable as an ION can start as a place-based network and then develop into a national or international group of actors.

17 Wenger and Snyder (2000)
18 See also Louie and Twersky (2017), Poell et al. (2000)
19 See also Johnson et al. (2004)
Similarly, networks formed around shared experiences can make strategic use of spatial proximity to foster face-to-face interaction, thereby strengthening the ties between network actors, e.g. by organizing physical events, meet-ups, conferences or even creating co-working spaces for impact organizations and entrepreneurs such as “Second Home”.\(^2\)

### 3.2. SELECTED KEY CHARACTERISTICS

The abovementioned elements describe the “raison d’être” of networks and provide an explanation of why they emerge and exist. However, IONs also demonstrate other noteworthy key characteristics that can help us to better understand how they function. We will close this chapter by highlighting two of the most important ones: the structure and the governance of impact-oriented networks. Other important but rather self-explanatory dimensions of IONs are their duration (long-term vs. short-term) and size.

First, IONs vary greatly according to their **network structure**. As mentioned in Chapter 2.1, networks can range from decentralized to centralized, and from primarily containing strong ties to mainly having weak ties. Applying these categories, IONs can take on four basic structural forms (cf. Figure 3). First, on one side of the continuum, *civic membership organizations* show both high centralization and tie strength (e.g. RE-AMP). Second, *multi-hub networks* are still rather centralized and often have a dense local structure, whereby these hubs are predominantly connected by weak ties (e.g. WEF Global Shapers). Third, *tightly knit networks* are decentralized in the sense that they lack dominant, agenda-setting central actors. They are instead characterized by many strong ties and a more evenly spread degree of centrality across the network (e.g. locally rooted alliances; intra-organizational learning networks). Lastly and on the other end of the continuum, *networks of networks* are characterized by high decentralization and overall weak tie strength between the actors (e.g. Wikipedia, Fridays for Future)\(^2\).

The network structure is implicitly connected to another characteristic that has broad range: the **governance** of an impact-oriented network. The governance of IONs can differ according to the involvement of its network actors. Hence, *shared governance*, on one end of the continuum, implies equal brokering and corresponds with the decentralized network structure mentioned above. It requires active membership and provides the advantages of more just, distributed and democratic decision making. For instance, Wikipedia decentralizes much of its decision making regarding key articles to users and long-time associates.

---
\(^2\) [www.secondhome.io](http://www.secondhome.io)
\(^2\) Partly built on a typology by the Monitor Institute (2017)
<table>
<thead>
<tr>
<th>Level of centralization</th>
<th>Strength of ties</th>
<th>Weak ties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralized</td>
<td>Civic membership organizations (e.g. RE-AMP)</td>
<td>Multi-hub networks (e.g. Global Shapers)</td>
</tr>
<tr>
<td>Decentralized</td>
<td>Tightly knit networks (e.g. peer circles, communities of practice)</td>
<td>Networks of networks (e.g. Fridays for Future, Wikipedia)</td>
</tr>
</tbody>
</table>

**FIGURE 3: STRUCTURAL TYPES OF IMPACT-ORIENTED NETWORKS**

*Highly centralized network brokers*, as one extreme, depicts single entities determining the network goals and principles (e.g. in civic membership organizations). A mid-range type sees parts of governance outsourced, which is typical for multi-hub networks. Habitat for Humanity, for example, centrally decides upon their major directives but leaves parts of the realization to diverse groups of local stakeholders, volunteers etc. In addition, IONs can be externally governed by a separate entity with a sole administrative function.\(^{23}\)

\(^{22}\) Adapted from Monitor Institute (2017) and Powell and Grodal (2005)

\(^{23}\) Provan and Kenis (2008)
4. The value of impact-oriented networks

4.1. OUTCOME-LEVEL BENEFITS: SOCIAL OR ENVIRONMENTAL IMPACT

“The potential for impact increases exponentially when leaders leverage resources of all types – leadership, money, talent – across organizations and sectors toward a common goal”

– Jane Wei-Skillern, David Ehrlichman, and David Sawyer24

Organizing into impact-oriented networks is associated with benefits on different, interconnected levels. In addition to the value for individual actors in the network (cf. Chapter 4.2), this section will outline a number of crucial benefits, the value of which is related to the societal outcomes of the network: the ability to collectively address complex social problems; unique ways of generating social innovation; a fertile ground for building trust and social capital; and a model to create community resilience.

4.1.1. Collective answers to collective problems

One of the most important outcome-level benefits of impact-oriented networks is their ability to assemble many stakeholders from diverse backgrounds and to collectively address a complex social problem. In many situations, it presents a basis that is significantly more effective for creating social or environmental impact than isolated, single or hierarchically executed actions.

This can materialize in two ways: First, offering an infrastructure for widespread engagement allows autonomous individual actors (or activists) to connect and build a follower-base. This function is most explicit on online platforms like Avaaz or wemakeit, which provide a self-administered space where individuals and organizations with similar goals can meet, advocacy initiatives can promote their campaigns, and crowd-funders can maximize the financial amount necessary for addressing a social or environmental problem.

A second, and often subsequent value of networks as a value-creation tool is their ability to coordinate resources and action necessary to address a specific external problem. Whether managed or not, an ION makes it relatively easy to cooperate towards a common mission and gain considerable size and complexity in a short amount of time. Particularly complex problems can thus be addressed more effectively by unified actions, which helps to avoid duplications and overlaps due to separate organizational agendas. The Sustainable Development Goals adopted by the United Nations Member

24 Wei-Skillern et al. (2015)
States in 2015 correspond to these insights and the implementation of the agenda that was formulated at that time takes diverse stakeholders up on their promise.  

4.1.2. Generating innovation

Impact-oriented networks not only create social and environmental value, they also form a fertile ground for the emergence and spread of novel impactful ideas. Unlike engagement and coordination, which are often directed towards a cause or shared experience, innovation in IONs is rarely a directed process. Instead, it is an emergent characteristic of the network, dependent on the serendipitous discoveries of network actors.

The emergence of new ideas is particularly common when social networks show a specific characteristic: a higher prevalence of structural holes that are bridged by network ties. This means that innovation is more likely to occur when a network consists of hubs that are linked to each other by only one tie (“bridge”) than in a homogeneous and densely knit network in which individuals and organizations are already familiar with each other. In the latter case, new, contradicting viewpoints that may cause productive, creative tension are less likely to emerge or have already been exchanged a long time ago. Accordingly, the diversity of involved actors has become a crucial starting point for setting up impact-oriented networks with the aim of (social) innovation generation, be it alliances for implementing the aforementioned UN Sustainable Development Goals or several other cross-sector partnerships. For instance, the Monitor Institute found that interactions among loosely tied network actors potentially furthers peer learning and thus broadens the range of expertise among and across an ION, and yielding innovative solutions. An interviewee describes this process as follows: “It wasn’t part of the agenda, but the fact that I happened to meet up with other participants in Beth’s group at an unrelated conference laid the groundwork for highly effective coordination on the anti-shark-finning campaign”.

Once innovation has become manifest, networks can also contribute to the further dissemination and implementation of novel ideas. Paradoxically, in this context, too many structural holes in the network might hinder this process of innovation. Instead, a certain amount of network cohesion and centrality is important for a meaningful transfer of innovation. Powell and Grodal (2005) for instance, find that successful knowledge transfer between different network actors requires the ability and willingness to learn from one another, as well as mutual trust. Using complementary assets and recombining existing information in novel ways – the two aspects of knowledge transfer – depend on the

---

25 See also Tapscott (2013), Monitor Institute (2017), and United Nations (2019)
26 See related research from innovation management and entrepreneurship, i.e. Dahl and Moreau (2002), Gregoire et al. (2010), Leung et al. (2008)
27 Monitor Institute (2012)
successful exchange of ideas and a leap of faith. Transferring complex implicit knowledge only functions once a certain relationship-specific understanding of more subtle forms of communication has been established.28

4.1.3. Building trust and social capital

Another outcome-level benefit of impact-oriented networks is their ability to build trust and social capital. Thereby, the role of trust in impact-oriented networks is twofold. On one hand, some level of trust is a basic component and prerequisite of networks, especially in informal and close-knit ones. On the other hand, frequent interactions between actors of a network, especially when facilitated by a shared goal, experience, or space (as well as shared norms or a network identity) can quickly increase the intensity and quality of relationships and encourage mutual trust. This promotes more intense collaboration, a sense of belonging, norms of reciprocity and civic engagement – societal characteristics the political scientist Robert Putnam termed social capital. In the long run, it is fair to assume that the social capital built by networks is not only bound to the shared object of interest (e.g. the common cause) but remains embedded in relationships even when the initial unifying cause of the network has vanished (e.g. because it was successful in addressing an issue).29

Many cases demonstrate the role that networks can play in building trust and social capital. For instance, in a project implemented by the social venture Front Porch Forum, neighborhoods across Vermont started to use an online tool with features such as information sharing, borrowing and selling products and services, or discussing local issues. Over time, this increased mutual trust, embeddedness and reciprocity in the local population, and decreased feelings of marginalization and isolation. After the intervention, 91% of community members reported to be more informed about neighborhood issues and 73% said they were more likely to cooperate on a shared community need than before the new online tool was introduced.30

4.1.4. Creating resilience

Lastly, individuals and organizations connecting within an impact-oriented network can increase the resilience in a community, particularly when the ION is formed around a common geographic space. Relevant literature describes community resilience as “the collective ability of a neighborhood or geographically defined area to deal with stressors and efficiently resume the rhythms of daily life through cooperation following shocks”31. IONs can equip communities with that competency by enabling the exchange of knowledge, labor force, physical material or financial resources. This way, natural disasters and other challenges threatening human civilizations on large or small scales can be handled more

28 Obstfeld (2005), Phills et al. (2008), and Powell and Grodal (2005)
29 See also Putnam (1993) and Philbin and Linnell (2013)
30 Welsh (2017)
31 Aldrich (2012)
effectively. A crucial condition for an ION to increase community resilience is, again, the existence of social capital and trust. More specifically, bonding social capital available within an ION allows for an interpersonal exchange of warnings, common participation in preparation, the provision of shelter and supplies, and so forth. This reduces the reliance on formal aid in favor of emergent, collective social action, which is potentially more responsive and efficient.\footnote{Aldrich and Meyer (2014)}

A notable example for community resilience is the disaster management displayed by neighborhoods in both New Orleans (USA) and Tamil Nadu (India). Although both areas exhibit income levels below the national average and neither received preferential treatment by their respective governments, the local populations demonstrated more success in handling and mitigating the flooding. Hence, poverty levels among the named resilient communities were significantly lower than in similarly affected other areas whereas infrastructural reconstruction and repopulation rates were clearly higher.\footnote{Aldrich (2012)}

4.2. **ACTOR-LEVEL BENEFITS: THE VALUES OF IONS FOR ITS INDIVIDUALS AND ORGANIZATIONS**

"I believe it is important, like it is with many aspects in life, alone you are weak, but in the moment you are embedded in a network of fellow people, you do not feel lonely any longer."

– Anonymous social entrepreneur\footnote{Schneider and Meyer (2017: 14)}

In Chapter 4.1, we outlined the different types of output-value created by impact-oriented networks on a macro level, i.e. for society. Often, however, the benefits of networks cannot be directly attributed to the macro level, but trickle down to the level of particular individuals and organizations within the network. This is especially the case when networks are not built around a shared purpose, but a shared space or experience, and when the individuals and organizations in the network pursue different social impact goals. By empowering these actors, the network helps them to be more effective in achieving their impact-oriented goals.

4.2.1. **Access to resources and opportunities**

With a slightly different connotation, the above-mentioned social capital effects of an ION can also make an impact on the level of individual actors. Whereas we previously conceptualized social capital with reference to Robert Putnam, the current context shifts towards Pierre Bourdieu’s understanding and is more actor-centered. Here, social capital is defined as “the aggregate of the actual and the
potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition”. This implies that individuals and organizations connected to each other via an ION can increase their access to precious resources (e.g. information, valuable contacts, funding).  

In a study among founders of small IT companies for instance, Ozgen and Baron found that informal industry networks and professional forums played a crucial role in the process of opportunity recognition. Their findings show that the capability of entrepreneurs to identify new business opportunities increases with their informal social network and the frequency of participation in professional networking events (e.g. conventions, conferences, workshops). Similarly, in a study among co-workers at the Impact Hub, the authors of this paper found that interaction and collaboration between members was associated with the increased recognition of professional opportunities as well as with better access to support and investment capital. The effect was particularly strong in longitudinal analyses, showing that every additional professional contact made through the network in 2016 was associated with a gain of 2,000 USD in investment by the end of 2017.

Finally, another example of these benefits is provided by the ERSTE Foundation NGO Academy, a capacity-building program for nonprofit and social enterprise leaders in Central and Eastern Europe. Evaluations of its main intervention, a cross-regional management development course spanning four months, suggests that many participants build durable relationships through the program. One year later, 95% of respondents reported that they are still in touch with other international peers: 47% had entered professional collaborations, such as the start of new projects with other participants after the end of the program; and 67% reported having sought advice or guidance from their peers. These results confirm the high intrinsic value of network relationships as providers of all sorts of resources, which appears to outweigh the costs of relationship management despite geographical and linguistic barriers and the busy schedules of the majority of participants.

4.2.2. Gaining legitimacy

Another valuable characteristic of impact-oriented networks is that they can lend legitimacy and credibility to their members not only within the network but also vis-à-vis third parties. Network membership thereby functions as a signal to third parties, conveying that the intentions and actions of the actor are aligned with the expectations, norms and beliefs of the community in which they operate. The signal of membership suggests that the actor has probably been “vetted” by the network with respect to their alignment, thereby effectively serving as a quality seal for third parties and providing “symbolic reputational competencies” to the member.

---

35 See also Bourdieu (1986)
36 Vandor, Leitner and Stamatiou (2019)
37 ERSTE Foundation NGO Academy, internal evaluation (2019)
38 Ivanova and Castellano (2012)
Moreover, many networks develop strong brands and credibility, which they then infer onto their members. This means that network membership can provide individuals and organizations with a distinct status and perceived competence within a wider audience. The signaling effect of a network membership is likely to help in increasing trust with potential partners, clients or donors. Such increases in legitimacy and sociopolitical approval can have substantial effects on organizations, and have been shown to improve the organizational survival rate, especially from small and/or new-to-the-place organizations.\(^{39}\)

The process of gaining legitimacy within a network often occurs in more subtle ways. One way to gain legitimacy is through one’s knowledge of and compliance with the “local rules”. For example, Pache and Santos show that commercial entrepreneurs entering the social welfare sector often adapt strategies and practices of that field fairly quickly in order to gain credibility.\(^{40}\)

4.2.3. Social and emotional support

Another proposition of IONs can be the creation of emotional and personal resources. Access to IONs can enable conversations and exchanges that are not only useful professionally but also have a beneficial impact on individual wellbeing. Cornelia Gerdenitsch and her colleagues found that interactions among loosely connected independent professionals (i.e. in co-working spaces) often facilitate social and affective support. Subsequently, social support from professional and private networks is linked to better self-rated health, as research by Maud Lindholm and colleagues revealed. According to their study, nurse managers with higher social support on the job were less likely to take sick leaves. A longitudinal Harvard study found that, in the long run, good relationships and an embracing community keeps people happier and healthier, and can thus even extend longevity.\(^{41}\)

Some of these effects can probably also be credited to an ION’s ability to create a sense of belonging or a sense of community. Whereas this collective experience typically thrives in neighborhoods, faith institutions or community organizations, impact-oriented networks can also be strong drivers of the development of stable and valuable relationships. Accordingly, in the evaluation of a health leadership program’s alumni network, Bruce Hoppe and Claire Reinelt found that the formation of close personal and professional relationships through bonding is a key actor-level outcome.\(^{42}\)

Finally, a related value proposition of IONs is the provision of identity offers for its members. The development of a professional identity is usually understood as a process of individuals undergoing introspection and simultaneously constructing their professional identities in accordance with the social network surrounding them. In this context, so-called “developmental networks” based on mutual trust, 

\(^{39}\) Dart (2004), and Aldrich and Fiol (1994)  
\(^{40}\) Pache and Santos (2013)  
\(^{41}\) Gerdenitsch et al. (2016), Lindholm et al. (2003), Chandler and Kennedy (2015), and Mineo (2017)  
\(^{42}\) Peterson et al. (2008), and Hoppe and Reinelt (2010)
interdependence and reciprocity provide both professional and psychological support. Thereby, they “provide a key means by which people can explore their possible selves and construct their professional identities”. We argue that IONs, especially when formed around mutual experiences and shared goals, can perform the function of such “developmental networks”.

Identity offers can be particularly valuable for actors, for whom attractive positive identity offerings are scarce. For example, support networks for social entrepreneurs such as the Social Impact Award often put a strong emphasis on not only supporting founders, but also helping them to build a cohort or “tribe” of social entrepreneurs. Such identity offerings are often perceived as very positive and attractive, especially when extant identity options (e.g. “do-gooders”, “business entrepreneur”) are negative or raise unachievable expectations and tensions.

Some IONs also use the identity-creating function of networks as part of a wider strategy. In the field of social entrepreneurship, for instance, network organizations and foundations have been described as “paradigm building actors” who, through giving grants or awards, provide nascent social ventures with crucial support while also promoting (certain concepts of) social entrepreneurship as a legitimate profession. This helps in advocating for social entrepreneurs and promoting their legitimacy to a wider audience (see 4.2.3), while also allowing the network to exert discursive power and influence what and how social entrepreneurship is perceived.

4.2.4. Ground for action

Finally, an impact-oriented network offers several opportunities for individuals to actively engage in her or his surroundings that otherwise would not be possible. Under the sub-heading of “institutional entrepreneurs in networks”, Michele Moore and Frances Westley describe ways in which individuals can actively use IONs and some of their abovementioned characteristics. First, individuals seeking to spread their social innovations and increase their impact potential can use IONs’ weak links as strategic partnerships with innovative thought leaders, the media or politicians. Second, mission-driven entrepreneurs can use informal networks and influential hubs in addition to formal structures in order to build strong relationships focused on the overarching mission.

Thereby, actors can amplify their envisaged impact through collective action. Accordingly, Alison Powell and colleagues found that philanthropic funders choosing their beneficiaries collaboratively were able to increase their impact through collectively allocating much higher levels of resources while better synchronizing their philanthropic work. Most notably, funders participating in the collaborations reported that the collectively brokered funding strategy was more consistent with the actual problem.

43 Dobrow and Higgins (2005: 569)
44 Schneider and Meyer (2017), and Wry and York (2017)
45 Nicholls (2010)
46 Moore and Westly (2011)
For instance, “local funders may partner with national funders as a way to attract funding to their community, or individual funders lacking extensive staff may seek to leverage the capacity of others”. In the end, the collaborative could simply give more money to stronger grantees.\(^47\)

The values an impact-oriented network can provide are summarized in Table 1.

<table>
<thead>
<tr>
<th>Value</th>
<th>Short description</th>
<th>Exemplary reference(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OUTCOME-LEVEL BENEFITS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generating innovation</td>
<td>Providing space for the emergence and dissemination of novel ideas</td>
<td>Monitor Institute (2012), Obstfeld (2005), Powell and Grodal (2005)</td>
</tr>
<tr>
<td>Building trust and social capital</td>
<td>Accelerating the development of mutual trust, thereby enabling better collaboration and stable long-term relationships</td>
<td>Philbin and Linnell (2013), Welsh (2017)</td>
</tr>
<tr>
<td>Increasing resilience</td>
<td>Increasing the ability as a community to absorb external shocks</td>
<td>Aldrich (2012), Aldrich and Meyer (2014), Schneider and Meyer (2017)</td>
</tr>
<tr>
<td><strong>ACTOR-LEVEL BENEFITS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to resources and opportunities</td>
<td>Improving opportunity recognition, access to support and investment capital as well as access to new collaborators and business partners</td>
<td>Ozgen and Baron (2007), Vondor, Leitner and Stamatiou (2019)</td>
</tr>
<tr>
<td>Gaining legitimacy</td>
<td>Providing external legitimacy and socio-political approval to network members through signalling</td>
<td>Dart (2004), Baum and Oliver (1991), Ivanova and Castellano (2012)</td>
</tr>
<tr>
<td>Social and emotional support</td>
<td>Creation of emotional and personal benefits such as social support, increased wellbeing, sense of belonging, and identity offers</td>
<td>Gerdenitsch et al. (2016), Hoppe and Reinelt (2010), Dobrow and Higgins (2005)</td>
</tr>
<tr>
<td>Ground for action</td>
<td>Creating opportunities for individuals to actively engage as well as to amplify their envisaged impact</td>
<td>Moore and Westly (2011), Powell et al. (2019)</td>
</tr>
</tbody>
</table>

TABLE 1: THE VALUES OF IMPACT-ORIENTED NETWORKS.

\(^{47}\) Powell et al. (2019)
5. IONs in the context of philanthropy

As shown in many of the above-given examples, IONs are not entirely new to the world of philanthropy. Many of these networks were initiated or prominently supported by philanthropic foundations (e.g. the "Knowledge for Better Philanthropy" strategy started by the William and Flora Hewlett Foundation, ERSTE Foundation NGO Academy, and many others). This development is in line with a more general tendency in the philanthropic world. In recent years, the support of ideas, talent and communities through programs has gained traction, with an increasing number of foundations moving beyond grant giving and setting up operative programs and direct means of support. At the same time, the academics and practitioners have paid limited attention to the applicability of IONs as instrument of philanthropy. Therefore, this section provides a brief cursory overview on the context of philanthropy and some pioneering work with respect to the quality of high-functioning networks.

5.1. THE TOOLKIT OF PHILANTHROPY

Undoubtedly, philanthropic foundations play a vital role in civil society and beyond. Via their various linkages, they are also able to influence and shape the corporate world and the policy arena. Not being governed by the institutional logics of markets and politics (or at least not to the same degree as typical representatives of these sectors), philanthropic institutions have the autonomy and power to use their resources to create value where markets and politics fail. Foundations are therefore generally assumed to fulfill various important functions for society, e.g. by funding research and development, education and other areas of public interest. Thereby, they complement existing offers, spur innovation and promote pluralism. All of which are important functions to address societal challenges and initiate social change in a comprehensive manner.

Traditionally, the main and most visible means of philanthropic foundations to fulfill these functions is the provision of financial resources to other impact-oriented actors. In 2018, the expenditures of philanthropic foundations across the world were estimated to exceed USD 150 billion. While practices vary, in English speaking countries such as the US, UK and Australia, the lions’ share of these resources was allocated to other organizations and individuals almost exclusively by grant giving.

---

48 Anheier (2018)
49 Anheier (2018), and Letts et al. (1997)
50 Anheier and Daly (2006)
51 Johnson (2018)
In spite of these impressive figures, it is important to note the limitations of traditional grant giving. First, in comparison with the public sector, foundations have limited resources at their disposal. In addition to financial resources, this also holds true for staff and political power. This becomes even more apparent with respect to the size and scope of prevalent challenges or those that lie ahead. Moreover, foundations face serious questions in terms of accountability and transparency that frequently challenge their legitimacy, especially in turbulent political times. Second, grant giving has in many cases been criticized as ineffective or even counterproductive, when focusing on covering costs rather than building capacities in organizations.

Against this background, it is important to acknowledge that the capability of philanthropy can and should go beyond the provision of financial capacity to others. For example, as Jodi Sandfort highlights, the toolkit of philanthropy may also include powerful micro-level tactics such the convening of key actors, influencing public opinion, research and network building. Already a cursory review of this argument reveals a high “fit” with activities related to being part of, forming or maintaining an impact-oriented network:

1. **Convening** is considered a tool to foster network building not only with respect to building social capital, but also to focus attention on a particular issue. Providing the necessary infrastructure, e.g. with respect to physical or virtual meeting places, lending a foundation’s brand to provide initial legitimacy to a new network etc., facilitates this approach.

2. By giving this network a voice and by utilizing their influential position in societal relevance, **communicating to influence public opinion** is another powerful tool.

3. In addition, **researching to document social problems** or supporting research is helpful, namely in two ways. On one hand, it generates evidence on a social issue for the network itself, providing direction for impactful action, but also gives orientation for future allies and network members as well as the general public. On the other hand, basing one’s activities on research can strengthen their legitimacy and thereby the legitimacy of the network.

4. Lastly and most obviously in this concept, **building networks to mobilize responses** is at the heart of this approach.

With the possible exception of research, all of these tools are reflecting functions that are core functions of the types of impact-oriented networks discussed above.

---

52 Reich (2019)
53 Letts (1997)
54 Sandfort (2008)
5.2. SOME PRINCIPLES OF HIGH-FUNCTIONING IONS

If we accept the proposition that networks provide a meaningful way to create impact and a fitting tool in the toolkit of philanthropic institutions, the next logical step is to ask how this tool can be used. Given the novelty of networks in the context of impact and philanthropy, prior research provides us very little guidance on what constitutes a high-functioning ION. A helpful exception to this rule is the pioneering work of Jane Wei-Skillern55, which highlights some basic principles of high-functioning collaboration networks.

First, Wei-Skillern and Silver argue that nonprofit leaders and funders should look at the potential of long-term impact of networks when considering an engagement with them, and let them guide their decision by the organizational mission. An investment in networks may not materialize in tangible short-term organizational growth and its outcomes are likely not even attributed to the organization. However, an investment in networks can allow organizations to create impact at a scale that is impossible to reach alone.

Second, partnerships established in the network should be based on trust, not control. Hence, selecting the right partners is of great importance, especially for assuring common goals and aligning values. This resonates with previously stated arguments: while IONs can be very effective in enforcing and multiplying trust, some basics of trust is also required as a prerequisite for the formation of relationships. Once trust is established on the network level, it "lubricates cooperation, and so reduces transaction costs between people. Instead of having to invest in monitoring others, individuals are able to trust them to act as expected"56. Our analyses of collaboration in the Impact Hub network support this argument, showing that higher levels of trust are associated with strong increases in collaboration across a number of categories. Moreover, once established, trust becomes a powerful characteristic on the network-level. Our results showed that even co-workers with lower levels of trust were more likely to collaborate when the average level of trust in her respective network was high57.

Thirdly, Wei-Skillern and Silver (2013) argue that network leaders should promote others rather than themselves. Network approaches are not necessarily rewarding for single actors such as foundations in the short run. This requires some degree of humility, especially when foundations are often keen on getting direct credits for their work. This may sometimes be easier said than done, as the temptation to become primus inter pares can be very high, especially for actors that have initiated a network, hold a central network position and/or hold central brand and infrastructure assets. Related to this, they argue that creating a high-impact network is about building constellations around an issue, not being the center. Translated into network terminology, this implies the creation of decentralized, closed-knit networks rather than ego-networks.

55 Wei-Skillern and Marciano (2008), Wei-Skillern (2010), and Wei-Skillern and Silver (2013)
56 Pretty (2003)
57 Vandor, Leitner and Stamatiou (2019)
Our brief examination of network theory in previous chapters also sheds light on a few other characteristics: First, it suggests the preeminent importance of aligning network structure with its purpose. Networks are geared towards loosely-defined goals – e.g. innovation networks or networks built around shared experiences of diverse impact-oriented actors – are likely to benefit from a higher number of weak ties, structural holes and bridges to other distant hubs. These ties can introduce novel perspectives, diversity and creative friction into the network. Thereby they increase the number of possible “serendipitous discoveries” and creative recombinations in the network and thus the likelihood of innovation and original collaboration. On the other hand, when goals are concrete and action-oriented, closely-knit strong-tie networks are much more likely to get the job done efficiently and fast.

This means that the required ideal network for a certain project might change over time and across its lifecycle, i.e. with a high number of structural holes for generating a breakthrough idea, but a dense, more homogenous network for disseminating it. Therefore, network members and leaders should embrace flexible design elements of networks early on in its development (e.g. by instituting permeable boundaries and low entry barriers) or join/design different networks for these purposes.

Of course, this only poses further questions: How can one facilitate the development of a certain type of network? How much of its characteristics is emergent, how much can be influenced and how? Similarly, we might ask ourselves how networks can be used as an instrument for learning, how distributed governance can function in practice or how one can deal with the potentially exorbitant power asymmetry within networks (e.g. an ION in which the Gates Foundation is involved).

The field of impact-oriented networks is an intriguing new field of study. This working paper has set out to provide an introduction to networks in the field of social impact and philanthropy and to explore this fairly new genus of networks which we labelled “impact-oriented networks”. Of course, given the scarcity of research in this area and the promise of networks to deliver impact, this brief reader can be only the start of the discussion. More thorough and critical empirical research as well as insights from practice are needed to move on. We encourage the reader of this paper to join us in the exploration of these questions.

59 Powell and Grodal (2005)
6. Summary

The goal of this paper was to provide a brief introduction to networks from the perspective of philanthropy and social impact. Against the background of growing popularity of network thinking, we explore and structure the scientific literature and discourse on networks in the field of social impact and philanthropy and provide an overview on basic concepts of network thinking and its use in and value for the impact field.

Based on an extensive literature review of 80+ sources (ranging from peer-reviewed journal articles to best-selling books, as well as from practitioner reports to theoretical treatises) and own thoughts, we provided a number of key insights:

- Networks in the impact field enjoy increasing popularity in theory and practice. They are often understood as an instrument to better address complex global problems such as poverty and climate change in a collective manner.

- Previous research has identified a large number of often quite similar types of networks in the context of social impact. Against this background, we use an umbrella term as working definition – impact-oriented networks (IONs) – and focus on shared key characteristics in prior scholarly work.

- Impact-oriented networks usually form around a shared element, of which we distinguished three: a specific common impact goal or cause (e.g., policy networks, social movements), a shared experience of its actors (e.g., professional networks, alumni networks) or a shared space (e.g., community foundation networks, co-working spaces).

- IONs can strongly differ according to their structure and governance. Based on the level of centralization and the strength of ties, an ION’s structure can take on four basic forms: civic membership organizations, multi-hub networks, tightly knit networks, and networks of networks. Their governance is either shared, outsourced or highly centralized.

- Impact-oriented networks create benefits on different, interconnected levels. On the level of societal outcomes they are associated with: (i) providing collective answers to complex social problems by offering an efficient infrastructure for widespread engagement and by coordinating resources and action; (ii) creating a fertile ground for the emergence and implementation of innovation; (iii) building trust and social capital by promoting more intense
collaboration, a sense of belonging, and norms of reciprocity; and (iv) **strengthening resilience** in a community, i.e. the ability to deal with external stressors or shocks through cooperation.

- Besides the societal outcomes, IONs can create benefits for the individuals and organizations that are its members, by: (i) increasing their **access to resources** such as information, business opportunities, valuable contacts, support and investment; (ii) providing **external legitimacy** to increasing their attributed competence and status; (iii) facilitating **social and emotional support**; and (iv) offering opportunities for individuals to scale their engagement and impact.

- A cursory overview of research on the functions and tools of philanthropic donors suggests that IONs have a **high fit with key recommended activities** for institutions that wish to move beyond traditional grant giving.

- We identify **five principles of high-functioning networks**: a focus on long-term impact, trust building, humility, alignment of network structure with network purpose and a dynamic perspective on network composition.

Network thinking has become widespread over the past decades, with several ground-braking theoretical and empirical insights inspiring action across a range of practical domains. Yet, network thinking has entered the philanthropic and impact field rather recently, leading to **promising but predominantly anecdotal evidence**. Existing research and practical application remains largely superficial and disconnected. Still, we find that impact-oriented networks could prove a versatile and very impactful instrument in the domains of philanthropy and social impact and encourage further scientific and practical inquiry.
References and further reading


Mineo, L. (2017). Good genes are nice, but joy is better. The Harvard Gazette, April 2017. Accessible online: https://news.harvard.edu/gazette/story/2017/04/over-nearly-80-years-harvard-study-has-been-showing-how-to-live-a-healthy-and-happy-life/


Tables and figures

Figure 1: The strength of ties (left) and structural holes (right).........................................................6
Figure 2: Two basic types of a network structure................................................................................7
Figure 3: Structural types of impact-oriented networks. .................................................................12
Table 1: The values of impact-oriented networks.............................................................................20
Table 2: Overview of existing concepts on networks in the impact field. .......................................34
## Appendix

<table>
<thead>
<tr>
<th>Name of the concept</th>
<th>Short description</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communities of practice</td>
<td>“Groups of people informally bound together by shared expertise and passion for a joint enterprise. [...] People in communities of practice share their experiences and knowledge in free-flowing, creative ways that foster new approaches to problems.”</td>
<td>Etienne C. Wenger and William M. Snyder (2000)</td>
</tr>
<tr>
<td>Collective impact</td>
<td>“The commitment of a group of important actors from different sectors to a common agenda for solving specific social problem. [...] Collective impact initiatives involve a centralized infrastructure, a dedicated staff, and a structured process that leads to a common agenda, shared measurement, continuous communication, and mutually reinforcing activities among all participants.”</td>
<td>John Kania and Mark Kramer (2011)</td>
</tr>
<tr>
<td>Generative social-impact networks</td>
<td>“Networks of individuals or organizations that aim to solve a difficult problem in the society by working together, adapting over time, and generating a sustained flow of activities and impacts.”</td>
<td>Peter Plastrik, Madeleine Taylor, and John Cleveland (2014)</td>
</tr>
<tr>
<td>Global action networks</td>
<td>“Global, multi-stakeholder, inter-organizational change networks [...] including people in government and businesses and NGOs of all sizes [...] developing an audacious and complex strategy to address the challenges and opportunities presented by globalization.”</td>
<td>Steve Waddell (2011)</td>
</tr>
<tr>
<td>Global solution networks</td>
<td>“Enabled by the digital revolution and required by the challenges facing traditional global institutions, these networks are now proliferating across the planet and increasingly having an important impact in solving global problems and enabling global cooperation and governance.”</td>
<td>Don Tapscott (2013)</td>
</tr>
<tr>
<td>Learning networks</td>
<td>“By linking landscape-scale, multi-stakeholder, collaborative processes through regional communities of practice, the FLN enables participants to achieve coherent goals throughout the network while fostering the expertise necessary to develop ecological restoration plans.”</td>
<td>Bruce Evan Goldstein and William Hale Butler (2010)</td>
</tr>
</tbody>
</table>

---

60 Please note: this is just an overview of similar concepts without any claim to completeness. The detailed references are shown in the Reference & further reading section.
The networked nonprofit

| The networked nonprofit | “Networked nonprofit leaders think of their organizations as nodes within a broad constellation that revolves around shared missions and values. [...] This requires them to focus on their mission, not their organizations; on trust, not control; and on being a node, not a hub.” | Jane Wei-Skillern and Sonia Marciano (2008) |

TABLE 2: OVERVIEW OF EXISTING CONCEPTS ON NETWORKS IN THE IMPACT FIELD.
Contact

Social Entrepreneurship Center
wu
Wirtschaftsuniversität Wien
Vienna University of Economics and Business

Building D2, Entrance E, 3rd floor
Welthandelsplatz 1, 1020 Vienna

Tel: +43 1 313 36 / 4594
Fax: +43 1 313 36 / 5824

Peter.Vandor@wu.ac.at
www.wu.ac.at/sec