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Impact-oriented networks in the context of philanthropy: an evaluation of the Bosch Alumni Network

Final Report

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Executive Summary

This report presents the findings of an exploration into the operating principles, benefits and social impact of the Bosch Alumni Network (BAN), an impact-oriented network that brings together more than 6,800 current fellows, grantees, staff and partners of the Robert Bosch Stiftung (RBSG) from all over the world. It builds on the results of a 12-month research project (09/2019-08/2020), comprising of the review of scientific literature (80+ sources) and company documents, 13 background interviews, 22 interviews with members, a participatory observation and an online survey of 634 members.

Our findings provide evidence for a circular model of impact creation in the network, comprising of five elements:

- The three key actors, Robert Bosch Stiftung, iac Berlin and the members, each provide unique contributions to the network. While the foundation contributes its relationships with a pre-selected pool of 10,000+ impact-oriented professionals, its reputation and resources, iac Berlin has taken care of designing, curating and constantly improving the network infrastructure. What members bring to the table is their diverse competences, backgrounds and shared commitment to impact. Together, we estimate that **members voluntarily invest 5,920 hours per month** to the network (which equates to the work of 37 full-time employees). Their work takes the form of supporting other members, offering events and trainings, and being active as regional coordinators.
- Together, all of these working-hours result in the creation of a diverse range of **online and offline interactions** that many members engage in with high frequency. These interactions help to create the structure of **relationships and exchanges** that make up the network. An average member has an individual network of 40 other members, 13 of which they are in regular contact with. These networks are diverse and international and go beyond the scope of typical alumni work, with 75% of its members being in touch with one or more other members who are not alumni of the same Robert Bosch Stiftung program, and 66% having made new contacts through the BAN.
- Based on these interactions, members experience direct benefits. They **build knowledge and skills**, access **resources and opportunities**, gain **legitimacy** and receive **social and emotional support**.
- Interactions and benefits also translate into social impact. 54% of members received support in building a new project, venture or idea, 44% started a new project or organization together

with another member and 29% co-developed an innovation. In total, this led to the creation of **over 3,300 new projects** in the network. The network is also associated with increased **resilience** for individuals who work in difficult economic, social and political environments as well as with an increased ability to act as a collective. Moreover, the increased capacity of members helps improve their impact-oriented professional work. Against this background, **they attribute 24.9% of their success and impact to the Bosch Alumni Network.**

- The beneficial effects of the network create **positive reinforcement effects**, leading to stronger willingness among members to engage in the network and contribute ideas, time and content. Similarly, iac Berlin and the Robert Bosch Stiftung experience positive reinforcement through learning, access to ideas, training and collaboration opportunities, and the fulfillment of their social mission.

Against this background, it can be argued that the Bosch **Alumni network indeed does fulfill the goals** of iac Berlin and Robert Bosch Stiftung to (a) support and encourage individuals (e.g., through trainings, mutual learning), (b) provide capacity building in the sectors and fields the members are working in and (c) address societal challenges.

Similarly, our results suggest that the BAN functions as an “**active memory**” for members: about 70% of former members are registered on the platform, 91% of RBSG employees on the BAN have already found valuable information on it. The network was also found to serve as an “**idea laboratory**” for all three key actors. Having created an estimated 2,000 innovations since its inception, 79% of the surveyed members express active interest in collaborating with iac Berlin and Robert Bosch Stiftung.

Results also provide insights into the **factors that make a network effective**: they confirm the hypothesized positive effects of feelings of belonging and trust, transactional values, as well as the chance to experience positive transformation, such as learning and creating impact. In addition, findings identify a range of factors that also contribute to a better functioning of the model, such as a flexible mindset, young age, network diversity, different BAN formats, onboarding or distributed governance.

Members expressed a lot of **praise**, but also identified **areas for potential improvement**, including new member onboarding, transparency in communication and the wish for more inclusive governance of the network. Some members also articulated a need to better overcome geographical and cultural barriers in the network.

Our analysis suggests that the network would **benefit from further growth in scope and depth** and holds potential to foster even more collaboration and innovation. Opening up the network to more program alumni as well as non-alumni represents an opportunity in this respect. At the same time, further efforts are needed to improve member onboarding and to overcome geographic and cultural barriers to avoid the **risk of network fragmentation.**

1. Introduction

This report presents the findings of an exploration into the operating principles, benefits and social impact of the Bosch Alumni Network (BAN), an *impact-oriented network* that brings together more than 6,800 former and current fellows, grantees, staff and partners of the Robert Bosch Stiftung (RBSG) from all over the world. We begin by laying the conceptual foundations for research on impact-oriented networks in the context of philanthropy (Section 1.1) before introducing the BAN in more detail (Section 1.2). Finally, the structure and method of the evaluation project are outlined in Section 1.3.

1.1. IMPACT-ORIENTED NETWORKS IN THE CONTEXT OF PHILANTHROPY

Thinking and organizing in networks has become increasingly popular during the past decades. As an organizational approach, it complements the two dominant mechanisms – market exchanges and hierarchies – by favoring lateral, often informal relationships and interactions between equal actors. Within networks, people and groups are bound together by norms of reciprocity and trust, rather than by transactional premises or formalized power¹. Thus, network thinking puts an “emphasis on the relationships between actors” and the structural patterns of connections among a certain number of actors rather than focusing on the agency of individual actors².

Network thinking is also gaining ground in the domains of **philanthropy and social impact**, as it offers two conceptual opportunities. First, actors in these fields often aim to tackle “grand challenges”: sticky, global problems, such as inequality and climate change that are characterized by high complexity and the involvement of a multitude of stakeholders with diverse interests³. Unlike isolated interventions and individual actors, networks hold the promise of providing a plurality of answers that match the complexity of these challenges by enabling collective action across the conventional boundaries between disciplines, sectors and institutions⁴. Second, resources, power and information in these domains are typically distributed unequally, while networks are able to improve the flow of information and provide options to distribute governance. This has been associated with increased effectiveness of resource allocation, learning and, ultimately, social impact⁵.

¹ Castells (1996), Powell (1990)

² Kilduff and Brass (2010), and Van Dijk (2012)

³ George et al. (2016, p.1881)

⁴ Montgomery et al. (2012)

⁵ Buteau et al. (2018), Powell et al. (2019)

And indeed, network thinking has been growing in popularity in philanthropy and impact-oriented fields, as witnessed by **numerous recent initiatives**. For example, the BMW Foundation co-created and funded the Responsible Leaders Network, which unites over 1,700 executives and leaders in more than 100 countries and promotes the implementation of the United Nations Sustainable Development Goals⁶. Similarly, the global Impact Hub network has evolved into a “network of networks” in over 100 cities within just a few years, fostering collaboration between impact entrepreneurs from different fields and geographic regions⁷. Another example is provided by the World Health Organization’s Global Outbreak Alert and Response Network. It consists of over 250 institutions and sub-networks and is dedicated to the aim of rapidly identifying and responding to public health emergencies of international importance, such as the COVID-19 pandemic⁸.

These new forms of organizations – **impact-oriented networks** – share a number of characteristics. First, they comprise of actors who seek to address some sort of social or ecological problem. Second, impact-oriented networks are not bound to a superordinate organization, but operate largely autonomously. At the same time, the loose network structure provides a level of ‘embeddedness’ and cohesion. Third, the (individual or organizational) network actors are diverse with respect to the fields, sectors, regions and societal spheres in which they operate. Finally, the network is formed around at least one shared element: a specific purpose, a (past or present) experience or a geographical space⁹.

A particularly interesting type of impact-oriented networks are **alumni networks**. Research into more general types of alumni organizations has shown that they are associated with a number of beneficial effects for their members, such as inducing mutual support and collaboration, resource sharing and exchange of information¹⁰. However, much of the existing research on the benefits of alumni networks has been limited to commercial contexts and universities. We still know little about the impact of alumni networks in the domains of impact-oriented work and philanthropic programs. Yet the professional context of impact-driven work is often characterized by higher levels of complexity, higher fragmentation and more diverse challenges¹¹. Experiences, information and resources thus might not be as convertible as they are in networks with a narrow focus in geography, industry and career intentions. Do alumni networks deliver similar value to their members under such circumstances as their counterparts in education and commerce? Do these benefits translate into social impact in similar ways as it creates rather self-serving benefits for the alumni?

⁶ <https://bmw-foundation.org/de/wie/bmw-foundation-responsible-leaders-network/>

⁷ <https://impacthub.net/>

⁸ <https://extranet.who.int/goarn/>

⁹ Vandor et al. (2019)

¹⁰ Fuchs et al. (2017), Hwang and Kim (2009)

¹¹ Austin et al. (2006)

Shedding light on these questions can contribute to our understanding of whether network-based approaches can be **a useful instrument for philanthropic institutions**. In recent years the philanthropic world has seen an upturn in the amount of programs that support talent and communities with an increasing number of foundations moving beyond grant-giving. Increasingly, they are also setting up operative programs and direct means of support¹². While the effectiveness of singular programs is increasingly measured and understood, little is known whether networks are an effective instrument in a philanthropist's toolbox; they are by design less selective and more diverse, less focused and more reliant on the emergence of serendipitous relationships than grants and programs.

This study is set out to explore these questions in the framework of the **Bosch Alumni Network**. As one of the largest impact-oriented networks in Europe, it brings together more than 6,800 former and current Robert Bosch fellows, grantees, staff as well as partners. It is implemented as a joint project of the International Alumni Center and the Robert Bosch Stiftung, with the aim of building networks between "members with common interests but different backgrounds, so that cross-sectoral exchange and international collaborations can be fostered"¹³. Before detailing our research aims and methods for the present evaluation, we provide an overview on the history, mission, structure and membership base of our object of investigation, the Bosch Alumni Network.

1.2. THE BOSCH ALUMNI NETWORK (BAN)

1.2.1. Context: The road leading up to the foundation of the Bosch Alumni Network

Having been established in 1964, the Robert Bosch Stiftung aims to advance the philanthropic and social endeavors of company founder Robert Bosch. Since its inception, the foundation has invested over €1.8 billion in charitable work in the areas of health, science and research, education, active citizenship, as well as international understanding and cooperation, making it one of the largest and most active philanthropic institutions in Europe.

The work of the foundation comprises of a large range of activities; from strategic partnerships and directed funding to the design and implementation of events, exchange platforms and programs¹⁴. Throughout the 1980s and 1990s, certain programs and program cohorts of the Robert Bosch Stiftung formed single alumni groups in order to keep in touch with other participants. While some of them remained small and on an informal level, others gained a momentum and set up an association¹⁵.

¹² Anheier (2018), Easterling and McDuffee (2019), Ferris (2016)

¹³ BAN Purpose, Vision & Mission (2017)

¹⁴ Reaves (2010); Robert Bosch Stiftung (2020a), Robert Bosch Stiftung (2020b)

¹⁵ This and the following paragraphs are based on the review of 20+ internal and external documents, as well as nine background talks with executives and staff of Robert Bosch Stiftung and the International Alumni Center (see Section 1.3).



The history of an overarching Bosch Alumni Network dates back to **November 2015**, when the executive board of the Robert Bosch Stiftung decided to increase its alumni work. This was based on the assumption that former fellows and grantees could also contribute to realize the foundation's objectives after their participation in a program had finished.

Subsequently, in **early 2016**, the board of the Robert Bosch Stiftung approached Darius Polok, a former fellow and at the time the managing director of MitOst, to create a concept for concerted alumni work. It was aimed to serve three fundamental purposes: (a) being able to better disseminate tenders and announcements of the Robert Bosch Stiftung; (b) keeping contact with former program participants, grantees, partners, and employees; (c) and as a result, having an instrument for strengthening the long-term work and impact of the foundation.

By **autumn of 2016** a common understanding of the fundamental pillars of a renewed alumni work had emerged: (a) after taking part in a Robert Bosch Stiftung program, fellows would be offered a way to stay connected – both with each other and with the Robert Bosch Stiftung; (b) the alumni would not only be connected with each other within one program, but across all programs – thereby furthering partnerships among “change makers”; (c) an alumni center outside of the foundation should be established in order to overcome the traditional sponsor-grantee relationship.

On **January 1, 2017**, the International Alumni Center Berlin (iac Berlin) was founded as a legal entity (gGmbH) to take on the coordination and administrative support.

On **February 21, 2017**, the first Alumni Council with former and current fellows was held, first thematic clusters were kicked off, and further plans and events presented.

On **April 1, 2017**, the online platform boschalumni.net was launched. At the same time, the physical facilities of the International Alumni Center as a think- and do-tank in Berlin were opened, complementing the virtual offering with a tangible, physical space for events and the iac Berlin team.

The **initial setup** for the Bosch Alumni Network was thus characterized by a largely **fragmented membership**. While a number of formal and informal alumni groups had formed around cohorts of individual programs and geographical regions, there was no connection between the different foundation programs, geographies and often not even between cohorts of the same program. All of this seemed to provide a substantial opportunity to create value through connecting and engaging with members across this diverse spectrum.

„Eine ganz zentrale Herausforderung ist das viele Leute wussten, ok ich bin Teil des Bosch Alumni Kosmos, aber es gab für die Einzelperson überhaupt keinen Weg rauszufinden wer jetzt eigentlich noch Teil dieses Kosmos ist. Also man musste quasi in der Stiftung anrufen und sagen, ich suche jemanden der auch zu Gesundheit arbeitet und wenn man Glück hatte war da jemand der einem helfen konnte.“ (Background interview 2)

„Das Ziel war dann mit einem Alumni-Center Querverbindungen zu schaffen [...], dass da plötzlich Verbindungen zustande kommen, die es vorher nicht gab. Dort wo praktisch immer nur die bilaterale Verbindung Alumnus – Bosch-Stiftung war [ist] jetzt potenziell ja jede Querverbindung zwischen jedem Alumnus in diesem Netzwerk möglich. [... Es ist] ein gigantisches wirklich den Globus umspannenden Netz von Personen, die aufgrund ihres Alumnus-Status den Kontakt zu anderen bekommen.“ (Background interview 4)

At the same time, the founders of the network shared the belief that establishing it **outside of the organizational frame of the foundation** would be an advantage. Building up the network embedded in an independent entity was expected to make it easier to also invite other foundations and impact-oriented networks to collaborate with iac Berlin and take part in the network. Moreover, it aimed to allow a redefining of the relationship between members, which had previously been characterized by power asymmetry. In the words of two of the decision-makers at that time,

„Andere verhaften sehr klassisch in dem Bezug Stiftung, also „Geber – Empfänger“, „Stiftung – Alumnus“, in so einem patriarchalischen System. Wir haben von vornherein gesagt, das geht nur, wenn wir auf Augenhöhe sind. Und um auf diese Augenhöhe zu kommen, müssen wir natürlich auch Verantwortung abgeben.“ (Background interview 6)

„Wir wollten eine andere Beziehung zu den Alumni herstellen, die Beziehung, die die Stiftung direkt hat, die Stiftungsmitarbeiter haben die Beziehung zwischen Förderer und Geförderten. wir wollten [...] eine neue Art von Beziehung gestalten. Das kann nur eine Organisation machen, die einerseits sehr eng mit der Robert Bosch Stiftung identifiziert wird, [...] aber gleichzeitig raus ist, anders sprechen kann, eine andere Kultur hat, anders auftreten kann“. (Background interview 3)

Related to this, several decision makers articulated the hope that iac Berlin could create additional impact by introducing network thinking and network competencies to the philanthropic sector at large. Building the Bosch Alumni network and learning from this experience is thereby seen as a chance to gain and disseminate **knowledge about networks in philanthropic institutions** in an area of philanthropy that was seen as uncharted territory:

“ [...] wir waren uns aber sehr schnell darüber einig, dass die Robert Bosch Stiftung, [...] die Chance hat, das Thema Netzwerke in der Philanthropie zu besetzen, im Grunde genommen ein Impulsgeber, vielleicht auch ein Service Provider, ein Unterstützer für das gesamte Feld werden kann“. (Background interview 3)

A key characteristic of the context in which the Bosch Alumni Network was started is **novelty**. It is worth mentioning that to the best of the authors' and our interview partners' knowledge, networks with comparable ambitions, diversity and scale did not exist in the philanthropic context at the time the network was founded. This required its founders to develop many elements from scratch and work

intuitively. As such, the founders of the Bosch Alumni Network approached the building of the network with the same entrepreneurial openness that they sought to grant their network members:

"Wir wollen Ermöglicher sein. Und das wäre für mich wirklich das Grundthema. Wir machen Dinge möglich, von denen wir noch nicht wissen, welches sie sind." (Background interview 4)

1.2.2. Strategy and key assumptions

The Bosch Alumni Network is implemented as **a joint project** of Robert Bosch Stiftung – bringing in its legacy, member contacts, and financial resources – and International Alumni Center (iac Berlin) – inducing new approaches on network development and collaboration. The third contributor to the project are the members themselves. They "bring in a breadth and diversity of skills, expertise and experiences from across the globe, which enables us to tackle complex challenges and take action together"¹⁶. By bridging diverse perspectives, sharing knowledge and taking action together, BAN's ultimate mission is to "contribute to an open, just and sustainable world"¹⁷.

The Bosch Alumni Network aims to build connections between "members with common interests but different backgrounds, so that cross-sectoral exchange and international collaborations can be fostered"¹⁸. Impact-oriented alumni networks of this sort have **goals spanning at least three dimensions**: (a) support and encouragement of individuals (e.g., through trainings, mutual learning), (b) capacity building in the sectors and fields the members are working in, and (c) addressing societal challenges¹⁹. On the part of the Robert Bosch Stiftung, the BAN additionally implies the establishment of both an "active memory" – former fellows, partners and program foci remain present – as well as an "idea laboratory" – alumni become partners and input givers.

"Wenn ich jetzt irgendwo hinfahre von der Stiftung aus, dann kann ich recherchieren: Gibt es da in der Region in der Stadt vielleicht sogar Alumni mit denen man vorab schon Kontakt aufnehmen kann und die eine bestimmte Unterstützung geben können?" (Background interview 4)

"Es ist natürlich auch die Vorstellung, dass die Stiftung selber dadurch wiederum nochmal Verstärkung und Inspiration bekommt". (Background interview 4)

To reach these multidimensional goals, a set of **strategic goals and assumptions** guide the operational alumni work. One crucial goal of the Bosch Alumni Network is the facilitation of serendipitous exchanges and connections (unintended positive consequences) and the induction of innovation. The underlying assumption is that in a complex system, collaboration opportunities are not always anticipated by actors, but often reveal themselves by means of undirected, unintentional interaction or by chance encounters.

¹⁶ BAN Purpose, Vision & Mission (2017)

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Background interview 1

" [Es ist] eine geteilte Vorstellung, dass es ganz viele ungehobene Schätze gibt, in der Zusammenarbeit. Aber die kann man eben nur heben, über deren Existenz kann man nur erfahren, wenn man sich trifft und sich austauscht". (Background interview 1)

Means to achieve these ends consist of enabling encounters and relationships (across barriers) as well as productive group processes and collaborations, building and strengthening trust and reducing power asymmetries, creating network nodes (see Section 1.2.3) and mechanisms of self-observation. These can all be filed under the goal of providing a "space of possibilities" in which the chance of serendipitous encounters is increased.

Furthermore, it is argued that a successful network serves three levels simultaneously, also referred to as **three types of "network glue"**. First, it is a "network of belonging", connected by a shared identity of the members and built around the positive relationship with Robert Bosch Stiftung, iac Berlin team and other members. This sense of belonging is hypothesized to go along with the emergence of pro-social norms, trust and gratefulness. Second, the network needs a clear transactional component, offering opportunities to directly benefit in terms of learning, career opportunities and professional growth. Finally, it is argued that a successful network needs to be "transformative", in the sense of a shared set of mission-orientation among members and the creation of opportunities to create positive social change.

Notably, a key assumption of all involved stakeholders seems to be that the direct support, exchange and serendipitous encounters in the network would implicitly lead to **positive social impact**. By empowering individuals and organizations who themselves aim to generate or support such impact-making, the network initiators expect to create additional impact.

"Es ist der Versuch, diese Menschen, die potenzielle Veränderer sind oder vielleicht auch in ihrem Feld Veränderer sind, besser zusammenzubringen und dadurch ihre Wirksamkeit zu verstärken". (Background interview 4)

1.2.3. Network tools and formats

A number of different **tools** and formats are applied to reach these goals, ranging from "closing triads" of formerly unknown members and triggering collaboration (on small self-organized projects), to cultivating the network periphery (by inviting new members and allowing different degrees of engagement) and strengthening a culture of knowledge and experience sharing. A necessary precondition is to make individual members, together with their work and interests, visible to others and to enable a global connectivity among them. This integral function is taken on by the online platform **boschalumni.net**, which is aimed at promoting ongoing communication with low transaction costs between members amongst themselves as well as with iac Berlin and the Robert Bosch Stiftung.

Ongoing health checks relate to issues of awareness of the network's goals and activities, the existence and role of influencers and connectors, the resilience of the network as a whole as well as a rather

equal integration of the members. The formats at use for the alumni work at the BAN can be grouped as follows (see also Table 1).

Decentral architecture	Encouragement to network and interact	Direct knowledge transfer
Across the network: the online platform boschalumni.net		
<ul style="list-style-type: none"> • Thematic clusters to connect along common topics (networks of transformation) • Regional sub groups to connect along regional commonalities 	<ul style="list-style-type: none"> • Vertical network formats (e.g. call for ideas within clusters and groups) • Horizontal network formats (e.g. Learning Exchange Grants) • Network-emergent pop-up formats 	<ul style="list-style-type: none"> • Workshops • Discussions (Monday on the Couch) • Webinars

TABLE 1: NETWORK TOOLS AND FORMATS WITHIN THE BOSCH ALUMNI NETWORK.

The **decentral architecture** of the Bosch Alumni Network encompasses the network as a whole (allowing for emerging activities from members and operators); the eleven thematic clusters²⁰ moderated by the BAN staff as well as interested members; the 38 regional sub groups²¹ with their 52 honorary regional coordinators. Hence, in the terminology of social network analysis, every architectonic level is equipped with a personified node responsible for moderation and coordination.

The **encouragement to network and interact** takes on three forms: regular calls for ideas invite members within existing clusters and groups (vertical structure) to bring in their expertise; network formats (e.g. Learning Exchange Grants) connect members across the network (horizontal structure); pop-up events and the likes provide for exchange, collaboration and creative input from members. They create space for content emerging from the network. Some of these formats are directly implemented or in some form co-facilitated by iac Berlin or partners. In many cases, however, they are simply invitations or frameworks for members to generate their own activities for the network.

In addition to encouraging and enabling such connections through creating opportunities and platforms, the iac Berlin staff also occasionally uses its own extensive knowledge of the network to match members:

²⁰ For the moment, the Bosch Alumni Network contains the following thematic clusters: Culture, Sustainable Living Spaces, Peace, Europe, Civil Society, Media, Governance, Social Innovation, Education, Health, and Science.

²¹ The regional groups within the BAN differ in their size (from 20 to 500+ members) and range from local groups (e.g. Bavaria) to country groups (e.g., China) and to supranational groups (e.g. West Africa).

"Gestern hat jemand eine Ausschreibung geschickt: ‚ich suche für unsere Grundschule im Dorf Grundschulen in Schweden‘. Ich habe die Leute aus den Ländern, die ich kenne, von denen ich wusste, getaggt und heute kam es dazu, dass sich eine Frau aus Malmö meldet: ‚ich kenne jemand in der Grundschule in der Gegend, ich bringe euch mal zusammen‘. Das ist [...] das ist klassisches Schließen von Dreiecken".
(Background interview 3)

Lastly, the Bosch Alumni Network operating team offers workshops, discussions and other ways of **direct knowledge transfer**. They fulfill diverse functions for the network and allow exchange and collaboration, while also including more traditional forms of teaching and directed learning.

A key element of introducing these new programs was the onboarding of pre-existing alumni activities, often in a **participatory approach**:

"Wir haben sehr oft versucht, bei den Kolleginnen, die für die Programme zuständig waren, nicht einfach 20 Minuten Info über das Bosch Alumni Netzwerk zu bekommen, sondern 2 oder 3 Stunden Slots für einen Workshop. [Hier konnten Fragen diskutiert werden wie] Wie wollt ihr eigentlich nach dem Programm weiter zusammenbleiben? Was habt ihr für Ideen für Kollaborationen? Wie können wir die Plattform sein, die dann die Realisierung dieser Ideen ermöglicht?" (Background interview 3)

Consistent with the goal to involve members in a horizontal democratic organization, emphasis is laid on including members in the governance. Amongst others, members are involved in decision making (e.g. as members of juries), resource allocation (e.g. by deciding on the provision of small grants), and strategy development (most recently, in form of the Alumni Council). A participatory approach is also often implemented on the micro-level by providing an open platform for member-generated content, funding, learning and exchange opportunities.

1.2.4. The members and their activities

The Bosch Alumni Network brings together former and current Robert Bosch fellows, grantees, staff and partners. Participants of programs hosted by the Robert Bosch Stiftung were (and are) invited to join the platform after the program was finished. The programs – and accordingly the main share of the BAN **membership base** – can be assigned to five **thematic areas**: education (e.g. early childhood education, United World College), society (e.g. youth and democracy, migration), health (e.g. public health, dementia), international understanding and cooperation (international civil society, Europe) and science (urbanism, women in science). In addition to the (former) program participants, those becoming members of the Bosch Alumni Network include project managers of (former) partner organizations, (former) Robert Bosch Stiftung staff, and other individuals with attachment to the foundation (e.g. event participants, peers of existing members working in relevant fields).

Bosch Alumni Network members can create and access different **activities** both online and offline. Online activities on boschalumni.net reach from a simple visit (login) and different kinds of postings to tagging and contacting other members. Physical activities span from learning and networking formats (e.g. Practitioners Lab, Monday on the Couch, Study Trip), collaborative activities (e.g. Learning

Exchange Grant) to events with strategic involvement (e.g. BoschAlumniForum, Cluster Kick-off, Conference). Table 2 provides a complete overview of the potential activities and formats.

Activities on bosch alumni.net (reading, reacting, creating, tagging)	Offline activities (Participating in, contributing to, co-creating)
Login to bosch alumni.net Messaging with other members Posting a job offer Posting events and/or projects Posting other professional content Posting travel activities Promoting BAN formats Reacting to posts and discussions Reading the weekly digest Tagging other BAN members Updating the personal profile Using the people search function Watching a webinar	Bosch Alumni Network Strategy Meeting BoschAlumniForum Cluster Kick-Off Conference Learning Exchange Grant Monday on the Couch Practitioners Lab Regional / thematic alumni group meeting Regional Activity Grant Study Trip Training Workshop

TABLE 2: ACTIVITIES OF THE BAN MEMBERS (ONLINE AND OFFLINE).

Of course, not all of these activities and structures were introduced at once. Instead, the development of the BAN – just as well as its main host iac Berlin – underwent a **dynamic build-up phase between 2017 and 2020**. Many activities were started with an initial focus on members active in the area of journalism and activities in other thematic clusters were built up in a continuous learning process.

"Wir wussten auch nicht wie stabil die Infrastruktur ist, deshalb haben wir das Programm schrittweise gemacht". (Background interview 7)

Over time, efforts as well as invested resources increased. The team of iac Berlin grew from 1.6 full-time equivalents (2017) to 4.2 FTE (31.7.2020), increasing the capacity to accommodate **growing network complexity, diversity and a fast-growing number of members**. As of July 31, 2020, the BAN platform bosch alumni.net showed 6,798 registered members. This equates to the three-fold of the 2,200 registered members by the end of 2017. After the year 2018 saw an increase of more than 200%, the membership base is still on a constant rise, with estimations of 8,000 members by the end of 2021. An approximate 75% of these members are estimated to be active, meaning that they have used the online platform after registration and within the last 12 months. This equates to the entry of approximately 100 new members each month. Accordingly, the diversity of the members' countries of origin and foundational program backgrounds is on a constant rise. By the end of 2017, the Bosch Alumni Network hosted members from 70 different countries across the globe. This number has risen to 132 by mid-2020. Similarly, the diversity of different program histories has increased by more than 500% from 40 to 221 (see Figure 1).

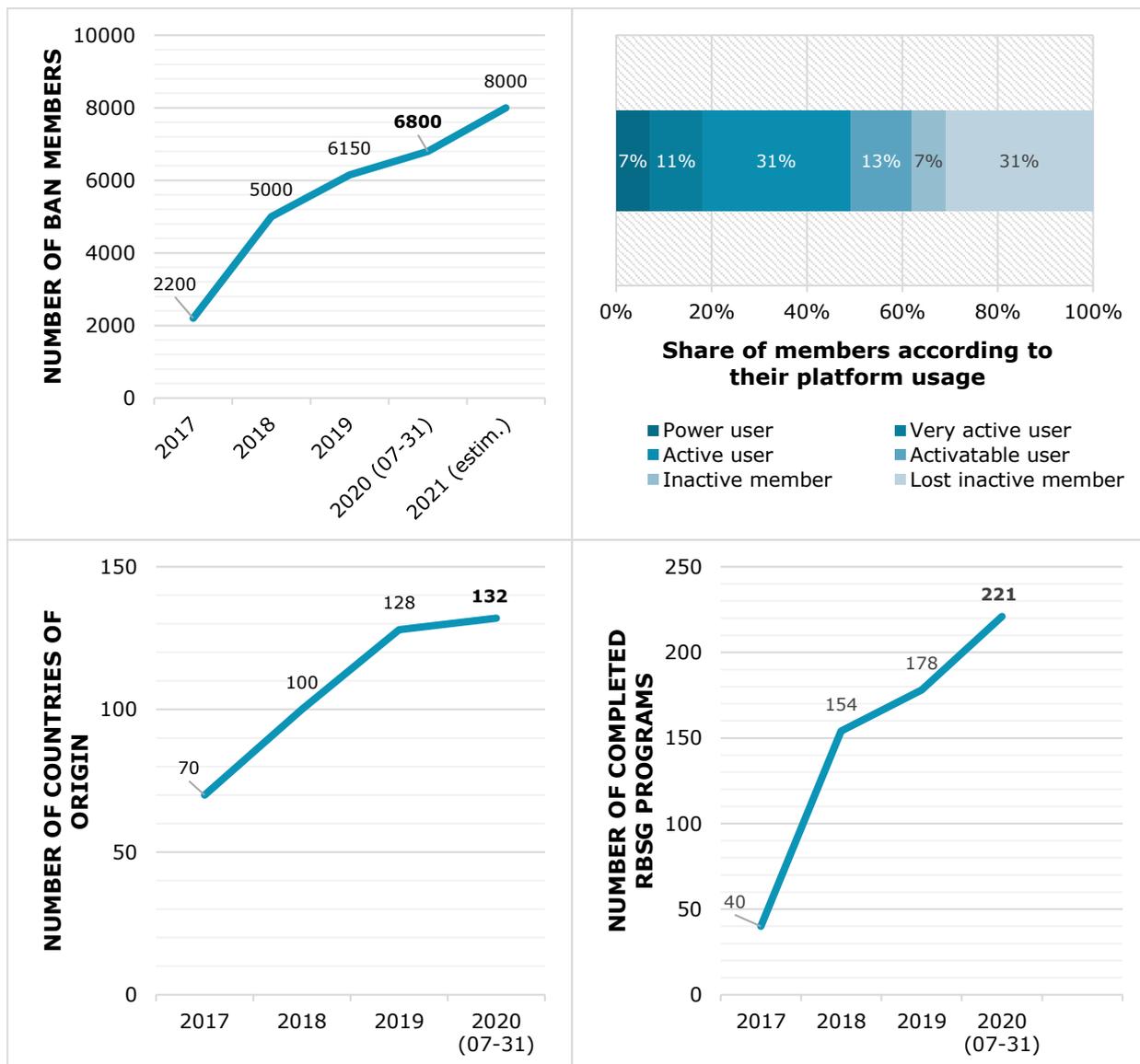


FIGURE 1: DEVELOPMENT, GROUPING AND DIVERSITY OF THE BAN MEMBERSHIP.

Along with the investments of iac Berlin, the **contributions of the members** have also increased significantly over time. In accordance with the growing membership base, the number of activities of the members has been on a constant rise. For instance, postings on boschalumni.net sextupled from 124 by the end of 2017 to 792 by July 31, 2020. Simultaneously, offline events offered by the Bosch Alumni Network increased from 23 in 2017 to 73 in 2019.

Notably, not only the usage and offers increased, but the members' willingness to contribute their own ideas and resources to the platform. Whereas in the early days of the BAN, the coordinating team had set up most of the activity options, this relationship has gradually reversed over time. While in 2017, 45% of the events were initiated by members, this share then rose to 75% by 2019 (cf. Figure 2). The share of opportunities posted on the platform by members similarly increased from 63% in 2017

to 84% in 2019. The ratio decreased again to 65% (events) and 81% (opportunities) by July 2020, likely due to the difficulties of hosting events in the COVID-19 environment and the strong engagement of iac Berlin in this period. Nonetheless, it is notable that the **vast majority of offers and opportunities** available in the Bosch Alumni network have consistently been **created by members who are not affiliated with iac Berlin or Robert Bosch Stiftung**.

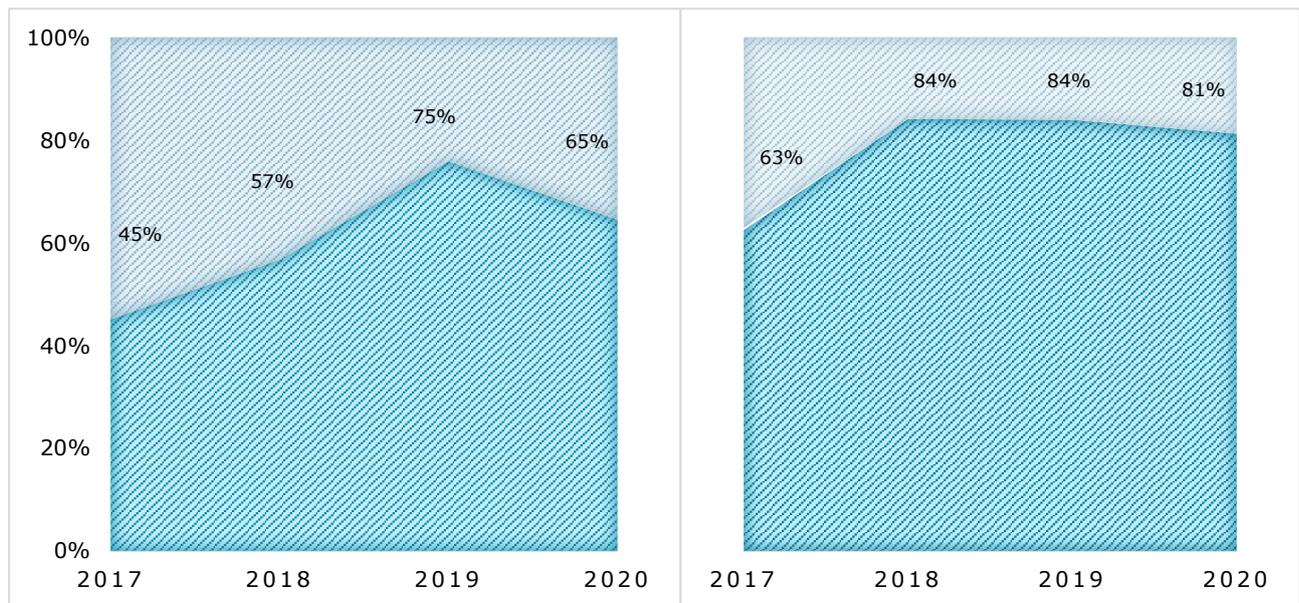


FIGURE 2: EVENTS AND OPPORTUNITIES CREATED BY BAN MEMBERS (BELOW) AS OPPOSED TO THE TEAM.

This trend is also mirrored in the level of engagement of members as regional coordinators. This new role and responsibility was introduced in mid-2018 as means to increase self-organizing capacities also in less dense and more distant parts of the network. By mid-2020, the number of these voluntary team members had grown to 80.

1.3. THE EVALUATION PROJECT

1.3.1. Research questions

As outlined in Section 1.1., it is the goal of this project to shed light on the **potential of alumni networks in** the context of **philanthropy and social impact**. An investigation into the Bosch Alumni network provides an ideal environment to learn about the potential benefits and impact delivered by this kind of instrument. We do so by exploring the ways in which the network members interact and gain direct benefits, as well as how (and whether) this is translated into social impact.

The analysis thereby aims to create **conceptual as well as practical insights** for iac Berlin and Robert Bosch Stiftung by developing an evidence-based impact model as well as a first evaluation of the concrete benefits and impact to its members and society. Moreover, the analysis aims to identify

patterns and drivers of benefits and impact, thereby allowing to test assumptions (see Section 1.2.2) and explore new potential ways to improve the network's functioning. Based on the research aims summarized Section 1.1, the evaluation presented in this report seeks to answer the following questions with regard to the Bosch Alumni Network:

- 1) What **benefits** do members derive from being in the Bosch Alumni Network, e.g. with respect to access to information and resources, learning, and collaboration?
- 2) How do these benefits affect the members' **performance and social impact**?
- 3) What **factors contribute to making the network effective**? What is the effect of particular interventions? How do individual-level and structural factors influence the networks effectiveness? Does collaboration emerge along planned trajectories or does it stem from unintended, serendipitous encounters?

1.3.2. Method

To explore these research questions, we followed a three-stage methodological approach, comprising of background research and talks, qualitative interviews and a quantitative survey.

Stage 1: Background research

In order to get an understanding of the historical development, goals and basic functioning of the Bosch Alumni Network as well as to anchor the evaluation within a broader framework of impact-oriented networks, we started conducting background research.

First, print reports, results of previous network analyses as well as 20+ background and internal strategy documents on the Bosch Alumni Network, provided by iac Berlin, were revised. In addition, we conducted nine background talks with staff of the International Alumni Center and BAN officials within the Robert Bosch Stiftung. These talks enabled us to gain a deeper understanding of the intentions and activities within the network, but also to learn about critical events, actors, "jargon", as well as origins of participants and networks. Furthermore, these early steps were critical to develop a joint strategy for gaining access to study participants in the course of the empirical surveys.

Second, a conceptual frame was developed based on literature research and the needs of the project partner. In order to contextualize the topic, a literature review of 80+ different sources was implemented, including peer reviewed journal articles in sociological, organizational and broader management studies (e.g. through EBSCO, ABI-Inform), grey literature and industry publications. Thereby, we were able to understand the related academic discourse and qualify the research questions of the paper with the help of existing literature, as well as to identify some suitable measurement instruments for the empirical studies.

Stage 2: Qualitative exploration

The following qualitative exploration aimed to gain a deeper understanding of the inner workings of the Bosch Alumni Network. To address this, we conducted 22 qualitative semi-structured interviews (in German or English, between 30 and 80 minutes each, via telephone or video telephone) with members of the network. In addition, we carried out a participatory observation of a Cluster Kick-Off event organized within the Bosch Alumni Network. In this setting, we conducted another 13 brief interviews. Lastly, we screened and analyzed the online platform boschalumni.net as well as social media channels.

Through means of the qualitative survey, we explored four topics: (a) how services of the Bosch Alumni Network are understood and used; (b) whether and how alumni are engaged as participants and “co-creators” of the community; (c) if at all, how alumni collaborate with each other; and (d) what wishes participants have with regard to the future of the network. In order to approach these questions, an interview guideline in collaboration with the iac Berlin staff was developed. In an iterative process, following the Grounded Theory methodology, we continually revised the guideline in order to integrate additional topics of relevance²². The survey contained questions regarding the perception and description of the BAN, the usage of formats and offers, the exchange with other members, the direct benefits of the network membership, the (potential) further impact on society, the (level of) identification with the network, satisfaction levels (of members), requests made to the BAN and, lastly, the BAN’ development over time²³.

Using an iterative sampling strategy of the interview partners, we developed a catalogue of diversity criteria in collaboration with iac Berlin. It enabled us to equally select interview partners along the following categories: activity and function within the BAN, level of seniority within their organization, professional field, thematic BAN cluster as well as age, gender and region of operation. The first cohort of interview partners – representing “typical cases” – was proposed by iac Berlin, the second cohort was selected through snowball sampling, research on the online platform and propositions from iac Berlin. An overview on the sampling criteria and the final sample is provided in Annex A.2.

The analysis of the qualitative material – most notably of the 22 transcribed guideline interviews and the 13 brief interviews with BAN members – followed the interpretative paradigm, aiming to explore the interview partners’ subjectively generated sense of the social reality. According to the qualitative content analysis method²⁴, the analytical process covered the following steps:

- i. Development of a system of categories (based on literature, background research, analysis of existing metrics and first explorations in the field)

²² Glaser and Strauss (2010)

²³ Please find the full interview guideline in Annex A.1.

²⁴ Mayring (2015)

- ii. Axial coding of the first cohort of interviews (explorative understanding of “typical cases”, inductive generation of new sub categories)
- iii. Revision and extension of the system of categories (with the newly generated codes gained in the material)
- iv. Coding of another cohort of interviews
- v. Finalizing the system of categories
- vi. Selective coding of the remaining interviews
- vii. Analysis and interpretation of the approx. 1,500 codes

Stage 3: Quantitative Survey

In a next step, a quantitative survey aimed to add two more layers of insight. First, it provided us with a quantitative comprehension of the prevalence of the different types of collaboration in the wider sample and thus an understanding of the “magnitude” and relevance of the phenomenon. It did so with the use of a larger and more representative sample than that of the explorative qualitative study. Second, a large enough sample enabled us to combine collaboration observations with other data on potential promoters of collaboration (e.g. knowledge about program participation), as well as for conducting statistical comparisons. This was also intended to draw attention to the collaboration contributors who were not yet known to the respondents.

The insights gained throughout the explorative phase were presented and discussed with the iac Berlin team. The resulting impact model (Chapter 2) as well as existing metrics, which had been validated in previous academic work (e.g. Frese, 1989; Gerdenitsch et al., 2016; Peterson et al., 2008), formed the basis for the development of the survey instrument. The survey consisted of 52 questions in total, of which five were procedural questions and seven were optional questions at the end. Furthermore, filter settings enabled different paths through the survey according to the respondent’s level of activity and professional role. The thematic blocks in the survey, in the order of appearance, were as follows: program and platform history, involvement in the BAN, interaction and social exchange, network evolution, benefits of the BAN, future of the BAN and professional impact²⁵. The survey was available in three languages: German, English and French. Prior to distribution, the survey was pre-tested in several settings and languages within a group of BAN members.

The survey was conducted on Qualtrics, a user-friendly third-party online platform, and was made available through a link in the period between April 28th and June 1st, 2020. In order to advertise the survey to participants and to make subsequent contact, the communication channels of iac Berlin were used. This way, respondents were contacted by a legitimate and trusted partner (which in our experience is necessary to boost response rates), at the same time knowing that their information will be processed by a confidential third party. Based on earlier experiences with surveying networks and programs, a response rate of 10-20% of the active members was considered a realistic target if the

²⁵ Please find the complete survey instrument in Annex A.1.

survey is strongly promoted. The final return was very satisfying: 890 members responded to the survey and 634 valid cases were carried forward for analysis. Compared with the number of 4,185 estimated active users in the network (i.e., users who are active on boschalumni.net at least once in a year according to iac Berlin statistics), this represents a 21% or 15% return rate.

The sample composition is in accordance with the active part of the Bosch Alumni Network membership base and equally spread across the diversity criteria taken into account in the qualitative exploration. Most of the respondents were between the age of 25 and 45²⁶, participated in a Robert Bosch Stiftung program not earlier than 2010, were highly educated (more than 95% finished tertiary education), and of middle or high seniority. Fifty-seven percent of the respondents were female. Almost half of the respondents joined the network in its first year (2017), with the number of survey participants falling incrementally for each further year of registration. The geographic diversity in the sample also corresponds to that of the network: while responses originate from 88 different countries, those from German members make up around 30% and those from Europeans (incl. Germans) more than 65%.

Comparisons of early and late responders indicate a moderate non-response bias with respect to online activities (lower frequency among late respondents)²⁷. For example, 94% of respondents reported logging on boschalumni.net at least once in the last year, which is higher than the 75% of registered users that in fact did so according to iac Berlin statistics. The bias was however not visible for other key variables such as individual network size, benefits, social impact indicators, satisfaction with BAN and attribution of success. This low level of bias is likely a consequence of the strong communication efforts around mobilizing members for the survey, including a set of very attractive financial and non-financial incentives for participation.

Against this background, we argue that this sample should not be regarded as representative for the entire population of 6,800 members but representative for those 4,185 individual who are estimated to go on boschalumni.net at least once a year according to iac Berlin statistics²⁸.

Subsequently, analyses were conducted by using the statistical software SPSS 23, encompassing descriptive as well as difference-testing analyses with respect to all initially formed areas of interest (e.g. demographics, network engagement profiles of BAN members, the prevalence of interaction and collaboration, effects on both individual benefits and social impact as well as potential antecedents of the aforementioned).

²⁶ The underrepresentation of older members might be due to a selection bias of online surveys.

²⁷ Armstrong and Overton (1977)

²⁸ Please note: the report contains a few cautious extrapolations from the sample to this overall active population for selected variables. To avoid overestimation, these calculations extrapolate values to 4,185 individuals (not 6,800), exclude outliers for count variables, and additionally discount 33% for all non-observed values.

1.3.3. Outline of the report

This report is organized as follows: Chapter 2 introduces the impact model of the Bosch Alumni Network and describes its key actors (Section 2.1), modes of interaction (Section 2.2), member benefits (Section 2.3), social impact (Section 2.4) and feedback effects (Section 2.5). Based on that, we explore what characteristics of the actors (Section 3.1), the network (Section 3.2), and the architecture (Section 3.3) influence the dimensions of the impact model.

Chapter 4 provides additional analyses and sheds light on the evolution of the network (Section 4.1), members' feedback with respect to aspects they would like to keep (Section 4.2) and change in the network (Section 4.3) as well as their perception of Robert Bosch Stiftung (4.4). We conclude the evaluation with a summary (Section 5.1), and then discuss the relevance of the results specifically for the BAN (Section 5.2) and for philanthropy in general (Section 5.3).

2. The impact model of the Bosch Alumni Network

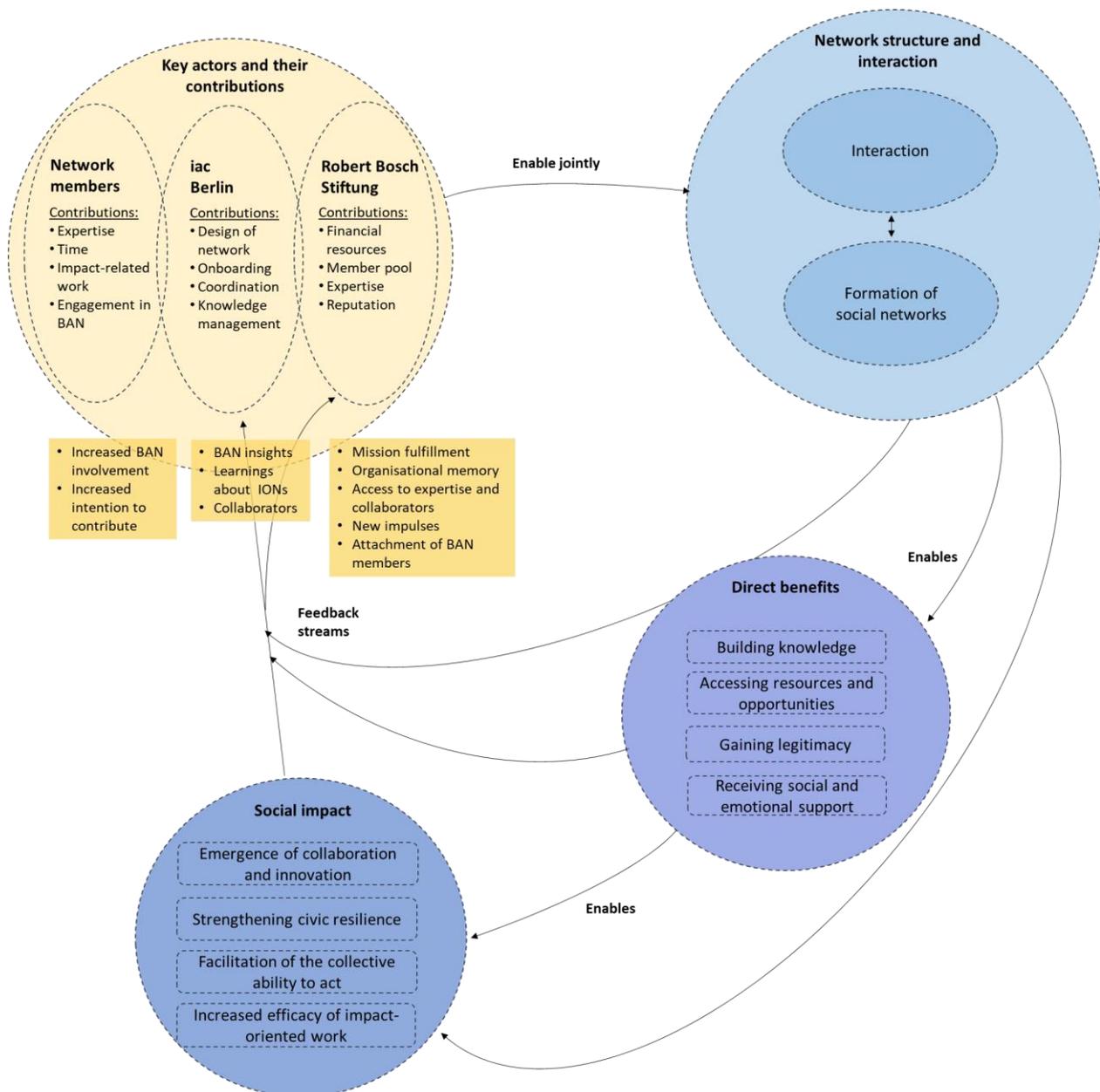


FIGURE 3: THE IMPACT MODEL OF THE BOSCH ALUMNI NETWORK.

Following the methodological approach outlined above, the evaluation collected and modelled the different elements with which the Bosch Alumni Network facilitates the creation of collaboration, individual benefits and social impact. Our analysis yielded a **circular impact model** (cf. Figure 3), which is described in this chapter in detail. First, the key actors in the BAN – the network members, the International Alumni Center (iac Berlin) and the Robert Bosch Stiftung – contribute different types of resources and activities (Section 2.1). Second, these activities manifest in interactions between members as well as the formation of network structures which fuel interactions, collaborations and the expansion of individual social networks (Section 2.2). Third, direct benefits emerge for the members from these interactions and collaborations: the acquisition of knowledge, resources and opportunities, increased legitimacy towards other network members and third parties as well as social and emotional support (Section 2.3). Ultimately, these antecedents can create social impact on four dimensions: increased impact-oriented performance of the members’ organizations, social innovation, civic resilience and the facilitation of the collective capacity to act (Section 2.4). Lastly, these various outputs and outcomes of the Bosch Alumni Network feed back to the key protagonists and reinforce their work, activities and commitment to the network (Section 2.5).

2.1. KEY ACTORS AND THEIR CONTRIBUTIONS

2.1.1. The Robert Bosch Stiftung

The Robert Bosch Stiftung is not only the initiator of the Bosch Alumni Network, but also its most key actor. Accordingly, the foundation contributes various aspects of the infrastructure and resources crucial for the network’s functioning. First and most notably, it allocates financial capital. The second most crucial resource is the identification of and investment into members. Through decades of program work and support, the Robert Bosch Stiftung has identified, supported and built relationships between a **pool of thousands of impact-oriented professionals** – current and former program fellows, grantees, partners and staff. Moreover, the foundation contributes knowledge gained through decades of philanthropic work as well as the time necessary to invent, implement and externally advise the BAN.

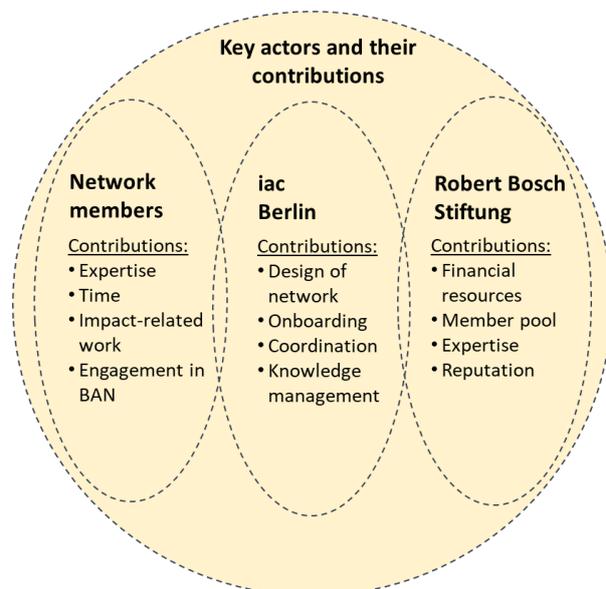


FIGURE 4: KEY ACTORS AND CONTRIBUTIONS.

Lastly, the **standing and reputation** of the Robert Bosch Stiftung in the civic and philanthropic field is a major driver behind the ongoing interest of the alumni and lends legitimacy and attractiveness to the network.

2.1.2. The International Alumni Center (iac Berlin)

The International Alumni Center is the **operative and creative center** of the Bosch Alumni Network. With the equivalent of 4.2 full-time employees currently working on the facilitation, coordination and strategic further development of the network, iac Berlin's contributions are numerous. First, it elaborates on and implements the concept of an impact-oriented alumni network as an open space of possibilities for participants across the board. Second, the International Alumni Center is responsible for the onboarding of new members. Third, it provides the resources needed for the ongoing operation of the network: the physical infrastructure of the community space in Berlin, the online platform boschaumni.net along with its continual maintenance, extensive knowledge and experience of (alumni) network building and design and time. Lastly, it moderates and fuels the activities of the network and is actively engaged in connecting members and creating relevant personal introductions.²⁹

Beyond these activities, iac Berlin is also responsible for gathering and managing knowledge about how an impact-oriented alumni network can be created. In the words of one of the members,

"As a network, the secretariat that supports the network is a learning secretariat. And they are willing to learn and they are always seeking opportunities to learn." (Member interview 16)

2.1.3. The network members

The third key protagonists in the Bosch Alumni Network are, naturally, the members themselves. As "co-creators" of the network, they contribute resources (e.g. diverse knowledge, experience and time), a variety of approaches to address social issues and, fundamentally, the network activities, which put the range of possibilities of the BAN into practice. The **contributions of members** to the Bosch Alumni Network can be summarized as follows:

- BAN members bring in a *diversity of knowledge and expertise from their working fields*, which range from civil society and civic engagement (46% of the survey participants), governance (39%) and climate change (27%), to culture (30%), education (25%) and media (20%).
- The extent of this expertise can be illustrated by the members' work experience, which is on average 12.8 years per person, amounting to 8,136 years of professional experience in the total sample.
- In addition, the members induce *diverse local knowledge* gained in the countries they originate from and/or operate in. In our sample of 634 BAN members, we determined 88 different

²⁹ Other activities of iac Berlin, such as the Global Diplomacy Lab or Connecting Networks, are excluded from this analysis.

countries of origin: one third of the participants originates from Germany, one third from another European country (mainly Southern or Eastern Europe) and one third from an African, American or Asian country. A similar distribution appears with regard to the regions of operation.

- The diverse professional and geographical background is mirrored in the *variety of social and environmental issues addressed*. To put it simply, every Sustainable Development Goal (adopted by the United Nations member states) is being worked on by the BAN members with a particular focus on **quality education (48%), sustainable cities and communities (33%), gender equality (31%)** and **peace, justice and strong institutions (31%)**³⁰.
- Similarly, the members' *approach to create positive social impact varies greatly*. The most frequent approaches in our sample are as follows: 60% consult and support others in their activities to create impact, 43% improve people's lives through education, 33% inform or influence public opinion, e.g. through journalism, 30% work inside an organization to improve its impact and 26% improve people's lives through culture. Another 24% aim to achieve positive change through policy, 15% offer financial investments in impact-oriented projects or ventures, while 10% create impact directly for beneficiaries, e.g. in medical care or social services³⁰.
- All these resources and approaches of the members are contributed to the Bosch Alumni Network through various activities (see below). One way to directly measure this *time invested* by the members are the hours of support one member received from others within the BAN (e.g. through training, feedback, insightful conversations). On average, members received 2.4 hours of support per month from other members³¹, summing up to a total of 1,272 hours per month in the sample. This amount of **voluntary mentoring and support experts** roughly equates to the work of **7.9 full-time employees** in this sample alone. Extrapolated to the active part of the entire network, the amount of time invested equates the work of 37 full time employees.

The activities of the Bosch Alumni Network members can be grouped into those taking place on the online platform and those taking place physically (cf. Figure 5). Among the **online activities**, a basic login to boschalumni.net is most common (with 94% of the participants logging in once or a few times per year), followed by reading the personalized weekly digest (89%). Other widespread activities on boschalumni.net are updating the personal profile (79%), using the People Search function (72%), reacting to posts and discussions (71%) and messaging (66%).

³⁰ Multiple answer options.

³¹ Please note: This number only refers to the 84% of members who reported to frequently interact with at least three other members. The rest was not presented with the respective question.

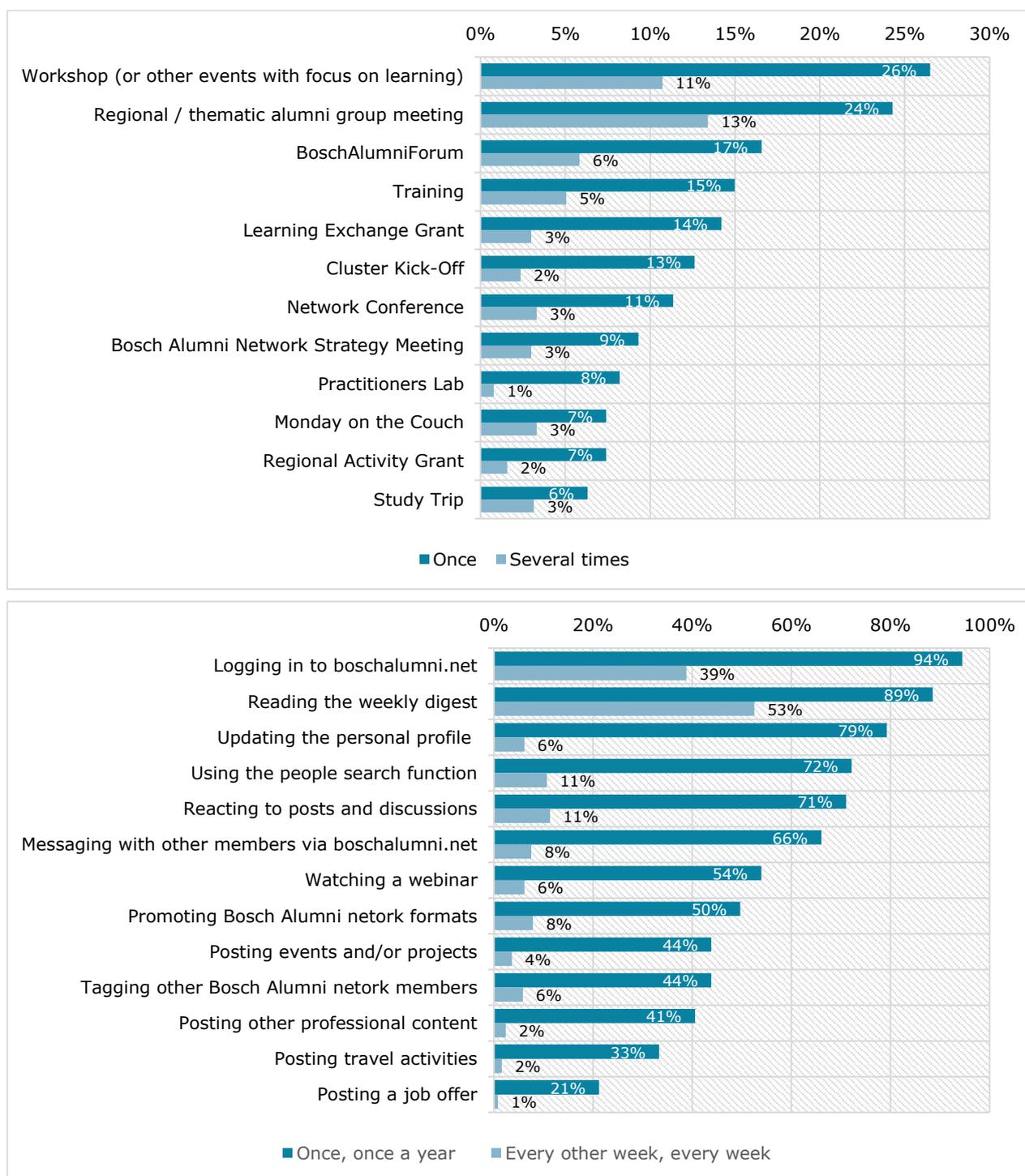


FIGURE 5: FREQUENCY OF THE BAN MEMBERS' ONLINE (ABOVE) AND OFFLINE ACTIVITIES.

A large share of the respondents also contributes content, stories and opportunities: 44% indicated that they have posted events and/or projects, another 44% tagged other members, 33% posted travel activities, 21% created/reacted to job offers. With regard to the regularity of online activities, newsletter reading (53% of the participants indicated a frequency of at least every other week) and logins to the platform (39%) are the most frequent activities. These numbers suggest that about **half of the**

sample keep themselves updated through these means on a weekly or biweekly basis and then engage in more “complex” forms with the network every once in a while, when a particular opportunity emerges (interesting event organized, searching for talent, etc.). At the same time, a small, committed group of about five to ten percent of the survey participants are “heavy users” and contribute to the platform very frequently (see Figure 5, above and also Section 2.1.5).

A sizeable share of members who reported being involved in at least one offline activity also directly **contributes to the “official architecture”** of BAN by taking over active roles in its infrastructure: 24% of the survey participants reported that they had promoted BAN event formats, 17% had been active as a facilitator, speaker or trainer. In addition, 12% of respondents that had been active offline reported being active as regional coordinators, 19% to have designed and implemented their own activities in BAN and 6% reported that they had been active in a jury function.

2.1.4. Ideal-typical BAN actors

The last chapter provided an overview on the occurrence and frequency of the BAN members’ network contributions. However, both the number of activities and the degree of involvement vary strongly among the many members, which invites the identification of sub-groups in the sample.

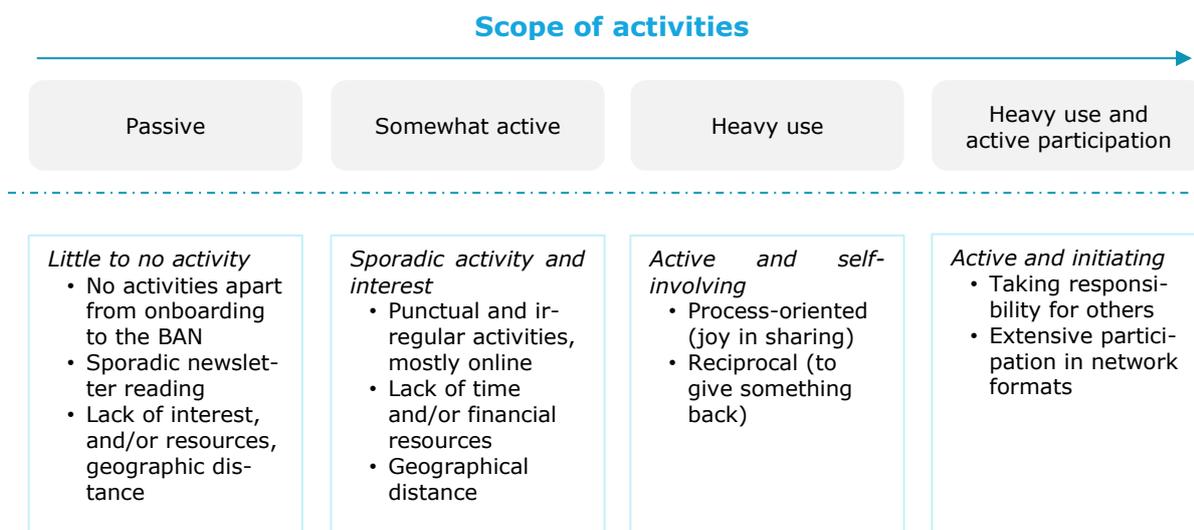


FIGURE 6: BAN MEMBERS’ SCOPE OF ACTIVITIES.

Stage 1 and 2 of the evaluation revealed two important dimensions, along which members of the network can be differentiated. First, members differ strongly with respect to the **scope of activities** they engage in, ranging from passivity on one end of the continuum to active participation on the other end (Figure 6). Passive members are typically engaged in little to no activity, with the only exception being the platform registration and occasional reading of the newsletter. Reasons for inactivity are mostly a lack of resources or interest as well as geographic distance. Members with limited activities participate in BAN formats on a selective and irregular basis. Due to lack of time, financial

resources and/or geographical distance, their activity occurs mostly online. Next in the activity continuum are members with heavy use. They are active and self-involving, enjoy sharing and are motivated to give something back to the network. On the active end of the scope, we locate members with heavy use and active participation. This activity type is characterized by an extensive participation in network formats as well as by taking responsibility for others.

In addition to the members' scope of activity, their **degree of involvement** also varies considerably. The latter is made up of their role within the activities, their motivation and expectation towards the BAN, as well as their self-image within the BAN. On our involvement continuum, we differentiate between three basic types: *followership* describes members with a self-image as a person who has access to the Bosch Alumni Network. These members take on hardly any roles, show very limited activity in general and feel their relation to the BAN is very loose. *Membership*, located in the middle of the involvement continuum, implies active participation and usage of the possibilities within the BAN. Members feel as though they are a part of the whole, but do not take on structural roles and ownership. Lastly, members with *ownership* have a self-image of co-responsibility within and towards the BAN. They take on formal and informal roles in accordance with the BAN structure (Figure 7).

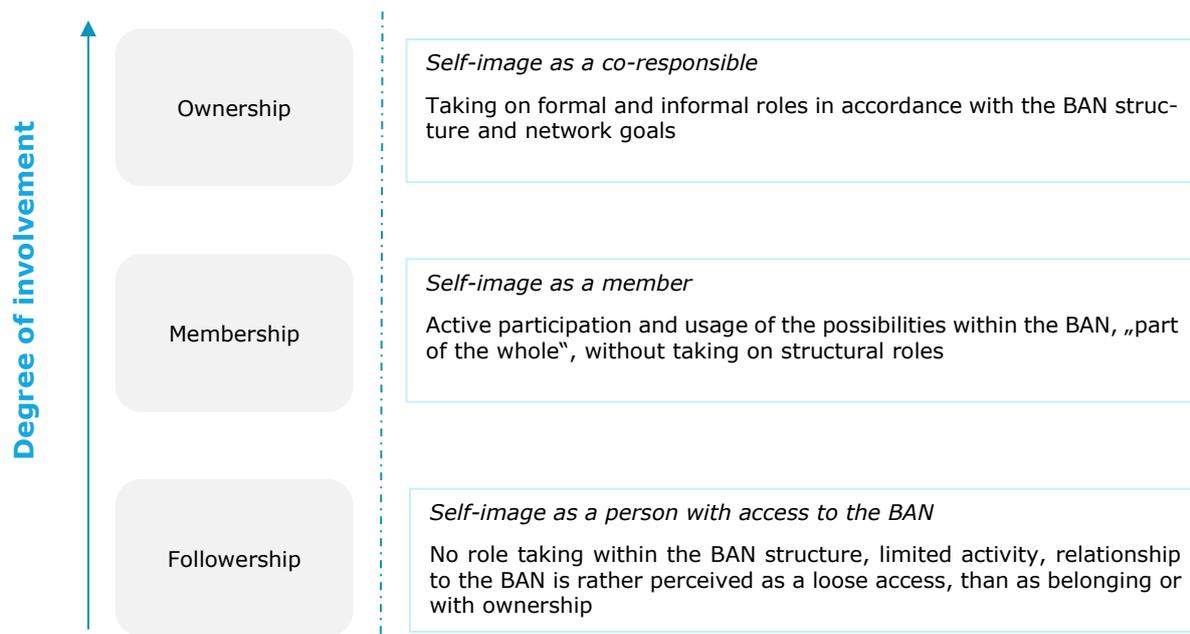


FIGURE 7: BAN MEMBERS' DEGREE OF INVOLVEMENT.

Among our survey participants, the distribution of the involvement types is as follows: whilst 38% reported feeling like a co-owner and 56% as a part of the network, 33% reported feeling like a guest or partner³² when accessing the network. Based on the scope of activities and the degree of involvement outlined above – and in connection with demographic factors – our qualitative research yielded

³² Multiple answer options

a classification of ideal-type actors in the Bosch Alumni Network (Figure 8), which was later also confirmed by a cluster analysis performed with our survey data, identifying three clusters that correspond to one or, in one case, three related types (Figure 8, dotted boxes; Figure 9)³³. Based on these two dimensions and qualitative insights, we were able to identify a number of “ideal types” of members.

On the upper end of both the activity and the involvement continuum, we identified the **“co-creator” ideal type**. BAN members in this group are characterized by very high levels of network usage (both online and offline) and an equally high amount of co-creation and ownership. Accordingly, structural roles within the BAN, such as regional coordination, are being taken on. Their self-image is active, involving, initiating, their primary motivation is to connect people and get contacts, as is also exemplified by the following statement:

„I’m proud to be a regional coordinator and first the role of the regional coordinator is to become actually the keeper one and enabling collaborations and, you know, allowing information sharing and facilitating interactions, connections between the network members”. (Member interview 14)

Quantitative clustering shows that there is diversity in the way this group contributes to the network, including activities such as participation in rather strategic offline formats (e.g. Cluster Kick-off, Network Conference), promoting and initiating events as well as reactions and the posting of opportunities. The quantitative cluster analysis suggested that approximately one fifth of the survey participants belong to this group of “co-creators” and that age and professional experience is slightly higher in this group than in others. “Co-creators” are more likely to originate in Germany or Europe and have a large individual social network within the BAN.

A second group of members belong to what we call the **“networker” ideal type**. While their position on the activity continuum is similarly high to the “co-creators”, their involvement is less pronounced. This means that “networkers” are characterized by a strong network (and platform) usage and high participation frequency. Yet, they identify as members rather than as organizing and initiating co-owners. By tendency, their professional background is in the media field; their level of seniority as well as their age is rather low. The “networkers” motivation towards the BAN is mainly networking and professional growth:

“...if you do this sort of study trips, you meet other people, and some of them are editors and some of them know editors, so that is really helpful.” (Member interview 4).

Typical activities within the BAN include strategically using the People Search function, actively and passively participating in various events and communicating with a large amount of other members.

³³ The cluster analyses was performed with XYZ Clustering and included social network size and composition of the respondents as variables.

Again, the quantitative cluster analysis yielded a similar ideal type with the following additional aspects: “networkers” make up another fifth of the sample. They are younger, less senior but more international than the “co-creators”. Their individual social network size and approach is similar to the “co-creators”, with the size being smaller – due to their lower age and seniority.

The third group of members within the BAN represents the “middle field” of both the activity and the involvement continuum. In the quantitative cluster analysis it appears as one large group making up about two fifths of the survey sample, with widespread identification as a member of the Bosch Alumni Network and a willingness to approach new members and the BAN operating team. Our qualitative results allowed us to further differentiate minimally different sub-types in this group.

First, the **“expert” ideal-type** is characterized by medium to high activity and involvement levels. With mostly professional backgrounds in science and research, members of this group are often content-related experts in their respective fields. Their main motivation in the BAN is to get in contact with new members in the same fields and to get professional feedback on their work.

„These clusters are excellent idea [...] and we discussed how this is also a good method to get useful information, you know, about what’s going on in that field.” (Member interview 11).

This ideal-type is fairly focused and strategic when engaging in the network and mainly takes part in offline events. This results in a smaller and more homogenous social network and fewer activities.

Next, members adhering to the **“high profile” ideal type** consist of slightly older and senior members doing rather practical work in fields such as international development and policy. They are characterized by a very professional network usage, which means that due to their membership in (several) similar networks they access the network even more selectively. Typical network activities of high profiles range from participating in thematically relevant events to using the People Search function to kick-off potential international collaborations.

“So there’s just been more or recent touch points with my work, so that’s been more directly relevant. [...] As we’ve become busier I need to make sure that things are strategic in terms of the use of my time and energy” (Member interview 18).

Their main motivation is thus to increase their individual professional success and impact. Involvement in strategical and structural BAN events is rather not intended. The main difference between the high-profile ideal type and the – relatively similar – expert group mentioned above is that members of the high-profile ideal type work rather practically (than theoretically) and that they have a slightly lower activity level.

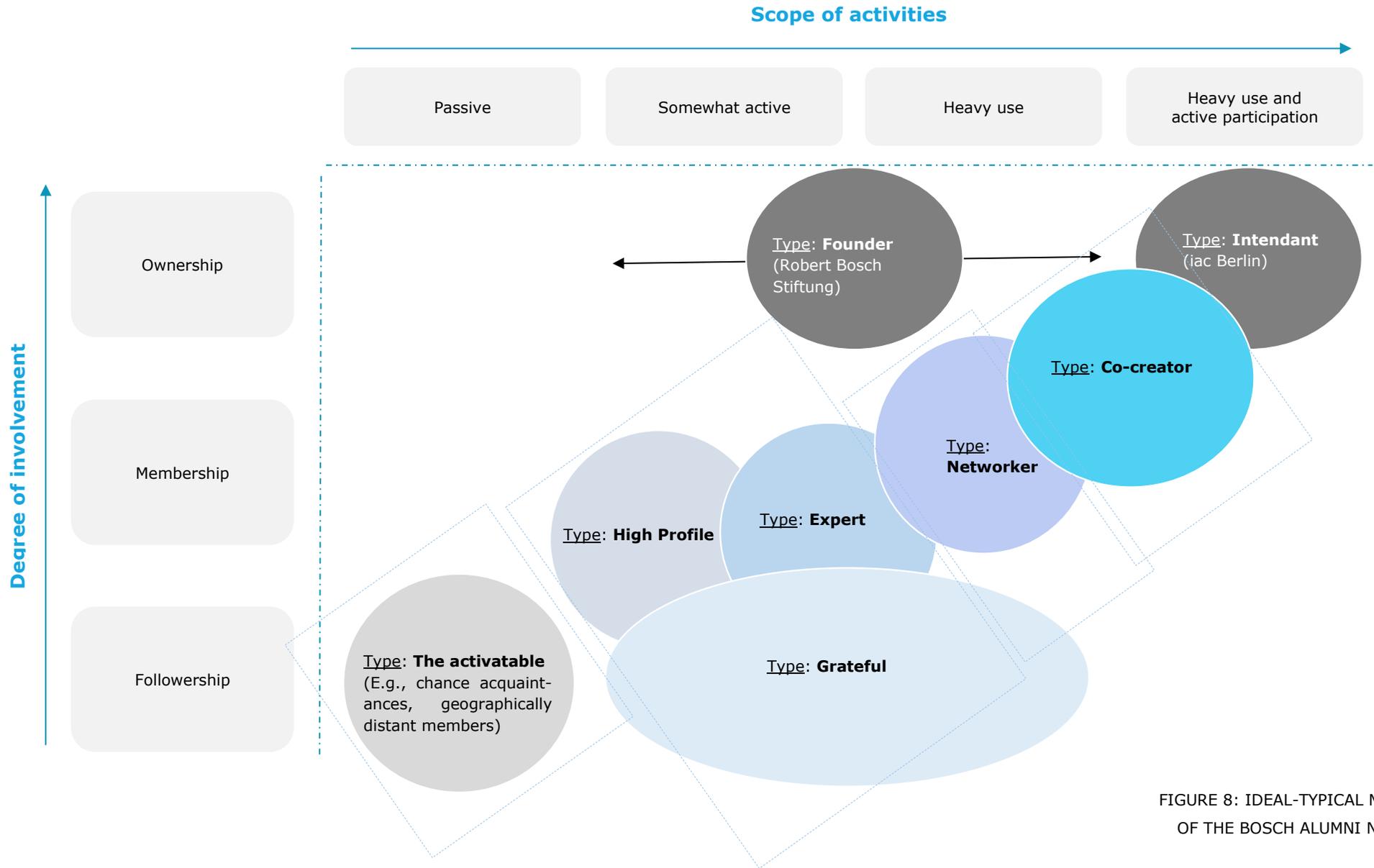


FIGURE 8: IDEAL-TYPICAL MEMBERS OF THE BOSCH ALUMNI NETWORK

Lastly, the **“grateful” ideal type** completes the “middle group”. Whereas their level of activity and involvement is similar to the experts and high profiles, this group has a higher attachment to and identification with the Bosch Alumni Network. Therefore, the “grateful” have a strong will to participate and contribute more. In many cases, however, this is not possible for them due to geographic distance, lack of resources or time constraints. Working in diverse professional fields (e.g. culture), they show high appreciation for the opportunities and events offered by the BAN and are motivated to learn and to give what they have learnt back to the BAN and society. Their individual social network is rather small and limited to acquaintances and peers from former programs run by the Robert Bosch Stiftung.

“The will and need for connection beyond national borders, beyond sectoral borders, beyond disciplinary borders to try and see if we can share, learn from others and even sometimes do projects together in partnership. So, all those things are valuable for us” (Member interview 17).

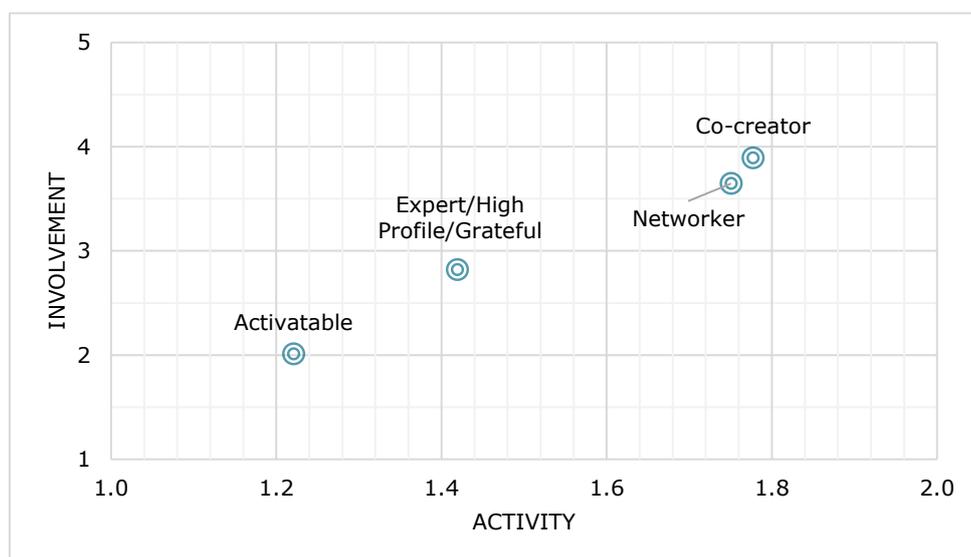


FIGURE 9: CLUSTER ANALYSIS OF THE FOUR MAIN IDEAL-TYPICAL BAN MEMBERS³⁴.

The fourth major group of members that emerged from both the interviews and the quantitative cluster analysis is located at the lower end of both the activity and the involvement continuum: the **“activatable” ideal type**. This group consists of chance acquaintances, geographically distant³⁵ and generally passive members. Mainly accessing the network as a guest or partner, their relationship to the Bosch Alumni Network is loose. Like for the “grateful” group, some respondents of this ideal type perceive geography as a barrier:

³⁴ The involvement axis pictures the 5-point-scaled item “I feel like a co-owner of the network, its success is also my success” (with 1 indicating “disagree”). The activity axis pictures the average amount of all online and offline activities on an ascending 3-point scale.

³⁵ This can include both the distance from Berlin (to, e.g., other parts of Germany or Europe), and the distance to Western Europe (e.g., from other continents).

"[The] alumni network is very European-centric at this point. So it's difficult to find belonging, coming from this part of Asia inside the alumni network" (Member interview 9).

Their network activity and usage of the "activatables" are, if at all, passive, which is mostly due to a lack of knowledge and awareness as well as insufficient resources. For example, respondents in this group were on average only familiar with 68% of the offline formats and activities in BAN (the average was above 80% in the other groups). Similarly, the number of connections to other BAN members is comparably low. On average, this group reports having 7.7 contacts in BAN, with which they interact frequently, while this number reaches up to between 9.1 (the "grateful") and 30.1 ("co-creators") in other groups³⁶.

In concluding this section, two disclaimers have to be noted. First, three ideal-typical actor groups have not been further outlined: the so-called "**Founder**" (Robert Bosch Stiftung) and the "**Intendant**" (iac Berlin) have been briefly described already (Sections 2.1.1 and 2.1.2), but are not focus of the empirical research. The group of **inactive members** are only technically present in the network but do not engage in any activity. Therefore, they could neither be reached by the qualitative interviews nor by the quantitative survey; the "activatable" group is thus the best proxy for this type. Second, the identification of ideal-typical member groups is only an explorative approach to understanding and structuring the diverse (active) membership base of the Bosch Alumni Network. We advise careful interpretation of these findings; for a deeper understanding further analyses will have to be undertaken. Still, the ideal-types outlined largely go along with typologies made by staff members of iac Berlin throughout the background talks, which clearly indicates validity.

2.2. NETWORK STRUCTURE AND INTERACTION

The contributions of the three key actors outlined in Section 2.1 – the Robert Bosch Stiftung, the International Alumni Center (iac Berlin) and the network members – jointly create a space in which the actual network structure is enacted. Its driving force (or "motor") is the **constant interplay between social network structure and interactions** between members (cf. Figure 10). Interactions between members (e.g. getting to know new members or reconnecting with acquaintances, engaging in discussions) allow members to expand their individual network, strengthen existing relationships, which again benefits the network structure and makes the network as a whole more connected and permeable. This, in turn, makes it easier for individual members to identify worthwhile contacts and thus have meaningful interactions, which then further reinforces network structure, and so on. In the following, we present the different elements of this self-reinforcing cycle.

³⁶ Value excludes outliers above the value of 100.

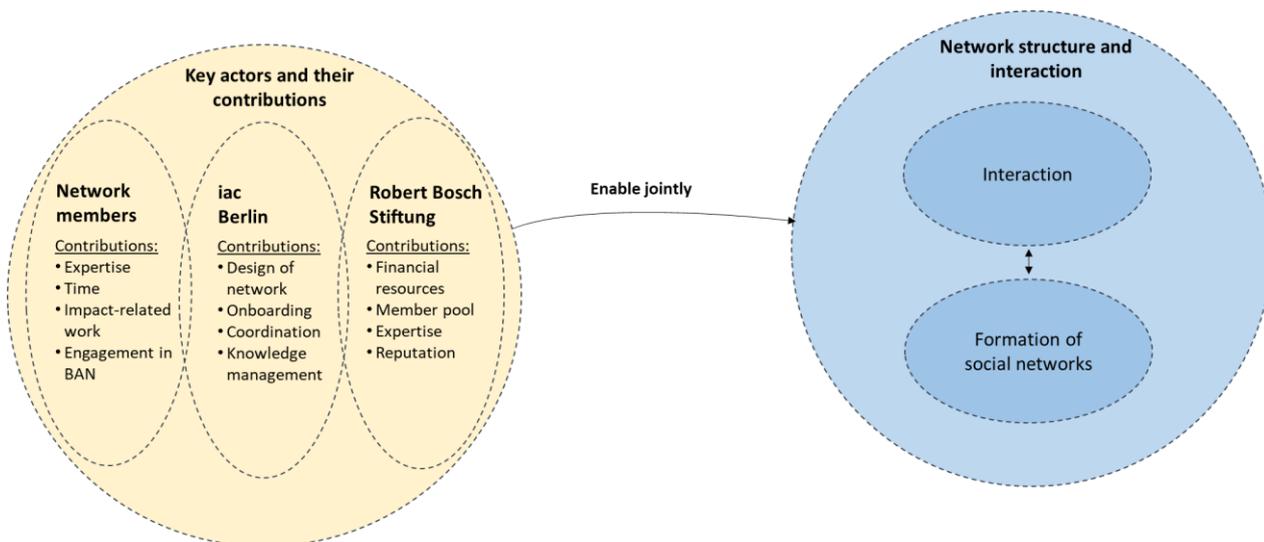


FIGURE 10: THE BAN IMPACT MODEL – NETWORK STRUCTURE AND INTERACTION.

On the one hand, **interaction and exchange** between the members is the most basic way to engage within the network. On the other hand, it forms the basis for further collaborations as well as the growth and consolidation of the individual social network. Member interaction within the Bosch Alumni Network occurs both offline and online as well as within and across sectors and regions. The most common interaction type among the surveyed BAN members is to discuss work with another member (92%), then followed by small-talk (89%). Further, three quarters of survey participants indicated to have discussed private matters, introduced other members or themselves, and reconnected to acquaintances from former programs. While one quarter reported to discuss work or engage in small-talks on a regular basis (bi-weekly or more), only a fraction of the membership engages in private discussions and mutual introductions on a frequent basis (Figure 11).

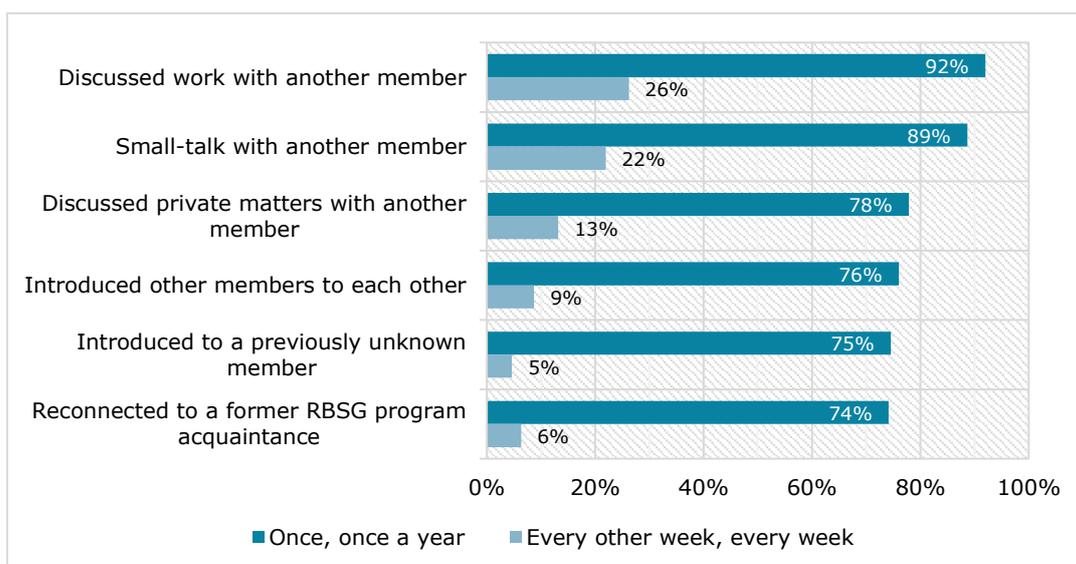


FIGURE 11: TYPES OF INTERACTION OF THE SURVEYED BAN MEMBERS.

Interaction and exchange within the BAN takes place on various **communication channels**. To our surprise, only 37% of the survey participants reported that the platform *boschalumni.net* was among their most frequently used channels to communicate with other members. Instead, the most frequent means of communication were email (68%), messaging services (e.g. WhatsApp, Signal) and social media channels (56% each). Face-to-face communication was mentioned by 39% (Figure 12). Interestingly, our data shows a decreasing communication usage of the platform with increasing membership. Hence, the longer members are registered on *boschalumni.net*, the more likely they become to switch their communication channel away from the platform. These findings underscore that the **online platform** – while a key resource in the network – only provides a **small window on the interactions in the network** and that parts of communication move to other channels over time, once contacts have been established.

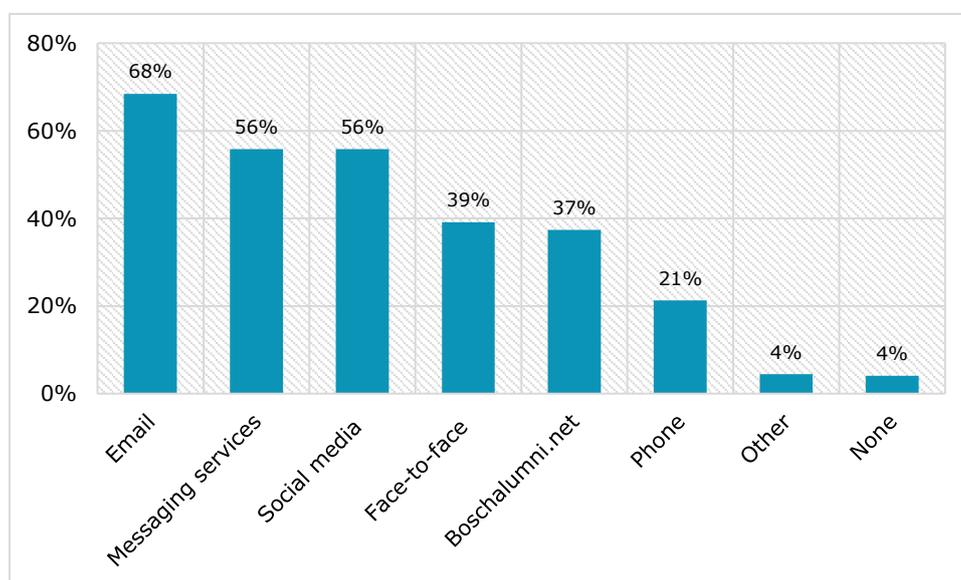


FIGURE 12: MOST FREQUENT COMMUNICATION CHANNELS OF THE BAN MEMBERS.

On the basis of such interactions, many members identify opportunities for **professional collaboration**. In interviews, respondents reported that their conversations in BAN events, on the online platform or other communication channels had frequently sparked new ideas and led to the initiation of joint projects. One member explained this process as follows:

"Through the Bosch network, I happened to connect with four, five members, and we were like 'what if we do something with these refugee warriors'. And me and my friend from the [name of Asian organization], we did a collaboration" (Member interview 14).

A crucial outcome of interaction and the network actors' contributions is the **formation and growth of (individual) social networks**. Physical events and formats (e.g. Cluster Kick-offs, forums and regional meetings) play a central role in both expanding and consolidating the social network of an individual BAN member, making them crucial in cultivating trust and individual involvement. However, the platform (e.g. via the People Search function and member tagging) as well as online communication channels

also help to widen the network. Through the BAN membership, the social network becomes larger, more diverse and easier to activate:

"You end up being more connected and being able to reach out to these people when you actually need it"
(Member interview 4).

The size of the individual social networks is considerable: the 634 survey participants indicated an average of 40 other members with whom they had had at least one conversation. In 13 cases, regular contact was reported. This makes up more than 12,500 connections among members in the sample who had at least one conversation and almost 4,000 close connections. Extrapolated to the full active network, these numbers amount to 53,000 "surface" connections and 18,000 "deep" connections. The size of the individual social network correlates positively with the duration a member is registered on the platform: participants who had been BAN members since 2017 are in regular contact with an average of 15 other members and had had at least one conversation with 54 others, whereas those registered in 2019 have a close social network of ten members and had conversations with 22 others.

As pictured in Figure 13, *the composition of the individual social networks* is very diverse. Most of the respondents are in touch with at least one BAN member who lives in another country (86%) or continent (54%)³⁷. For 46% of the survey participants, more than two thirds of their individual network consists of international members. Network compositions that cross professional fields and seniority are also widespread. Every second BAN member reported being in contact with at least one staff member of iac Berlin or Robert Bosch Stiftung staff member (46%). Yet, only 3% reported that such contacts make up more than two thirds of their "deep" connections.

The vast majority of members (88%) reported to still be in touch with at least one member that they had gotten to know in "their" program funded by Robert Bosch Stiftung, 52% reported that these members made up more than two thirds of their network. While many members (74%) were in touch with at least one person with whom they would likely remain in touch if BAN didn't exist, 33% responded that this is true for more than two thirds of their network. 66% made at least one entirely new contact through the network. These findings provide evidence for the **additionality of the BAN**. The network helps members to keep in touch and strengthen their relationships with alumni with whom they would have otherwise likely have lost contact. More than that, it allows them to build meaningful new contacts beyond the limited group of their initial programs and cohorts.

³⁷ Please note: These numbers only refer to the 84% of members who reported to frequently interact with at least three other members. The rest was not presented with the respective questions.

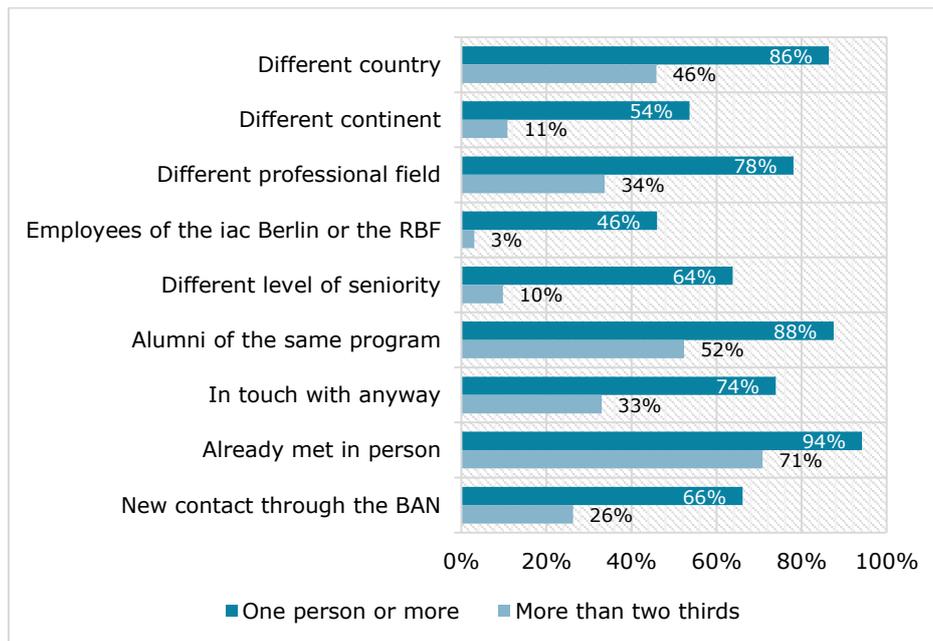


FIGURE 13: COMPOSITION OF THE BAN MEMBERS' SOCIAL NETWORKS.

Our model hypothesizes that contributions on the part of the key actors enhance the extent of interaction among the members as well as the size and growth of their individual social networks. Controlled, linear regression models with the survey data confirm these assumptions: **higher activity levels of the members** are associated with a **significant and strongly positive effect on the extent of their interaction**. This holds true for both the activity level in general and for the online and offline activities separately (with the online effect being stronger). The usage of the **People Search** function was found to have a particular positive effect on interaction. Similarly, the activity level of BAN members significantly increases their individual social network size. This is especially the case for members with frequent participation in offline events and regular platform visits³⁸.

2.3. DIRECT BENEFITS FOR THE MEMBERS

The contributions of the network's key actors, including their interactions and social networks, yield direct benefits spanning four dimensions: building knowledge, accessing resources and opportunities, gaining legitimacy and receiving social and emotional support (Figure 14).

2.3.1. Building knowledge

The Bosch Alumni Network provides direct and indirect access to information and therefore enables learning on the part of the members. Such learning experience can be the product of intentional learning experiences created in training events, workshops and study trips, as well as the exchange of best

³⁸ In all linear regression models we controlled for the duration of network membership, age, gender, level of education, region of origin and the year of the first program participation.

practices, experiences, etc. between members. Similarly, learning can stem from direct interactions between members, e.g., in course of support or mentoring conversations in which feedback and input on the members' own work and projects is provided. Another source of information and knowledge is provided by the content and learning format on the online platform. Ultimately, this furthers an interdisciplinary, intercultural and supra-regional mindset among the members:

"Basically, we learned a lot because then every time I go home from forums or labs, we share all learnings in the group, internally with my fellows. So we learned a lot from how people do things abroad, how do they lead in the rural areas, what kind of processes or practices or projects they are able to implement that we could also think of implementing". (Member interview 17)

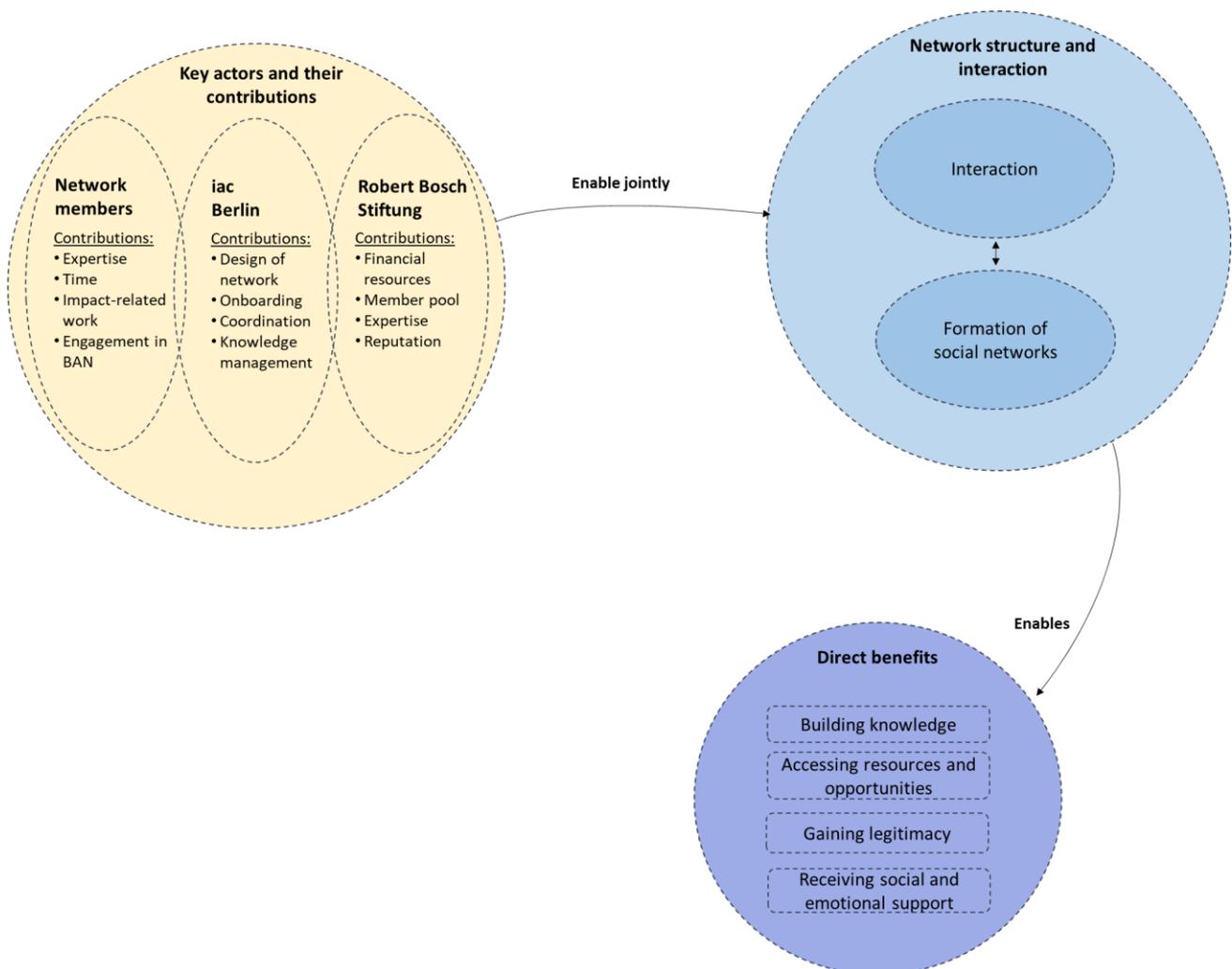


FIGURE 14: THE BAN IMPACT MODEL – DIRECT BENEFITS.

The survey data confirms that knowledge building is widespread among members: 94% of the participants indicated to having received valuable information through BAN, and for 70% of participants this happened every (other) month or more frequently. Similarly, 78% reported to have learned a new skill or competency, and 49% agree that the Bosch Alumni Network has helped them to better understand the social and environmental challenges that our world faces. Our linear regression model again backs

the assumed relationship between the network “motor” and the direct benefit of building knowledge: both **regular interactions and a larger individual social network** are associated with a **significantly higher gain of knowledge**. These effects remain robust even when additionally controlling for the activity and involvement level of the members.

2.3.2. Accessing resources and opportunities

Another direct benefit for members gained from the Bosch Alumni Network is the access to resources and opportunities³⁹. Depending on the specific context, these resources and opportunities can take different shapes and forms, including a place to stay or a place to host an event in a foreign city, information or people in an unknown domain, funding or job opportunities or even political contacts, as exemplified in one interview statement.

“I was recently in Bosnia and I could not reach out to local authorities and again I turned out to this friend, whom I met with Bosch, who is like connected with pretty much everyone”. (Member interview 4)

Accordingly, 73% of the surveyed members reported to have identified one or more professional opportunities through the BAN. Our sample demonstrates that there was a total of 1,688 professional opportunities reported to have been gained through BAN membership. Extrapolated to the entire active network, we can estimate that this number could even reach 7,900.

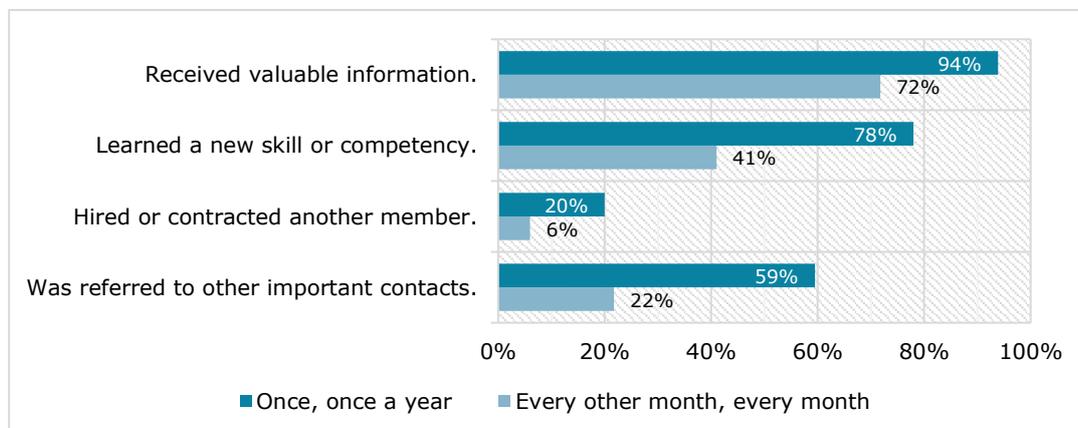


FIGURE 15: SELECTED DIRECT BENEFITS GAINED BY BAN MEMBERS.

Among respondents, 59% had been referred to other important contacts. Frequently accessed resources also included the access to a working space, event space or material (which was accessed by 59% of the surveyed members) as well as to financial means and/or funding (30%). Hiring or contracting other members (20%) or getting hired (18%) was less common but still an observable benefit. Lastly, the Bosch Alumni Network can serve as an individual instrument for mobilization (e.g., through placing and

³⁹ Our linear model again shows a significant positive impact of the members’ interaction and social network size on the amount of resources accessed.

spreading own offers). More than half of the survey respondents indicated to have promoted their work through the network.

2.3.3. Gaining legitimacy

Another direct benefit emanating from the Bosch Alumni Network is gaining legitimacy. This has basically two dimensions: external and internal. Gaining external legitimacy means that BAN members can use the brand of the network and, implicitly, the brand of Robert Bosch Stiftung to increase their legitimacy in a respective field, area or organization. Accordingly, several interview partners expressed their pride at being part of the Bosch Alumni Network – and two thirds of the surveyed members indicated that being able to claim membership in the network can be helpful to build credibility towards others.

I: "Did your organization take something out of that?"

IP: "In terms of direct benefits no, but in terms of recognition and reputation, yes". (Member Interview 12)

The internal dimension of gaining legitimacy stands for the benefit of making visible relevant professional information as well as projects and functions within the BAN (platform). 65% of the survey participants specified that their membership has benefitted them or their organization to build credibility towards others. The effects of interaction and social network size on the perceived gain of legitimacy is also significantly positive within our linear model. This means that **higher levels of interaction and a larger social network** corresponds to an **increased likelihood of a member gaining legitimacy** through the network.

2.3.4. Receiving social and emotional support

A fourth direct benefit for the members of the Bosch Alumni Network is the access to social and emotional support. To a large extent this aspect exemplifies the community-like quality of the network: for some, membership often goes beyond a merely transactional experience, but also involves the emergence of friendships and peer-support relationships. Among the survey participants, 38% reported that other members were in general willing to listen to their problems at work and 37% reported that they received support in getting things done at work. One third of respondents indicated that they "can rely on other members, when things get difficult at work" and 27% of the survey participants that they "are willing to listen to their private problems". This level of intimacy is also reflected in the agreement of 59% of the surveyed members with the statement that their BAN membership helped them to "strengthen their personal motivation". This sentiment was also reflected in the interview in which members repeatedly described gaining new friendships through the Bosch Alumni Network.

"I have had the opportunity to co-create two joint project with other members of the Network. The first one is called SDG Couture, which is in collaboration with 4 other members of the network. SDG Couture is a series of fashion shows coupled with workshops, aimed at promoting the Sustainable Development Goals (SDGs) amongst young people in Africa. The pilot workshop was held in March 2019 in Botswana where two members of the team from Malawi and Zambia traveled to Botswana to implement it. The first show will be held in Zambia in 2020, followed by shows in Malawi and Botswana in the following years. The second project is called the Restore Earth Challenge which is a collaboration with one other member of the Network. It is a competition targeting students in Botswana and Malawi aged 13-18 years to develop innovative solutions to tackle pollution and reduce the use of single use plastic within their community. We hosted and launched the competition in Botswana in March 2019 and held a skills workshop for interested participants in Botswana. The workshop entailed an introductory demonstration into design thinking methods for creating solutions. We believe in learning by doing, so during the workshop we challenged participants to co-create solutions for the most common type of litter in their community".

(Survey participant)

„Das Projekt "Mobile Open Culture and Innovation Hub (MOCI)" ist ein Kultur- und Kapazitätsbildungsprogramm für kulturelle grassroots und andere engagierten Akteure im ländlichen Balkan. Im Kern besteht aus einem Mobile-Hub der auf verschiedenen Routen durch die Region ToT-Workshops und Community-Workshops anbietet und die Teilnehmer regional auf einer Plattform vernetzt, die ebenfalls ein großes Kompendium an Tools und Best-Practices in lokaler Sprache zur Verfügung stellt. Das Programm vereint Social Innovation Ansätze, best practices aus Open Culture, und Tools aus der Kreativwirtschaft".

(Survey participant)

STORY BOX 1: COLLABORATION, INNOVATION AND IMPACT WITHIN THE BAN.

In addition to this individual level, the network also seems to provide a more abstract sense of belonging, which is associated with wellbeing and emotional stability. In one of the interviews, a member described belonging to a network of people who think and work in a similar way as being an important asset and a "power source" (Member interview 1). In total 70% of the survey respondents seemed to share this sentiment and reported to feel a sense of belonging with respect to the community of the Bosch Alumni Network.

2.4. SOCIAL IMPACT

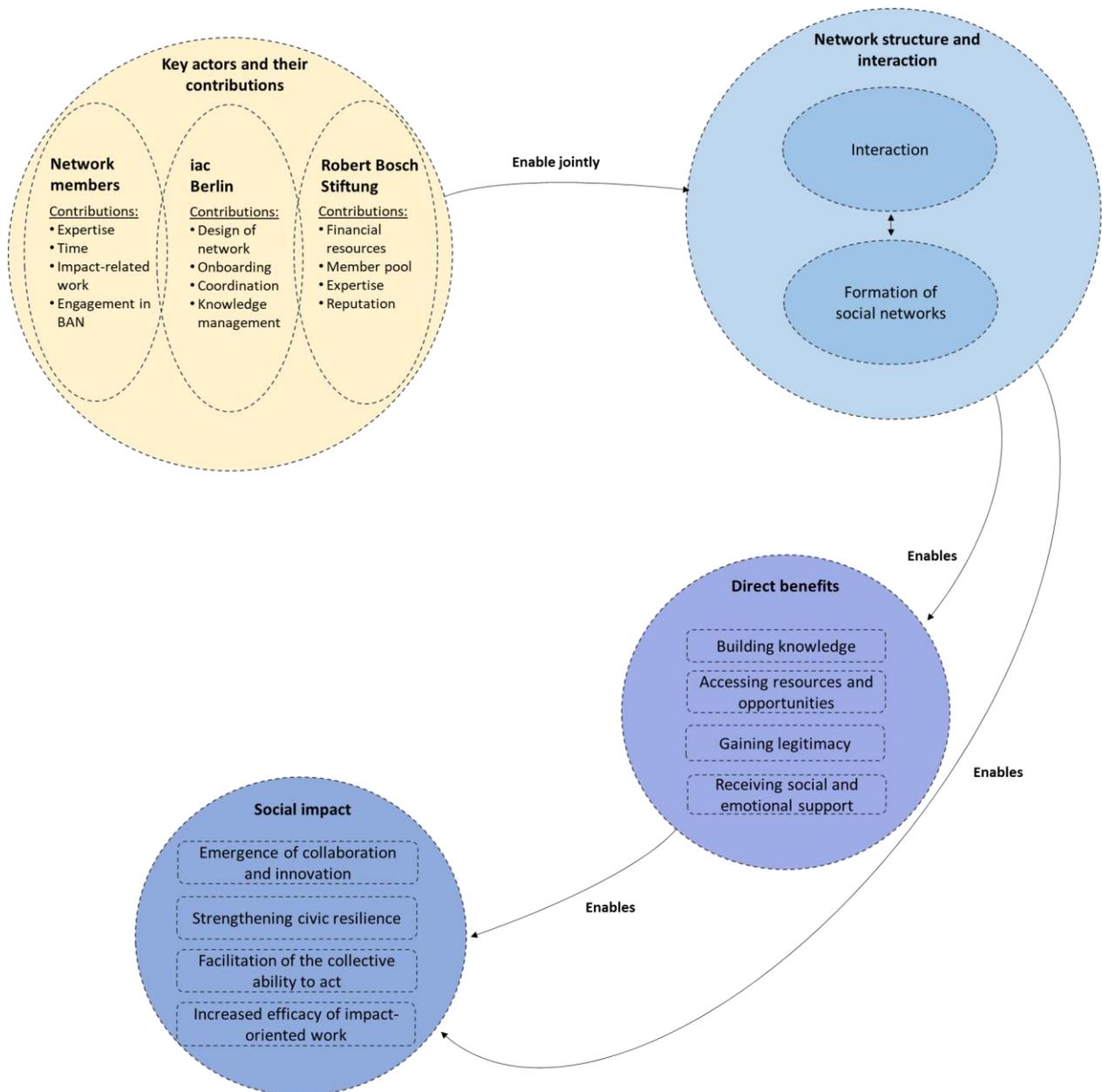


FIGURE 16: THE BAN IMPACT MODEL – SOCIAL IMPACT

Ultimately, the interactions and collaborations within the Bosch Alumni Network and/or the direct benefits gained by the members further lead to the creation of social impact on the macro level. This can happen on another four dimensions: emergence of innovation, strengthening civic resilience, facilitation of the collective ability to act and increased capacity to create impact through members' organizations (Figure 16).

2.4.1. Emergence of collaboration and innovation

A second aspect of social impact directly and indirectly created by the Bosch Alumni Network is the emergence of innovation. Exchange, interaction and collaboration across sectors, disciplines, regions and seniority levels is a fertile ground for new ways of thinking. When this is put into practice, innovative approaches to societal challenges are likely to arise. This is supported by both our qualitative and quantitative data. Among the surveyed members, 54% received support in building a new project, venture or idea, 44% started a new project or organization together with another member and 29% co-developed an innovation. In the interviews and open survey field, a number of innovations were reported, among others:



Members developed a manual for intercultural exchange using the narrative frame of an intercultural cookbook. In it, *"all the practices [...] in the book should be written as recipes as if intercultural dialogue was a food or a very good dish, very different, tasty"* (Member interview 17).



Another group of members designed a *"new toolkit for small and medium organizations in terms of how they would approach impact assessment [...]. And [...] as we are interested in civil society, [...] in general but also given the more authoritarian turn in Central and Eastern Europe and the closing space for civil society, I think this is an important topic for the region and for Europe"*. (Member interview 7)



Yet another young BAN member is revitalizing an old cinema in her home town into a cultural place for the local community – based on innovative ideas gained from fellow BAN members.

Other examples included starting a podcast series with another member, joint fundraising efforts, building an impact assessment toolbox and the development of a concept for theater pedagogy directed at trauma work. In total, members in the sample indicated having started **over 1,100 projects with other members** and having launched **over 700 projects together** that included some element of **innovation**. Conservatively extrapolated to the overall active sample, these values reach 3,300 and 2,000 innovations respectively. Even if the level of innovativeness and complexity of projects is likely to be heterogeneous, the sheer number of collaborative projects and attempts to co-create novel solutions is noteworthy.

Arguably, not every innovation creates positive social or environmental impact per se. Our data do, however, suggest that most actors in the network oriented their professional activities towards the creation of positive effects on society. 98% indicated that they aim at contributing to the United Nations' Sustainable Development Goals in their work, 96% could name a theory of change to do so (60% through consulting and support, 43% through education, etc., see Section 2.1.3). Against this background and after reviewing the examples presented to us in interviews and through the online survey,

we assume that the **vast majority of these collaborations and innovations contribute to members' efforts to create social impact.**



"The Bosch Alumni environment helped us to start the development "Multifarm Model". This means that through the travel grants and other gatherings we could meet some Bosch Alumni to talk about our idea, get feedbacks and support. Organic Farming & Wellbeing Districts are a way to revitalize Rural Areas, based on the idea of merging together organic farming, health treatments, tourism and cultural production on the themes of ecology, sustainability, biodiversity, circular economy, climate change. This idea takes form as farms with a double identity. On one side, there are organic and biodynamic farms, producing natural products focused on quality. On the other side, there should be other independent structures to provide services related to wellbeing and to organize and host cultural events such as conferences, festivals, art residencies, cultural meetings".

(Survey Participant)

"In 2019, my organization launched a campaign to recover 100,000 plastic bottles from the environment to build two classroom buildings in a village where there was no school. This idea was partly inspired by the work of a fellow Bosch alumni [...] I later got a Learning Exchange Grant to SINA where this idea was further polished by the contributions of the network members I connected with over there."

(Survey participant)



STORY BOX 2: COLLABORATION, INNOVATION AND IMPACT WITHIN THE BAN.

According to our impact model, we expected that the emergence of collaboration and innovation is promoted by interactions and network size, as well as the different direct benefits experienced by members. Controlled regression analyses confirmed all these hypotheses, showing significant positive effects for all these variables. The strongest and most robust effects occurred for the "gaining knowledge" and "accessing resource" variables.

2.4.2. Strengthening civic resilience

Some benefits and outcomes of the Bosch Alumni Network are particularly precious for members in certain regions and professional fields. Most notably, this is the case in countries with repressive political and social climates, in which the network support for members gains a larger meaning by reaffirming the importance of members' work and giving it legitimacy in the eyes of third parties. One participant expressed this in the following way:

"In [country], both politically and as a sector, we feel very much alone. So the value of finding people who do different things but with similar philosophy or ethics around Europe has infinite value for us". (Member interview 17)

Statements like this mirror a larger phenomenon in the network. Overall, 34% of the survey participants indicated that the network membership has **helped them to continue their professional work despite difficult economic, social or political environments**. The agreement to this statement is highest among members who operate in Africa (50%), Asia (41%) and the Middle East (37%).

Along with the direct benefits for individuals working and living in repressive societies, the network also provides a safe communication space for certain professional fields, which are under general suspicion (e.g. investigative journalism). Strengthened civic resilience, as operationalized above, is significantly linked to gaining knowledge, accessing resources, receiving social support and legitimacy. It furthermore increases when the levels of interaction are higher and the social networks are larger.

Our quantitative analyses again confirmed positive relationships between interactions and network size, as well as all four direct benefits for members and the strengthening of resilience in difficult political and social climates. Members who interact with the network more and gain more benefits from it are thus more likely to be empowered in their civic work in such contexts.

2.4.3. Facilitation of the collective ability to act

Thirdly, one of the most remarkable characteristics of impact-oriented networks is their ability to assemble many stakeholders from diverse backgrounds and enable them 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. One respondent put it this way:

"It is really about amplifying changes. If I am in a network like Bosch, I can get other people to work with me. So it amplifies what somebody or a person can do on their own. It is almost like it is the loudspeaker that you need if you are going to be talking to society about a particular issue". (Member interview 14)

This concept is realized by the Bosch Alumni Network in two ways: first, existing initiatives, smaller networks and the like are being facilitated by getting connected to new, previously unknown collaborators. This happens typically in international and interdisciplinary settings. Accordingly, 64% of all survey participants worked on a project or activity together with another network member (including but not limited to the new collaborations outlines in 2.4.1).

The second way the Bosch Alumni Network facilitates the collective ability to act is by providing a platform for members to develop and substantiate common strategies and communication around a particular topic, industry or action. By gathering shared but individual experiences and approaches, new collective visions take shape. Almost half of the survey respondents indicated that the BAN "has helped them stay in touch with the latest developments in their field" (45%) and "**that the network provided a space to develop joint visions and strategies" (44%)**. These values were somewhat more pronounced among respondents active in the professional field of media, culture, peace building and sustainability, and less pronounced among scientists, reflected the different levels of attention paid to these areas in the BAN over the past years.

Consistent with innovation and resilience, regression analyses in the quantitative survey data also confirmed the expected positive association of the explanatory variables (interactions, network size and all four direct benefits for members) with the perceived increase of collective ability to act.



"Currently working on two projects: 'VAHA (Oasis in Turkish): Building Common Ground for Spaces of Public Discussion & Dialogue in Turkey and its wider European neighborhood'. This project is co-developed with [name] & MitOst and will conduct Turkey network related activities (including BAN members); 'Performative Journey on the Via Eurasia Cultural Route', another joint project with some of the Turkey BAN members [...] that we co-developed to set up an international dialogue between performing artists/practitioners and cultural heritage managers resulting in new methodologies for creating contemporary arts events on a cross-border cultural route".
(Survey Participant)

"Waren gemeinsam an einem Entwicklungsworkshop für eine, auf Ideen von Gamification basierte Lösung um Fact Checking und Counterspeech in sozialen Netzwerken zu bewerben und Jugendliche mit ins Boot zu bringen."
(Survey participant)

"With fellow colleagues, I am in current exchange for possible journalistic collaborations. In concrete: I am planning my next reporting trip to India (on hold because of Covid) together with former media ambassadors from India".
Survey participant)



STORY BOX 3: COLLABORATION, INNOVATION AND IMPACT WITHIN THE BAN.

2.4.4. Increased efficacy of members' impact-oriented work

Finally, our model also suggests that the direct benefits and impacts outlined in the last chapters translate into social impact on the level of beneficiaries and clients served by BAN members.

While the study design did not allow such impact to be measured directly (it would have required an individual impact assessment for each member), our results provide indirect evidence for this type of effect. In qualitative interviews, respondents repeatedly provided examples of how the aforementioned benefits materialized in their impact-related work, as explained by this member:

"Thanks to the coordinators, my friends of East Africa, [...] we were able to give workshops about financial literacy and people have been able to learn". (Member interview 14)

In fact, the vast majority of the many innovation and collaboration projects as well as the direct benefits outlined in previous chapters were related to impact-oriented causes. The combined observations that almost all members' work aims to contribute to an issue mentioned within the United Nations Sustainable Development Goals (SDGs) and that 96% of the members were able to name a theory of change

(see 2.4.1), it is unlikely that these efforts do not result in a degree of positive impact through members' professional activities.

To gain a sense of the potential dimension of this impact, respondents were given the option to indicate the number of individuals reached through their most important activities. Table 3 provides an overview of members' key impact metrics. It also contains the standard (most common) answer to a question in which respondents were asked to indicate the role that their BAN membership played in the overall achievement of success and impact.

Attributing the role of a network to one's professional success and impact is an inherently difficult task, so results should be considered cautiously. Nonetheless, findings illustrate that the members in our sample alone **positively impact the lives of a substantial number of individuals** – and attribute a considerable degree of this success and impact (24.9%) to their membership in the Bosch Alumni network.

Theory of change (multiple answer possible)	Size of subsample	Metric	
Consult and support others in their activities to create impact	219	26 600	organizations supported
Work inside an organization to improve its impact (e.g. as intrapreneur)	107	981 950	people benefited
Inform or influence public opinion	112	57 002 900	people informed
Create change through policy	78	7 688 300	people influenced
Improve people's lives through education	169	1 932 800	people educated
Improve people's lives through culture	109	4 940 000	people reached
Direct help for clients and beneficiaries (e.g. social work, medical care)	38	1 555 200	people benefited
Invest in other projects, ventures or initiatives	60	600	projects invested
Other	10	82 700	people benefited
Attribution of success to BAN membership	Size of subsample	Metric	
<i>"Overall, what percentage of your professional success and impact in the last year would you attribute to being a member of the Bosch Alumni Network?"</i>	634	24.9%	of professional success and impact (average)

TABLE 3: MEMBERS' IMPACT AND ATTRIBUTION TO THEIR BAN MEMBERSHIP.

Quantitative models again largely support our impact model. When looking at the attribution of success to BAN, respondents with higher levels of interaction and larger networks, as well as those who experience stronger direct benefits with respect to knowledge, resources, legitimacy and social support, were significantly more likely to experience higher levels of success attribution than others.

No robust results were yielded, however, with other attempts to link members' benefits with professional success. Working under the assumption that the positive effects of the BAN would also materialize on the level of members' organizations, we also tested models that linked individuals' benefits to organizational success and growth over the last year⁴⁰. Here, our controlled regression model did not provide evidence for a positive effect of the BAN membership.

This non-finding has at least two possible reasons: first, it is possible that the effects of a BAN membership on the members does not translate into a significant development of their organizational capacity. Given that some organizations represented by members are large multi-national institutions with thousands of employees, this is a likely scenario for some respondents. A second reason could be that influencing organizations takes time. The cross-sectional quality of the data is problematic in this respect; while an innovation, for example, may increase organizational success over time, it is unlikely to do so instantly. Further, such efforts could represent a reaction to negative developments in the organization, which would show up as a negative effect in our data. With this in mind, we propose a more long-term oriented measurement approach in future to better explore the impact of BAN membership on their respective organizations over time (see Section 5.3).

2.5. FEEDBACK EFFECTS

A key element of the impact model of the Bosch Alumni Network is circularity. We hypothesize that the interactions, network building, direct benefits of the network and its social impact create feedback loops towards the three (initial) key actors: the BAN members, the International Alumni Center, and the Robert Bosch Stiftung (Figure 17). We tested these effects in controlled linear regression models and now close this chapter by briefly presenting the related findings.

⁴⁰ Measured as the agreement with the statement "Overall, my organization was very successful in meeting its goals in the last year." The question was posed to the 217 respondents which indicated as being either self-employed or CEOs, board members or directors of organizations.

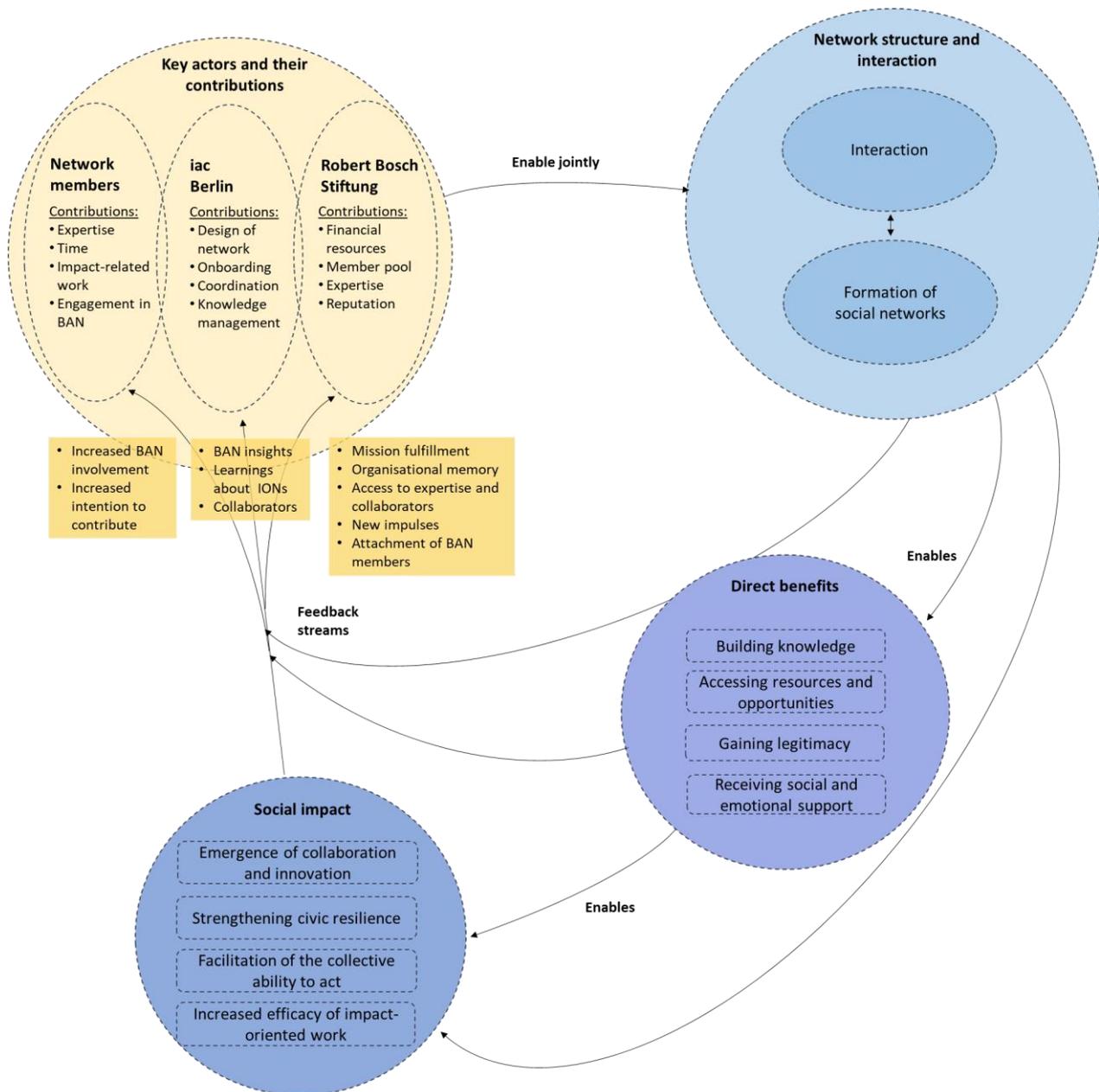


FIGURE 17: THE BAN IMPACT MODEL – FEEDBACK EFFECTS.

2.5.1. BAN members

In terms of BAN membership, our data suggests that positive experiences within the Bosch Alumni Network reinforce members' commitment to the network and create intentions for further future engagement. Such intentions include plans and wishes to be more involved in the BAN, to share more opportunities and resources in the network (e.g. jobs), to take more active roles (e.g. to be engaged as a regional coordinator), to collaborate more with other members, and spend more time in the network. Overall, such intentions were wide-spread, with large parts of the sample indicating that they wish to

be more involved in the BAN in the future (81%), that they aim to share more opportunities and resources (67%), aim to take on a more active role in the network (54%) or aim to collaborate more with other members (84%).

We found that higher levels of interaction were associated with stronger intentions to contribute in future projects and arrangements. For example, 54% agreed to the statement “[In the future] I want to take on more active roles (e.g. be engaged as a regional coordinator)” on average. Among respondents who interacted other members on a bi-weekly or weekly bases, 65% agreed with this statement; among those with who attributed 50% or more of their success to the BAN, this number reached 81%.

The extent of direct benefits gained by the members is also positively linked to intentions of future sharing and contributing. This effect is particularly robust for the benefits of gaining legitimacy and social support as well as the different types of social impact.

2.5.2. International Alumni Center

The International Alumni Center benefits from the Bosch Alumni Network and its impact model in at least three ways: first, the constant interaction provides iac Berlin with a detailed understanding of the network and its members. By interacting with members and observing their actions and communication, iac Berlin can learn about members’ needs, wishes and ideas, thus providing a constant stream of feedback to improve the network. Moreover, the network provides direct insights into international developments and key actors in journalism, politics and other areas represented within it.

Second, iac Berlin is in a unique position to **learn about the development and successful operation of impact-oriented networks**. The ongoing process of planning, growing, reviewing and evaluating the Bosch Alumni Network and its events and opportunities allows for insights on many levels, from the general strategic potential of networks and insights into building a network, to micro-level knowledge on operations in different cultures, industries and through different programs and media.

„Das IAC lernt aber ganz viel am Bosch Alumni Netzwerk [...] wo das IAC im Grunde auch ein bisschen draufschauen kann und mitausprobieren kann, und am BAN merken wir was für Instrumente funktionieren, um Alumni zu aktivieren, um Mitglieder aktiv einzubinden, und was für Formate oder Instrumente funktionieren nicht“. (Background interview 5)

Third, iac Berlin also benefits from the direct access to a large and diverse **pool of potential collaborators**. The network enables the identification and building of first relationships with these contacts, but it also seems to increase interest in collaboration among members. As one staff member of iac Berlin puts it:

„Wir als Mitarbeiter [nutzen] das Netzwerk ja auch, wer wäre jetzt ein guter Speaker für dieses Thema, wie finden wir den jetzt, usw. Ich glaube, das ist auch eine Ressource für die Stiftung Mitarbeiter, die ja immer wieder solche Dinge machen, die einfach sagen können, ich habe hier einen Pool von 6000 Leuten, die uns irgendwie wohlgesonnen sind, den kann ich jetzt richtig nutzen um mein nächstes Programm für die Studienreise nach Brüssel zu bespielen“. (Background interview 2)

Notably, 79% of members expressed that they would like to “collaborate more with iac Berlin and Robert Bosch Stiftung in the future”. Quantitative analysis models largely support the notion that this increased interest in collaboration is reinforced by positive experiences in interacting and collaborating in the network. Network interaction and a higher number of deepened contacts are associated with a significantly higher interest in future collaboration with iac Berlin and Robert Bosch Stiftung. Similarly, all the direct benefits and social impact generated through the network are significantly linked to higher collaboration plans.

2.5.3. The Robert Bosch Stiftung

The Robert Bosch Stiftung is a “beneficiary” of the following feedback effects of the Bosch Alumni Network. First, as outlined in the previous sections, the network enables its members to create a positive impact in society. On average, members in our sample credit 24.9% of their professional success and impact to the influence of being a member of the BAN. Thus, the network directly contributes to the **fulfillment of the foundation’s social mission** (cf. Section 1.2.1).

Second, the Bosch Alumni Network serves as an organizational memory, enabling former program fellows and grantees to reach out and stay in contact with one another. This benefit was expressed in many of the background talks, which stressed the importance of the BAN enabling to stay in touch with individuals whom the foundation had already invested considerable effort into.

„[Es ist ein] Erfolgserlebnis, dass sich zum einen die Kontakte zu unseren Ehemaligen enorm gefestigt haben. Also wir haben wahrscheinlich etwa 10.000 Alumni aus allen Bereichen im Laufe unserer Geschichte aufgebaut. Jetzt haben wir glaube ich zu 6000 schon wieder Kontakt.“ (Background interview 6)

Benefits, however, go beyond simply staying in contact. To the foundation, members represent an attractive pool of **expertise and potential collaborators**, the work of whom the foundation is already connected with.

„Wir haben zum einen natürlich in allen Bereichen, wo wir arbeiten immer wieder Bedarf an Expertise, an Beratung, an Information. Das können wir inzwischen auch über Alumni bedienen. Das ist auf jeden Fall ein Plus. Wir haben damit unsere Möglichkeiten erweitert. Ich glaube auch, die Möglichkeiten, jetzt sind wir gerade dabei unsere internationale Arbeit komplett neu aufzustellen, haben viele neue Themen auf die wir uns konzentrieren wollen, da sind wir teilweise gar nicht selber so fit bisher, da müssen wir uns Experten ins Haus holen. Auch da ist jetzt so, dass wir über das Alumni Netzwerk einfach sehr viel Expertise im Griff haben, auf die wir zugreifen können und einen besonderen Bezug herstellen können?“ (Background interview 4)

Moreover, employees of the Robert Bosch Stiftung seem to profit from the same benefits that other members of the network experience as well, as analyses of survey responses of 20 foundation employees suggest. Responses show that the platform is used as tool for **capacity building** and a **source of fresh impulses** for the foundation’s work: 91% of foundation representatives report that the BAN provides them with valuable information, 76% got access to workspace or work materials through the BAN, and another 76% made new contacts through the network.

Another 44% agree that membership helps them to stay up-to-date in their field of expertise and 48% reported learning a new skill or competence. Almost half of the respondents employed at the Robert Bosch Stiftung (48%) also reported that they had received support from the network in building a new project, venture or idea.

On a more general level, some of these impulses can come from iac Berlin and its experience in building and curating the BAN. This expertise is a resource for the foundation:

„Da haben wir das IAC, weniger das Netzwerk als das IAC, zunächst einmal als Institution mit einer Beratungsfunktion. Das darf man nicht unterschätzen. Bei vielen Personen, Programmen und Bereichen, die bisher keine strukturierte Alumni-Arbeit betrieben haben. Da ist sozusagen das Training, der Wissenstransfer, das In-House-Capacity-Building, um hier mit Anglizismen um mich zu werfen“ (Background interview 4).

Finally, **positive experiences** in the BAN also **increase the members' attachment to the Robert Bosch Stiftung** as well as **their plans to collaborate** (more). This is in line with our proposed impact model. In our quantitative models, almost all types of interactions, benefits and impact metrics were associated with higher levels of attachment and intention to collaborate. While on average 34% of respondents reported that the relationship between their organization and Robert Bosch Stiftung was somewhat close or close; this share reaches 45% among those who are active in the network on a bi-weekly or weekly basis.

3. Factors shaping the BAN impact model

In section 2 we have outlined how the Bosch Alumni Network generates direct benefits and social impact through the actors' contributions and interactions and how these outcomes lead back to their activities, reinforcing their motivations to contribute to the network. Of course, these effects do not occur for everyone and in every context equally. Therefore, building on our previous analyses, the following sections explore which characteristics of the actors (Section 3.1), the network (Section 3.2), as well as the concrete design and architecture (Section 3.3) influence the key elements of the BAN impact model.

Table 4 summarizes the relevant factors that significantly shape the extent of interactions and social networks, direct benefits and social impact. All described effects were tested and confirmed in our survey data running linear regression models (controlling for age, gender, education, work experience, region of origin, duration of BAN and RBSG affiliation and organization size).

3.1. ACTOR LEVEL FACTORS

3.1.1. Member ideal type

First and foremost, members' experience of the BAN (as well as its benefits) differ significantly depending on which member ideal type they belong to (cf. Section 2.1.4). When looking at the extent of **interaction** and size of the social network, the so called "activatable" members show the lowest levels, whereas the "co-creators" and "networkers" turn out to be the most interactive and connected. For instance, "activatable" members reported one or more conversations with 24 other members on average. The middle group (consisting of "grateful", "expert" and "high profile" members) reported 28 such contacts and the "networkers" 36, while "co-creators" reported talking with an average of 89 other people. Interestingly, "networkers" show an even higher interaction frequency than the "co-creators" but still have far fewer contacts, both on the superficial and on the deeper level. This can be explained by their younger age and that they have, on average, been involved with BAN and Robert Bosch Stiftung for a shorter period of time⁴¹. This implies that "co-creators" may have had longer time to build their personal network within the BAN.

Turning to the **direct benefits**, similar differences among the ideal-typical members arise. The "activatable" group reports the lowest level of benefits with respect to knowledge acquisition, resources and legitimacy gains and they also report receiving the least social and emotional support. The "middle

⁴¹ While most "co-creators" first took part in a program of Robert Bosch Stiftung in 2012, the "networkers" only did so in 2016. "Co-creators" joined the BAN half a year earlier than "networkers".

group”, on the other hand, showed higher interaction levels than the “activatable”, though the direct benefits experienced are similarly low. The “co-creators” and, to a slightly larger extent, the “networkers”, report the highest levels of direct benefits from the Bosch Alumni Network across all categories.

		<i>Outputs and outcomes of the Bosch Alumni Network</i>			
		Interaction and social network	Direct benefits	Social impact	Feedback
<i>Factors shaping the outputs and outcomes of the BAN</i>	Actor level	<ul style="list-style-type: none"> • Member type • Goal clarity • Duration of BAN affiliation • Awareness • Impact approach • Age 	<ul style="list-style-type: none"> • Member type • Goal clarity and openness • Duration of RBSG affiliation • Awareness • Impact approach • Age • Organizational size 	<ul style="list-style-type: none"> • Member type • Goal clarity and openness • Duration of RBSG affiliation • Impact approach • Organizational size 	<ul style="list-style-type: none"> • Member type • Goal clarity and/or openness • Age
	Network level	<ul style="list-style-type: none"> • Trust, reciprocity, accessibility • Network “health” • Diversity • Geographic proximity 	<ul style="list-style-type: none"> • Trust, reciprocity, accessibility • Network “health” • Diversity • Geographic proximity 	<ul style="list-style-type: none"> • Trust, reciprocity, accessibility • Network “health” • Diversity • Geographic proximity 	<ul style="list-style-type: none"> • Trust, reciprocity, accessibility • Network “health” • Diversity • Geographic proximity
	Architectural level	<ul style="list-style-type: none"> • BAN formats • BAN cluster • RBSG programs • Communication channels 	<ul style="list-style-type: none"> • BAN formats • BAN cluster • RBSG programs • Onboarding • Communication channels 	<ul style="list-style-type: none"> • BAN formats • BAN cluster • RBSG programs • Onboarding • Communication channels 	<ul style="list-style-type: none"> • BAN formats • BAN cluster • RBSG programs • Onboarding • Communication channels

TABLE 4: FACTORS SHAPING THE OUTPUTS AND OUTCOMES OF THE BAN.

The **social impact** created through joint efforts of the BAN’s key protagonists differs along the member ideal types too. The “networkers”, followed by the “co-creators”, report the highest levels of innovation, collective action and – with the biggest difference – strengthened civic resilience. The latter difference probably points to the higher share of internationals among the “networkers”. The “activatables”, followed by the “middle group”, claim to have had the least social impact through the BAN. Similarly, the **feedback effects** – essentially success attribution to the BAN and intentions to contribute more to the network in future – differ along the same logic. For example, 89% of “networkers” and 73% of “co-creators” indicated that they wish to share more opportunities and resources with the network in the future, whereas only 57% of “activatables” and 69% of the “middle ground” group agreed with this statement.

The findings underline that a major driving force behind the different levels of BAN outputs and outcomes among the ideal typical members is the extent of their **network involvement**. As one of the members described in an interview:

"I think these networks, you know, you get out of them as much as you put into them" (Member interview 18)

"We as members must lean in in order to take advantage of all that it can be" (Member interview 2)

This approach is reflected strongly in the different ideal types. Whereas only 6% of the "activatable" members indicate to proactively engage on the platform *boschalumni.net* (e.g. posting, tagging and promoting), 86% of the "co-creators" and all of the "networkers" reported to do so. Similarly, while 67% of the survey participants we categorized as "co-creators" indicated that they engage in rather strategic offline events (e.g. Network Conference, strategy meetings), only 44% of the "networkers" and 28% of the "activatables" did so. On the other hand, network involvement also reflects the role that members ascribe to themselves: self-identifying as a mere "guest of the network" is most common among the "activatables" (56%) and least common among the "co-creators" (24%). By contrast, a sense of co-ownership in the network is highest among the "co-creators" and "networkers" (67% each), and below average among the "middle group" (29%) and the "activatables" (10%).

3.1.2. Goal clarity and openness

Another factor on the actor level that shapes the network outputs and outcomes was found to be the individual approach to networking and their **openness to the emergent characteristics of the network**. Therefore, interview partners and survey participants were asked whether they usually have a "clear goal when they engage in the network (e.g. a project I want feedback on, an idea I want to implement, etc.)" or whether they do so "without a concrete goal but with an open mind to see what emerges". Interestingly, we found that both individual network approaches highly correlate with each other, indicating that these seemingly contradictory approaches are not exclusive but rather are frequently combined.

"I think it is a mixture. Some of them [benefits, note] are more foreseeable [...] but then again the network has a lot of unforeseeable opportunities. For instance, I never thought that I would be, when I joined, I did not think that I would be facilitating a workshop in [African country], I did not think that I would be facilitating a network in [African city] for UNESCO." (Member interview 16)

With regard to the BAN outputs and outcomes, goal clarity turns out to be significantly linked with a higher number of deepened contacts and higher levels of interaction. Then again, **both goal clarity and openness to emergence lead to more direct benefits** on all dimensions as well as to social impact in the sense of strengthened resilience and facilitated collective action.

When it comes to the generation of innovation and collaboration, goal clarity functions as a direct factor whilst openness to emergence as an indirect factor (via interaction). Among the members who engage in the network with clear goals, 33% reported having co-developed an innovation with another member

(26% among members who did not engage with clear goals) and 55% started a new project or initiative with another member (35% among members without clear goals).

Lastly, feedback effects to the members (i.e., intentions to engage more in the network in the future) were higher for members with clear goals, whereas members with higher levels of openness tended to express more interest in future collaboration with iac Berlin and Robert Bosch Stiftung.

3.1.3. Duration of the BAN and RBSG affiliation

Next, the time a member has been affiliated to the Bosch Alumni Network and/or the Robert Bosch Stiftung also shapes the way he or she interacts with and benefits from the organizations. More precisely, a **longer membership within the BAN is associated with higher the interaction frequency**. One possible explanation for this is that long-time members are likely more aware of the many offers and possibilities in the network and may have a better understanding of what matches their needs. As will be discussed in Section 4.2, higher levels of awareness of tools and opportunities of the BAN is associated with higher levels of greater interaction (and direct benefits). At the same time, long-term members may have simply had more time to self-select into and out of the network, with those who perceive no impact of the network permanently vanishing into inactivity. In this case, the only members who remain are those who perceive the network as meaningful and who feel a connection to it.

An earlier participation in a program by the Robert Bosch Stiftung has no strong effect on interactions, and reduces the perceived benefits on some levels. Amongst others, individuals who have participated earlier in programs were somewhat less likely to experience benefits from knowledge acquisition, legitimacy gains, resilience and increased collective ability to act. From a different angle, this suggests that **members who had more recently participated in programs are more likely to experience gains** from their BAN membership.

3.1.4. Approach to create social impact

Among the Bosch Alumni Network members, a variety of approaches is applied to create social impact, from education and consulting to investment and political work. Some of those appear to take advantage of the network more than others. For instance, survey participants who indicated to **consult and support others** in their activities to create impact turned out to be particularly interactive and connected. Members working in the **media** sector are also more active in the network, perceive that they gain more direct support from other members, and feel more supported with respect to civic resilience and facilitating collective action than members from other fields. This might also have to do with the particularly high importance of international contacts in this industry, as one respondent described:

"...you meet other people, and some of them are editors and some of them know editors, so that is really helpful. I mean, I am referring to journalism, I have no idea if this is the same in other clusters, but actually in terms of what is the most important, in journalism the most important are connections and contacts". (Member interview 4)

Third, **investors** tend to gain legitimacy within their professional field. Altogether, the network appears to unfold a certain flexibility and openness to enable different members to gain what they need – provided that they make an effort (cf. Figure 18).

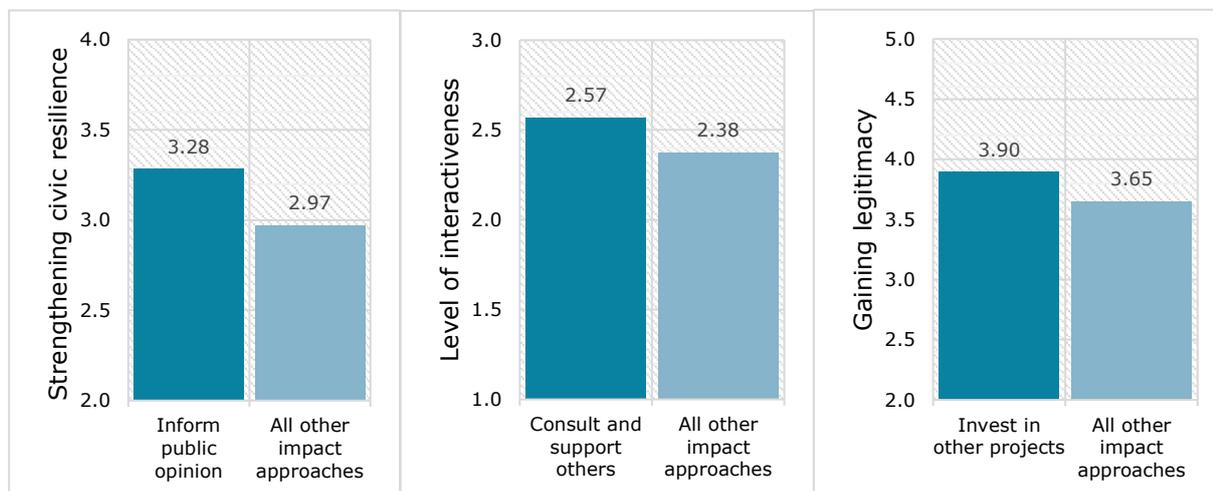


FIGURE 18: IMPACT APPROACH SHAPING SELECTED BAN OUTCOMES⁴².

3.1.5. Other insights on the actor level

The younger the **age** of BAN members, the more positive was the effect on the level of interaction, the direct benefits gained and the intention to contribute more. Simultaneously, the level of **seniority** had no direct effect on any of the BAN'S outputs and outcomes. This implies that the impact model of the Bosch Alumni Network seems to provide similar value to members, regardless of their high or low hierarchical level. Similarly, **gender** did not display any influence a member's likeliness to interact, gain benefits or generate impact within and through the BAN.

3.2. NETWORK LEVEL FACTORS

3.2.1. Community norms

A crucial aspect in impact-oriented networks are the social norms shared and followed by their members. Academic research has repeatedly shown that the occurrence of exchange and cooperation largely depends on whether these actions represent an appropriate behavior under a given circumstance. The perceptions of appropriateness are often expressed by community norms, e.g. in the form of mutual trust or norms of reciprocity⁴³. For instance, high levels of trust "lubricate cooperation and so reduce

⁴² We compared the BAN outputs and outcomes (means) of three groups of survey participants according to their impact approach: "inform or influence public opinion", "consult and support others in their activities to create impact", and "invest in other projects, ventures or initiatives". The scales on the vertical axes range from 1 to 5.

⁴³ Thomson and Perry (2006)

transaction costs between people. Instead of having to invest in monitoring others, individuals are able to trust them to act as expected⁴⁴. The influence of trust and norms was raised early on in our qualitative interviews, as is exemplified by the following two quotes:

"As a regional coordinator [...] for instance, whatever we do there is first this space where people can build trust [...] so that they can open up". (Member interview 14)

"There is a sense of solidarity which you feel is staying. Even in Ethiopia there are people who were part of the program or the workshop for instance on digital safety and people from Africa and there was someone from Zimbabwe, there was someone from Kenya and we are all part Bosch alumni network". (Member interview 6)

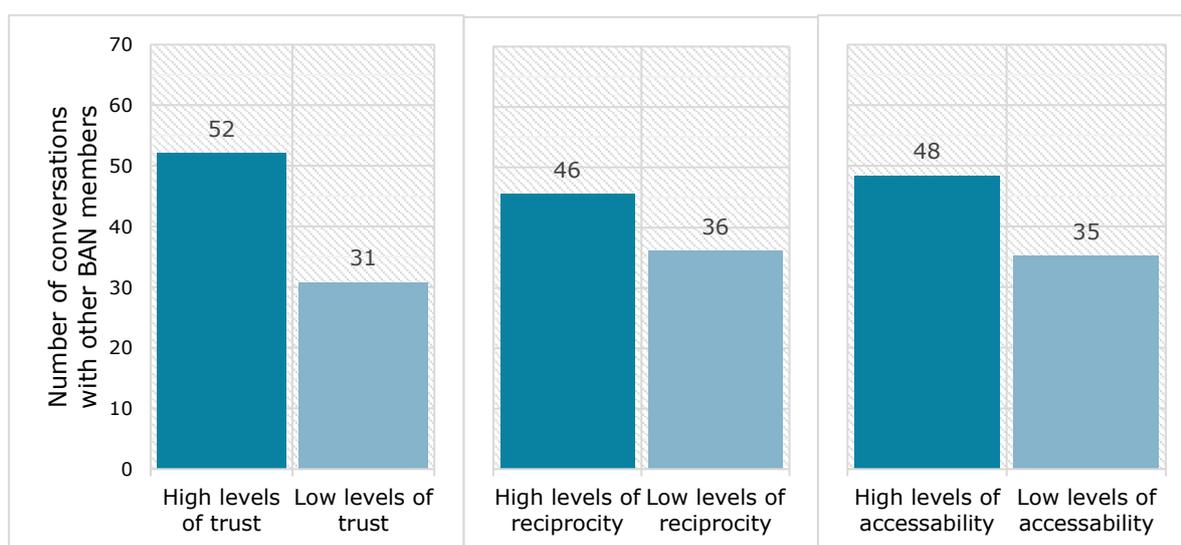


FIGURE 19: COMMUNITY NORMS SHAPING THE BAN MEMBERS' CONNECTIONS⁴⁵.

In our quantitative survey, we found that a number of norms are quite prevalent among members. 88% of members believe that "in general, the people here can be trusted", 70% agreed that "there is a culture of giving back in the network. When you learn or benefit from it, you pass it on to other members". 60% experience a high prevalence of accessibility as a norm, finding it "easy to approach other members and ask them for help".

In a next step, we tested the influence of **trust, reciprocity and perceptions of accessibility** within the BAN membership on interactions, benefits, impact and feedback in the network – and found **significantly positive effects of these norms on all levels of the impact model**. The more the members

⁴⁴ Pretty (2003, p. 1913)

⁴⁵ The levels of trust and accessibility pictured here are based on cumulated average approval ratings to the statements "In general, the people here can be trusted" and "I feel comfortable discussing a new idea with other members" (trust) as well as "I find it easy to identify competent members when I seek advice" and "I find it easy to approach other members and ask them for help" (accessibility).

trust each other, the more they believe that the time and support invested in others will be reciprocated over time. Further, the easier they can identify and access (competent) peers, the more interaction, connections, direct benefits, social impact and feedback effects are generated within the Bosch Alumni Network (cf. Figure 19). The only exception here is that norms of reciprocity do not affect the number of superficial contacts a member has.

3.2.2. Network composition and diversity

In addition to the norms that guide the network and the relations within, we found the frequencies and consequences of interactions and collaborations within the BAN are also influenced by the structural composition of a group (e.g. whether a group consists of completely uniform or of very different individuals). Thereby, results suggest that **more diverse networks create better outcomes for members.**

In concrete terms, we found that the more the social network of an average BAN member consists of members from different countries, disciplines and levels of seniority, the higher the effects on all aspects of the impact model. This also holds true for new contacts as well as for contacts to iac Berlin and Robert Bosch Stiftung. By contrast, the higher the share of existing contacts and of contacts from joint programs within the network, the lower the benefit and impact generated, especially regarding innovation.

These findings can be illustrated by direct comparisons. Members who had only contact with alumni from the same Robert Bosch Stiftung program were equally likely to collaborate and receive information as those who also made contact beyond the scope of their initial program. The latter were however twice as likely to report that they had been “hired or contracted through the network” (20% agreement) than respondents with program-contacts only (11% agreement). Differences are even more pronounced with respect to international diversity. Among respondents who interacted primarily with individuals from the same country, few reported having developed a joint innovation (21%) or joint project (23%) with another member. These figures were significantly higher for members with at least one international contact. Here, 31% reported collaborative innovation and 48% reported starting a new project or initiative with another member.

3.2.3. Network health

Another way to look at the network composition is through the lenses of network theory. For that reason, we analyzed the role of the Bosch Alumni Network’s “health” based on four main aspects: (a) the existence of sufficient bridge-building actors who connect e.g. between clusters and to individuals outside of the Bosch Alumni Network; (b) an equal spread and awareness of the functioning and offers of the network; (c) enough opportunities for the members to contribute; and (d) freedom to experiment.

While these dimensions were informed by background talks with iac staff as well as background research, qualitative interviews also pointed in similar directions, e.g. frequently mentioning the relevance of openness in the BAN,

"It's an open network in that sense that we are... I feel really free to, in a way, take things in my own hands if I don't like it, to say what I want to say". (Member interview 20)

"When you can feel that there is an opportunity then it's really an open place to suggest something".
(Member interview 12)

Results from the survey suggest that a considerable part of the network perceives the network structure to be healthy. Results, however, also shed light on some of the **opportunities for improvement in the network**.

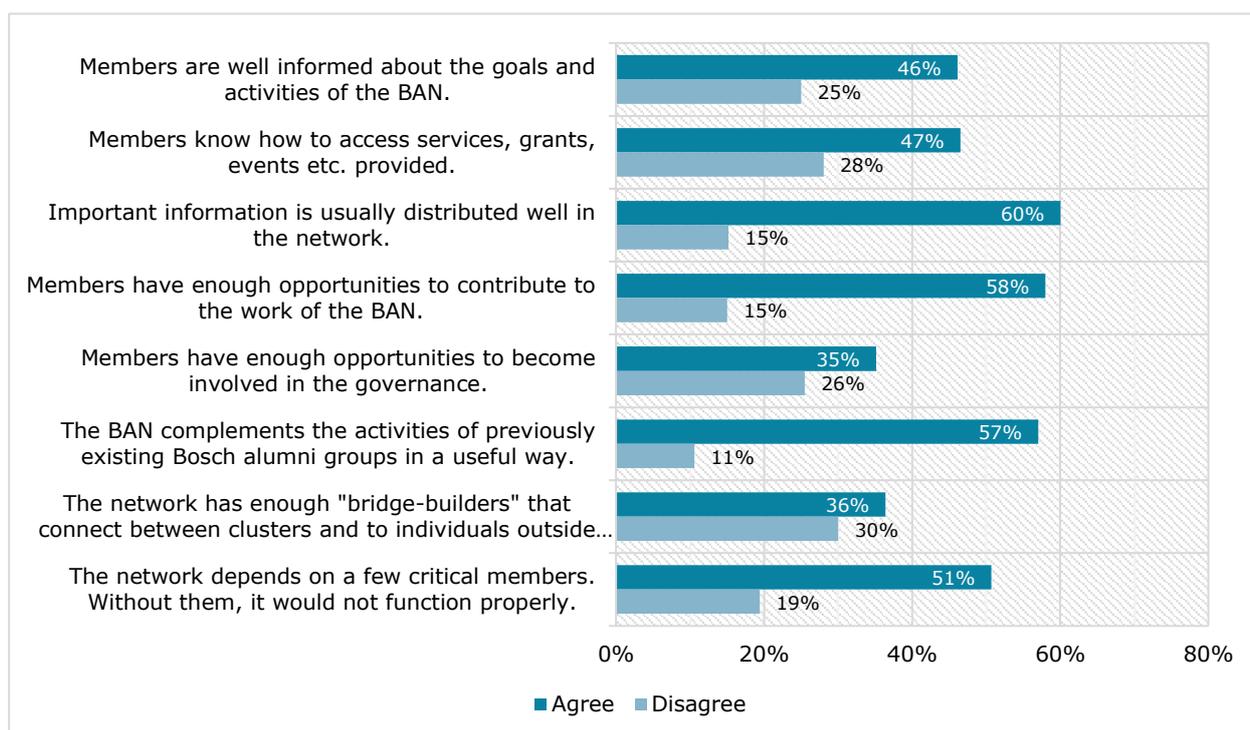


FIGURE 20: THE BAN'S NETWORK "HEALTH" AS PERCEIVED BY THE MEMBERS.

Members provided mixed assessment with respect to **information distribution** in the network. While a majority (60%) indicated that they thought information was "usually distributed well in the network", 15% of respondents disagreed. Similarly, 47% suggested that "members know how to access services, grants, events, etc. provided by the Bosch Alumni Network" (while 28% disagreed), and 46% agreed that "members are well informed about the goals and activities of the Bosch Alumni Network" (while 25% disagreed).

Responses also indicate some critical perceptions with regard to **network structure and governance**. 36% of respondents agreed to the statement "The network has enough "bridge-builders" that connect between clusters and to individuals outside of the Bosch Alumni Network". Another 30% disagreed with the statement. Related to this, 51% agreed with the statement "The network depends on a few critical members. Without them, it would not function properly". Similarly, only roughly a third (35%) felt that

“members have enough opportunities to become involved in the governance of the Bosch Alumni Network”, whereas 26% disagreed with this statement. These findings suggest that, while the network in its current form already delivers a wide range of benefits to its members, they still perceive areas with room for improvement (cf. Figure 20).

Assessments were more favorable with respect to **freedom to experiment**. 62% agreed that the network provided this freedom, only 6% disagreed. Similarly, respondents had predominantly positive view on a question that had been raised repeatedly in background conversation and in which iac Berlin had invested considerable effort (see Section 1.2). 57% of respondents indicated that they believed that “Bosch Alumni Network **complements the activities of previously existing Bosch alumni groups in a useful way.**” Only 11% disagreed with the statement.

The importance of these factors should not be underestimated. Our models show that all of the named “health parameters” (except for that of the assessment that the network depends on a few critical actors) showed significantly positive effects on all parameters of the impact mode.

3.2.4. Geographical proximity

Lastly, the geographical proximity between the members of a network turned out to effect the impact model only marginally. The measurement used in network theory known as closeness centrality has been measured inversely, i.e. via the geographical distance to the Bosch Alumni Network’s physical center – Germany – and via the region of origin as such. It turned out that geographical distance has **no significantly positive or negative effect on the interaction**, but does **decrease the individual social network size**. This goes hand in hand with insights gained throughout the qualitative research, which underline that participation at physical events is important for a member’s involvement in the BAN (see Section 4.3 for details).

Interestingly, in spite of the smaller network size, survey participants who are active at a greater distance from the geographical center reported **benefits** which were **equally high or in a few cases even higher** than their peers closer to the center. Benefits and impact that were more prevalent among distant members include knowledge acquisition (particularly for respondents from Africa and the Middle East) and innovation (particularly in the Middle East; cf. Annex B.1). Also, geographically distant members were more likely to attribute their professional success to the BAN and expressed significantly higher willingness to contribute more to the network in future (except US respondents), as well as collaborate more with iac Berlin and the Robert Bosch Stiftung.

Nonetheless, geographical proximity was not the most influential factor shaping the direct benefits of the BAN. This suggests that, in spite of obvious challenges with respect to transaction costs and cultural differences, the network is fairly apt in delivering value equally to members across the world.

3.3. ARCHITECTURAL LEVEL FACTORS

3.3.1. BAN events, trainings and grants

When looking at the role of the specific events and offers organized and moderated by the International Alumni Center for the BAN members (cf. Table 2, Section 1.2.4) we found a **consistent and significantly positive effect on the impact model**. Although this simply indicates that higher general levels of activity lead to higher outputs and outcomes⁴⁶ (our basic assumption behind the impact model outlined in Section 2), we want to point at a few selected aspects of the analyses.

Overall, our analyses show that the different interventions have slightly different complementary effects on the network. In the context of interaction and the formation of individual social networks, **Cluster Kick-offs** and **Practitioners' Labs** appear to be the most effective events. For instance, survey participants who have participated in several Cluster Kick-Offs indicated an average of 40 "deep" contacts within the BAN (i.e. members with whom they interact regularly), the same value is only 12 in the total sample. Also, members participating in a Practitioners' Lab stated that they had been in contact with twice as many members as was reported in the overall sample.

Regarding direct benefits, the **Learning Exchange Grant** format and the Practitioners' Lab were reported to be of particular value across most of the benefits surveyed. Concerning knowledge gain, **trainings** were indicated to be the most useful, whereas for resource access it turned out to be the **Network Conference** that was reported as most fruitful. Interestingly, the benefit of the latter is reported to decrease rather than increase when participating several times. **Regional Activity Grants** provide the highest benefit with respect to gaining legitimacy, while **Monday on the Couch** yields most social and emotional support.

On the level of social impact, we found that Learning Exchange Grants and the Practitioners' Lab are most likely to strengthen civic resilience and facilitate collective action. Innovation is reported to emerge particularly with the help of trainings and, again, Learning Exchange Grants.

The feedback effects are highest for most of the above named events and offers: Practitioners' Lab, Cluster Kick-offs, and Learning Exchange Grants. For instance, surveyed members who have participated in more than one Learning Exchange Grant indicated a success attribution of 58% (in contrast to 25% among the full sample). For further differences between selected BAN events and offers, see Annex B.2.

⁴⁶ Due to aggregated survey items, causal and controlled effects of single offers and programs cannot be calculated separately. The presented results are compared means and thus should be interpreted carefully. The same applies to the Sections 3.3.2, 3.3.3, and 3.3.5.

3.3.2. BAN Clusters

The cluster groups are another central element in the BAN architecture. Again, cluster membership per se is positively linked to the different elements of the BAN impact model. We found the following insights emanating from comparison of the following group means: members of the **Europe Cluster** reported the highest number of superficial contacts (had a conversation with 50 members on average, the mean in the rest of the sample is 30), members of the **Sustainable Living Spaces Cluster** reported the highest number of deepened relations (17 individuals with whom cluster members interact frequently, in comparison to the mean of the rest of the sample, 11). The highest levels of interaction are reported among members of the **Health and the Peace Clusters**.

Turning to the direct benefits, the Peace Cluster members report gaining the highest levels of direct benefits, followed jointly by the Health, Social Innovation and Culture Clusters. Amongst others, this is reflected in participants' answers to the question, how many "professional opportunities (e.g. inspiration through a member) have you identified through the Bosch Alumni Network so far". Here, members of the Peace Cluster identified 3.9 opportunities on average and members of the Health Cluster identified around 3.8. In other clusters, these values reached up to 3.0 and 3.5 opportunities.

The social impact was also reported to be the highest among the Peace Cluster members, followed by the Media, Health and Social Innovation Clusters (each for the case of strengthened civic resilience) and also the Civil Society Cluster (for innovation emergence), as well as the Sustainable Living Cluster (for collective action). For further differences between the cluster groups within the BAN, see Annex B.3.

3.3.3. Program affiliation

The Robert Bosch Stiftung programs that the members have participated in are structural pillars of the Bosch Alumni Network. They play an important role in selecting, training and building relationships between members. Due to the fact that some of these programs had their own alumni groups even before the BAN came into existence (cf. Section 1.2), many of these sub-groups continue to exist within the BAN to some degree. These groups have a strong influence on members' experiences in the network. For more than half of the members, over two thirds of (28%) or even all (25%) of the individuals they engage with frequently, are alumni of the same program as they themselves.

Comparing the means of the surveyed program alumni along the aspects of the BAN impact model, we gained the following descriptive insights⁴⁷: the level of interaction is highest among former participants of the "**Global Diplomacy Lab**", whereas "**START**" and "**MitOst**" alumni turn out to have had the most regular and one-time contacts within the BAN. The highest knowledge gain was reported among alumni of "**Truth, Justice & Remembrance**", resource access for the "START" program. Former participants

⁴⁷ Due to strongly varying subsamples, these figures have to be interpreted with caution. Only subsamples consisting of at least 10 cases were taken into account.

of “Reporters in the field” indicated the highest benefit regarding legitimacy, with the “**Grenzgänger**” alumni reporting the most social and emotional support.

Social impact generation also varies strongly depending on the program the BAN members originate from: innovation emergence is highest among the “Global Diplomacy Lab”, “Reporters in the field”, “Tandem Europe”, and “Truth, Justice & Remembrance” alumni. Facilitated collective action was most experienced by “**EPRIE**” alumni, strengthened civic resilience by “**Reporters in the field**” alumni. Lastly, feedback effects were highest for former “Truth, Justice & Remembrance” participants (regarding success attribution) and “**ChangemakerXchange**” (regarding intentions to contribute more, including collaborations with RBSG and iac Berlin). For further differences along the RBSG program history, see Annex B.4. In relation to the RBSG program history, we also found that the closer the relationship between the Robert Bosch Stiftung and the members and/or their organizations, the higher the outputs and outcomes of the Bosch Alumni Network.

Irrespective of these differences, it is important to point out that **program affiliation in general had a positive effect on a number of variables**. Members with a program affiliation were more likely to take part in offline and online activities, and reported more connections (21.1% more surface level connections, 13.6% more deep connections) than members that lacked this affiliation and experience. They were more likely to perceive the BAN as a space governed by norms of reciprocity and trust, and were more likely to feel a sense of belonging to it.

3.3.4. Onboarding

The process of being onboarded and introduced to the Bosch Alumni Network is a crucial factor understanding the BAN’s offers and basic functioning (see also Section 4.3). In an ideal scenario, onboarding helps members to learn about the opportunities offered by the network, its key actors, functions and platforms, and provides guidance on how to start one’s journey into the network.

However, members’ feedback with regard to onboarding was rather critical. Only **38% reported a positive onboarding experience**, 29% perceived it as neutral, and 9% recalled a “rather negative” or “negative” experience. While otherwise very opinionated, a fairly large share of respondents (24%) indicated “I don’t know” as their response. Qualitative findings suggests that this might have to do with some respondents not experiencing any type of onboarding process consciously:

“My memory would be that I was sent an email explaining that we as a result of our participation in Global Diplomacy Lab were invited to become a member of the Bosch Alumni Network. We were given a link to sign up for the Bosch Alumni platform which I did right away [...] That’s about all I recall there. I don’t recall any other onboarding process and you know I will be embarrassed if you tell me there was something welcoming party”. (Member interview 2)

“I can’t remember kind of really organized process of onboarding”. (Member interview 18)

“I did not join the network, in the sense of joining”. (Member interview 16)

This finding is noteworthy, especially because a **positive onboarding experience was also associated with higher perceived benefits**. Resource access, gaining legitimacy and social support were significantly more likely to be experienced by members who indicated that they were satisfied with their onboarding process. The same holds true for the emergence of innovation, facilitation of collective action and strengthened civic resilience as well as for several feedback effects.

Interestingly, the effects on the interaction frequency and the social network size are not significant. This suggests that good onboarding might make members more efficient. By building the right connections and choosing the right interactions, they manage to gain more benefits with the same effort. Taken together, these findings point **to an opportunity for improving onboarding processes** in the network (see also Section 4.3 and 5.2).

3.3.5. Communication channels

As discussed in Section 2.2, the most frequent communication channels in the network include email (68%), messaging services (e.g. WhatsApp, Signal) and social media channels (56% each), face-to-face communication (39%) as well as the online platform *boschalumni.net* (39%).

Interestingly, the choice of communication channels was also linked to different experiences in the network. For instance, members who communicate face-to-face and/or via phone had the highest number of contacts (both regular and one-time) and interacted most often, underlining the value of face-to-face communication. Similarly, members who communicate via their telephone were more likely to report benefitting from social and emotional support.

On the other hand, knowledge gains, resource access and legitimacy increases were most likely to be experienced by members who communicate via the platform *boschalumni.net*. **Users of the platform were also more active** than users of any other form of communication, **both in online and offline activities**. Similarly, they were more likely to experience direct benefits as well as social impact across all categories, and were most likely to attribute their success and impact to the BAN. Users of the platform were also more likely to have a favorable perception of network health (Section 3.2.3) and onboarding (3.3.4).

Taken together, these findings highlight the **central role of the online platform** as the communication and navigation tool within the network.

4. Supplementary analyses

Building on the impact model of the Bosch Alumni Network (Chapter 2) and its influencing factors (Chapter 3), this chapter contains the additional analyses with regard to topics of particular relevance: first, we outline findings of the evolution of the BAN on a temporal dimension (Section 4.1). Then we present positive feedback from members (Section 4.2) and their wishes for the BAN in the future (Section 4.3). We close this chapter with some preliminary insights into the perceptions and attitudes towards the role of the Robert Bosch Stiftung (Section 4.4).

4.1. EVOLUTION OF THE NETWORK

Given the fact that the Bosch Alumni Network has been in existence for just over three years and that an international impact-oriented alumni network exhibits an advanced level of complexity, one crucial factor must be kept in mind: **time**. As our interview partners have pointed out in the background talks, until very recently the BAN was still in its initiation phase, with the main focus on inviting (new) members from the various programs of the Robert Bosch Stiftung while building up the BAN architecture.

As shown in Section 1.2, the period between 2017 and 2020 is thus associated with rapid growth in scale and scope. Between mid-2017 and mid-2020 the number of registered members increased from 2,200 to 6,800 and the number of posts increased from 124 to 792. Between mid-2017 and 2019 (pre-COVID-19 pandemic) the number of events increased from 144 to 757 (or to 316 by mid-2020, in spite of evident difficulties to host events during lockdowns). This growth did not go unnoticed by network members. As survey results show, more than 80% perceive that the network has become larger, while 75% reported increased diversity and a higher number of activities offered. Moreover, almost 70% perceived that the quality of offers has improved (cf. Figure 21).

This increase in the overall network size was also paralleled by an **increasing involvement of the members** over time, as well as an increase in the size of individual networks. While our cross-sectional analysis does not allow for a longitudinal inspection, it does show that individuals who had been BAN members since 2017 reported 140% more surface contacts and 50% more “deep” contacts with other members than those who registered in 2019. This is likely a consequence of the increase in offers and functions over time, more opportunities to engage with other members, as well as a better understanding of the diverse opportunity space of the BAN.

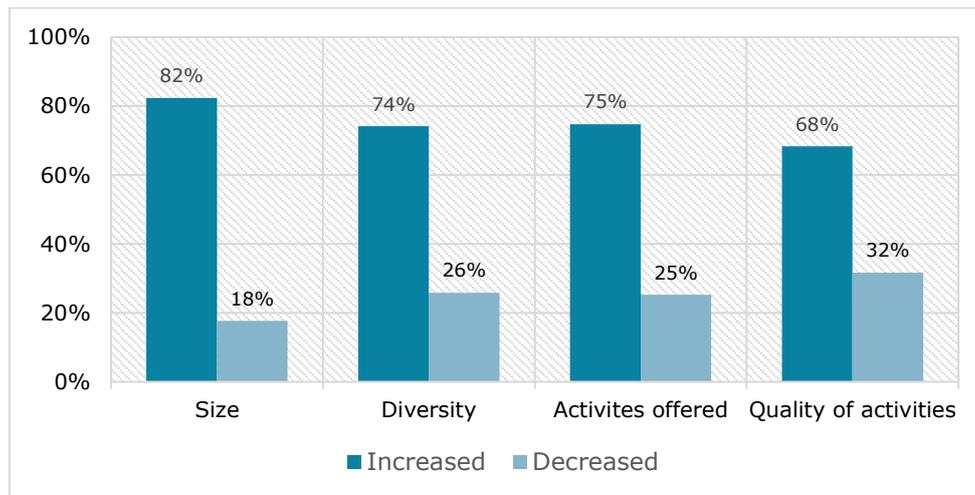


FIGURE 21: EVOLUTION OF THE BAN FROM THE MEMBERS' PERSPECTIVE.

As outlined in Section 2.5, this increased involvement is also encouraged by the positive experiences made in the network. Interactions, diverse forms of direct benefits and experiences of increasing social impact were all associated with an increased willingness to contribute and invest (more) into the network in future. The effect of this positive, self-reinforcing cycle is also visible in the rapidly growing share of member-generated content on boschalumni.net: while in 2017, 45% of events had been initiated by members, this share has risen to 76% by 2019. The share of opportunities posted on the platform by members similarly increased from 63% in 2017 to 84% in 2019. This trend is also mirrored in the level of engagement of members as regional coordinators. From its initiation in mid-2018 until mid-2020, this voluntary role has been taken on by more than 80 members (cf. Section 1.2).

With the increasing member involvement comes the second dimension of the network's evolution: **scale effects of a larger network**. The more members an impact-oriented network consists of, the better they are able to collectively address a complex social problem. As shown in Section 2.3 and Section 2.4 this also manifests on an individual level. The higher the number of contacts a member has, the more benefits and social impact they experience and attribute to the network. Members interviewed in the qualitative research phase experienced a similar process:

"The more people you have coming in, you know this idea of what can I do, what can I gain from this network, the more beautiful and amazing it becomes". (Member interview 14)

Conversely, the growth of the Bosch Alumni Network is also associated with increased **internal differentiation and fragmentation**. Among our survey participants, more than 60% reported that they perceive the BAN increasingly as a fragmented network (as opposed to one large community). Furthermore, some members described the network in our interviews as consisting of several encapsulated mini clusters.

"I do feel as the network is so broad that most people just remain within their mini clusters and never really know what else is outside of it". (Member interview 6)

While such fragmentation is arguably difficult to avoid in a growing network, it also reduces the likelihood of serendipitous encounters that can enable novel joint projects, unexpected referrals and innovation. Our quantitative analyses support this notion, associating higher perceptions of fragmentation with lower new project collaborations, innovations and referrals (though not activities that are likely to take place within a sector, such as hiring other members or accessing funding).

On the other hand, a number of instruments of the BAN architecture seem to counteract fragmentation. Being a member of a cluster, the use of Learning Exchange Grants and Regional Activity Grants, as well as taking part in Cluster Kick-Offs, network strategy meetings, offline trainings and workshops were all associated with fewer experiences of fragmentation. Furthermore, almost any type of engagement on boschalumni.net was associated with lower perceptions of fragmentation, again underlining the important role of the tool for network navigation. These effects were also supported by our qualitative analysis, as for instance:

"Initiatives like the Learning Exchange Grant facilitate that gap to make it more like inclusive, diverse and global as well". (Member interview 9)

4.2. MEMBER FEEDBACK: "THINGS TO KEEP"

While many of the previous chapters already provided some insights into the satisfaction of members, we also used surveys and interviews to explicitly ask for "things to keep" and "wishes for changes" in the network. With respect to positive feedback, four general themes emerged.

First, members expressed high levels of satisfaction with the **online platform boschalumni.net**. When asked for direct feedback in the quantitative survey, 79% of the survey participants indicated a rather high or high satisfaction. This was also mirrored in the open feedback section in which they described advantages such as the ease of access of other members, messaging and discussion options, the relatively low technical complexity, the event information.

"[The] Platform structure is already great, it really gives information in one dashboard when you first start to login". (Survey participant)

"Die digitale Infrastruktur ist genial. Toll, dass ihr das auf die Beine gestellt habt und weiterentwickelt". (Survey participant)

"I think, it is the online platform, the way it is structured, the way it works, the way it is used. And I think this is a really, really big plus in a network where people are not in the same place, they are all over the world". (Member interview 7)

Also, the **offers and events** in the Bosch Alumni Network were perceived as broadly positive. 56% of the surveyed members rated the quality of the online events and formats as rather positive or positive (with 19% indicating "I don't know" or "not applicable"). Specifically, the weekly digest, the job opportunities and webinars were mentioned repeatedly and perceived as positive aspects of the network that should be kept in future. With almost 70%, the satisfaction with the quality of the offline events and

offers is even higher. Particular event formats, such as Monday on the Couch and trainings were positively highlighted. In addition, the availability of the community space in Berlin, funding opportunities and grants as well as the diversity of topics offered were all rated positively.

Certain ambiguity exists with regard to the cluster structure: whereas one part finds it very useful, another group of members (e.g. who haven't yet been informed properly) reported some confusion about it.

"The regional and thematic clusters are very important!" (Survey participant)

"I also believe the 'clusters' and 'groups' create a more fractured feeling within the network. Too many silos." (Survey participant)

The **team of the International Alumni Center** in Berlin represents another aspect of the BAN that is perceived very favorably – at least by those members who are geographically rather close and/or have been sufficiently involved in the network. Accordingly, 23% of the survey participants indicated "I don't know" or "not applicable". The 59% of the surveyed members who reported rather high or high satisfaction with the work of the BAN coordination team positively highlighted their engagement and support, their constant availability, their close relationship as well as their coordination and moderation work on the platform. This positive assessment was also reflected in the open comment section and in interviews:

"The team that works very hard to be always accommodating towards our requests and needs." (Survey participant)

"Above all [I suggest to keep] the motivation and engagement of the iac team." (Survey participant)

"I'm quite satisfied. I think there is a very visible effort in the IAC to build this network, to develop it to try different kinds of methodologies, to be flexible and allow people to test different approaches. And I think that's really valuable". (Member interview 7)

"The managing team is really intelligent in the way they are handling the network. They are not managing a network, they are coordinating a network and moderating a network and in this way, they are managing". (Member interview 20)

Openness and norms of collaboration. A number of further positive associations of members centered on the open, purposeful and collaborative nature of the network. Mentioned topics included norms and values guiding the network (e.g. openness, connectedness between likeminded people); the diverse, interdisciplinary and international composition; the culture of information sharing and collaboration; the simultaneous voluntariness (e.g. no pressure to act, flexibility); a decentralized and flat hierarchy; both professional and private partnerships; agile and future oriented agenda (e.g. with respect to COVID-19 topics).

"It is really good to have a platform for alumni and to bring together different groups. This focus on interconnectedness is much needed." (Survey participant)

"I think the community is very open and approachable - this is great. Also the opportunities for funding and grants helps!" (Survey participant)

"Values and opportunities, values that are shared, intercultural dialogue, mixing of educational character and social concern, impact on social issues and so on and opportunities of getting together, having the funding to do things together, meeting other people to do projects together and so, values and opportunities".

(Member interview 17)

Some members saw these values also reflected in the governance of the BAN praising the attempt to bring members together and include their voices and ideas.

In addition to these assessments it should be stressed that the different benefits and impacts outlined in Chapters 3 and 4 also reflect dimensions of satisfaction with the network, just as the fact that members attribute 24.9% of their professional success and impact to the network. Similarly, the steadily growing activity in the network as well as the high willingness to contribute time on a voluntary basis (2.4 hours per month on average) indicate a generally positive perception of the network and its values.

4.3. MEMBER FEEDBACK: "WISHES FOR THE FUTURE"

Turning to some more critical feedback, it has to be noted that, again, a very high share of survey participants entered answers into the respective open field ("What are your wishes for the future? What should be changed (optional)?"). Their willingness to invest this time at the end of a 30+ minute survey and to deliver their wishes and thoughts for a future BAN indicate the existence of a group of members who hold positive feelings towards the BAN. This group also seems to have a strong interest to participate more – but dispose of few means and possibilities to get involved. "Activatable" members were slightly less likely to fill out the open fields, but nonetheless, all four ideal types of members are represented (cf. Section 2.1.4).

One thematic feedback cluster refers to the issues of **communication, transparency and awareness**. The largely missing onboarding process of new members (cf. Section 3.3.5) keeps many members in the dark when it comes to understanding the network essentials (e.g. cluster structure and content, email notification system, BAN strategy). Yet, more transparent communication was also desired with regard to grant rejections (in order to prevent new members from feeling unable to access the BAN) as well as regarding the future of the Robert Bosch Stiftung and, relatedly, of the Bosch Alumni Network as a whole. This offers a fertile ground for uncertainty, skepticism and, ultimately, the perception of the BAN as a complex and elitist club.

"All above mentioned is not adequately promoted and clearly communicated. The challenge is not so much the number and the quality of existing projects, but lack of communication of the executive office with members. Appointment of our regional coordinators has never been communicated with members in our region. [...] We haven't even been informed on the decision that we would have our coordinator. I would appreciate to be informed on strategy, goals of this network, not only short-term projects". (Survey participant)

In spite of the general praise of the online platform, some wishes were also formulated with respect to improving communication over boschalumni.net and its user experience, including, amongst others, the following statements:

"The platform can be a bit confusing to so many people. I never understood how to navigate the web platform until someone from Italy showed me how to, but the BAN is a goldmine!" (Survey participant)

"The app needs work. Load times are slow. Lacks intuitive features, such as sharing announcements into specific clusters or alumni groups." (Survey participant)

"More emphasis on an open feed/wall for all, where network members can post by using tags, locations, competencies. Less emphasis on clusters, groups?" (Survey participant)

"I enjoy the dynamics of the network. There are a lot of functionalities for collaboration, although it does seem overly complicated". (Survey participant)

Another related set of critical feedback expressed by the surveyed and interviewed members concerns the **structure and governance of the BAN**. Many members desire more exchange across the network (e.g. between clusters, alumni of different programs) and, hence, more bridge builders. As outlined in Section 3.2.3, only 36% of the survey participants agreed to the statement "The network has enough 'bridge-builders' that connect between clusters and to individuals outside of the Bosch Alumni Network". Relatedly, many members perceive the existence of a small circle of decision-makers and "co-creators" who have access to relevant information and strategic decision-making. This group of critical members – whose existence is perceived by 51% of the survey participants – represents a bottleneck for many periphery members who lack access and representation.

This diagnosis goes hand in hand with the desire to implement more ownership for the members, which would involve, for example, the inclusion of members in the shaping of the network. Thereby, the wishes for clearer structural goals, more focus on tangible outcomes and a higher representation of current issues the members are interested in (e.g., climate change, music, social impact) could be put into practice. A concrete proposal made by several members is to increase the focus on smaller networks as opposed to one large one, since a bigger network brought about impersonality opacity and less member-ownership of the network.

"I think there is a sense that a small group of people and their circles run the show in the network. There is very little to no room to penetrate or get involved even when we want. I applied for a few things but nothing materialized because it was given to those who were more actively involved. But I cannot get involved if the standard to get involved is to be involved in the first place". (Survey participant)

"Provide more opportunity to be engaged in the decision making process of the management of the network. To use the potential of each member - I am a PhD candidate in Education and have more than 20 years of experience. I have been engaged in number of international projects in education but haven't had an opportunity to help network grow in this area." (Survey participant)

Besides, a feedback cluster revolves around the wish for **more physical events and personal exchange possibilities** among members. This encompasses both the exchange between professional peers in the same field and geographical bubble as well as externally.

"I feel very strongly about being a member of the network, but at the same time feel like I don't belong in a way. We should have more get-togethers, more meetings and discussions with other members of the network, more diversity of ideas and views on different matters". (Survey participant)

"[Ich schätze die] Cluster, Filter- und Suchfunktionen nach Personen, die vielen Hinweise auf Webinare, Tools, Events, Aktivitäten. Vielleicht gibt es ein Format, das mich zufällig einmal pro Monat für 15 Minuten auf eine virtuelle Kaffeepause mit einem anderen, mir nicht bekannten Netzwerk-Mitglied zusammenbringen könnte (1:1)?" (Survey participant)

„[...] mehr themenbasierte Treffen/Workshops über das Jahr verteilt an unterschiedlichen Orten in Europa und darüber hinaus; bitte mal wieder ein großes RBKM-Netzwerktreffen (das Treffen in Athen war großartig und wunderbar inspirierend und hat zu vielen neuen Kontakten geführt!)“ (Survey participant)

Some members also criticized the reduction of specific offers and programs (e.g. journalism grants, international study trips).

Another strong theme in the material was the existence of something that might be best described as a **geographical gap**. Some respondents criticized the Berlin- and Germany- centeredness of the network and articulated the wish for increased accessibility of the offers. Their suggestions range from more offline events in certain regions (both internationally and within Germany) and better travel support (e.g. visa assistance) to more online offers (for all time zones).

"Wünsche mir mehr regionale Offline-Aktivitäten. Gefühl, dass sich viel auf Berlin konzentriert." (Survey participant)

"Weniger Berlin-zentriert" (Survey participant)

Related to these, the regional structure can be strengthened, e.g. by increasing the regional and local offers and initiatives, by improving the access to regional alumni group meetings, and, especially, by furthering the concept of the regional coordinators (e.g., more extensive, more active, better staffed). The latter received mixed appraisal in the online survey. Asked about the satisfaction with their respective regional coordinators, 40% indicated not knowing if they had a coordinator for their region. 29% perceived their work as positive, 28% as neutral and 3% as negative. In the open comment section, members suggested more visibility and resources for coordinators as well as more engagement from them:

"Resources planning for regional coordinators (of which I am part) should be reconsidered." (Survey participant)

"Regional coordinators should be reconsidered - almost not visible at all..." (Survey participant)

"Regional coordinator should engage members more, and regional gatherings be promoted to improve collaboration." (Survey participant)

In some cases the lack of coordinators for a specific region or country was reported as an issue:

"[I wished that there was a]... Southern African regional coordination and events because at the moment we depend of East Africa and West Africa and they prioritize their regions". (Survey respondent)

"Have regional coordinators for all African regions - Southern Africa region has no coordinator. Realize the economic and social disparities among members. Those from economically weak regions do not take opportunities because of partial funding. That deepens inequalities in opportunity access". (Survey participant)

One interview partner also elaborated on ways to improve the roles of regional coordinators in more detail:

"Yes, I think the regional coordination can be improved. [...]for instance, they need to figure out whether they want a regional coordinator based on a particular country, because right now you can have four regional coordinators in one country for instance. And that does not make a lot of sense to me. And also in terms of [...] what kind of roles they have. So I think last year that was not very clear, as a regional coordinator what is your role, where does it start, where does it end?" (Member interview 16)

"Depending on different cultures, people read different things into the word coordinator. Some feel like it makes them above other network members in a way, while others are like: "Oh no, I just support and facilitate others in their work". So the different approaches [...] at some point will need some harmonizing and to have like a minimum threshold of what they expect of the regional coordinator. And this is what the coordinator can expect from the Bosch-Alumni-Network. And I think that is one of the areas that they can improve". (Member interview 16)

Alongside this, some BAN members experience a **gap between life realities**, often between a European center and the diverse realities of the Global South. This is connected with the aforementioned eurocentrism of the BAN, leading to the creation of functions and offers that tend to address a certain group of (Western European) people. For instance, members have very different motivations and expectations of the BAN: where a Berlin-based member may appreciate inputs from a "Monday on a Couch" discussion or yoga classes, some respondents from the Global South highlighted the importance of the network to find job opportunities. Also, funding opportunities are perceived to be unequally spread across the continents by some members, which creates structural barriers to participation. Hence, the openness, equality and diversity that is communicated across the network is not perceived as such by some peripheral members.

"There are a lot of job opportunities but usually only accessible to Europeans, I am yet to come across any job opportunity that I am qualified for as an African on the platform". (Survey participant)

"I think it should be more driven by work opportunities, meaningful professional networking, projects opportunities, consultancies and things like that. The reason is people are already part of many different social media, and time is a big constraint to participate of another one. I guess alumni are more interested in turning their (great) experience in one of the Bosch programs, into job opportunities". (Survey participant)

"Having Bosch in the CV is nice, but Bosch should worry above all with employability and entrepreneurship of the alumni. And that is particularly true in the case of alumni from the Global South, which have many

difficulties to find proper jobs at higher levels in their home countries (qualification if not always valued as it should). In fact, creating channels of bridging global opportunities to this specific public would be a good way of attracting attention to the BAN.” (Survey participant)

“Realize the economic and social disparities among members. Those from economically weak regions do not take opportunities because of partial funding. That deepens inequalities in opportunity access”.

(Survey participant)

Lastly, a certain **generational gap** among the members of the Bosch Alumni Network was reported. Belonging to different age groups implies having different needs and expectations of the BAN. For instance, younger and less senior members requested more training and learning formats. Older members, by contrast, indicated that they require more technical support for the use of the platform.

4.4. MEMBER FEEDBACK: “MEMBER EXPECTATIONS OF ROBERT BOSCH STIFTUNG”

We close the sections on member feedback by outlining the general perception of RBSG. Members in the quantitative survey were asked to indicate their “expectations of Robert Bosch Stiftung in the future”. Though the question was optional, over 300 survey participants chose to provide a written answer.

First, it has to be noted that there seems to exist a **lack of awareness of the role** of Robert Bosch Stiftung in comparison to that of the International Alumni Center. Hence, many survey participants discussed the role of the foundation without knowing about its actual role in the BAN and beyond.

“Understand better where they stand in terms of the role and responsibilities of a foundation going forward.” (Survey participant)

“To communicate clearly the vision for our network.” (Survey participant)

“I don't have a clear picture of how Robert Bosch relates to BAN, so I don't know.” (Survey participant)

Among those who were aware of the foundation’s role, four feedback topics can be discerned: first, members expressed their desire for a **more active and accessible role of the foundation**, including more cooperation and collaboration possibilities. As the following quotes exemplify, many respondents wished for more direct interaction with the RBSG team and also saw potential for RBSG to be more engaged as a “model philanthropist” towards other foundations in the field.

“I have the utmost respect for the Bosch brand and the Stiftung's goal - the company and Stiftung are models of corporate/NGO citizenship. That said, beyond formal fellowships, the Stiftung can play a powerful convening role in bringing people together to make progress on important global issues, e.g., mini-study tours, expert conferences, capacity-building meetings, etc.” (Survey participant)

“The last time I had a proper conversation with one of the employees for Robert Bosch Foundation was when they attended one of the summits of ChangemakerXChange. I have also had a couple of conversations on Facebook with that specific person afterwards but he is no longer working for Robert Bosch Foundation. I prefer this personal connection and would be nice to get back to a more frequent communication one day.” (Survey participant)

"To keep the human face and care that I saw during our offline meetings." (Survey participant)

"That it continues to fund important projects and have in-person meetings. They are most valuable." (Survey participant)

"My biggest expectation is simple: staying in touch and continue exchanging ideas." (Survey participant)

"I want the foundation to take a more active, and personal approach to its members. I don't think the foundation even knows I exist because they were too busy setting up the system that it essentially forgot about the people." (Survey participant)

Members also mentioned the desire to learn more about the ongoing activities of the foundation in a digital form, such as a newsletter. Answers to the question "How frequently would you like to receive information from Robert Bosch Stiftung?" indicated that 67% wished to receive information every month, 27% every other month, 5% once or once a year and 1% would not be interested in such information.

Relatedly, members expressed the wish for maintaining and increasing **investments in the network and members' work**. Also, several members indicated that the foundation should expand its reach to other regions (e.g. Latin America, the Balkans and South East Asia) and widen the issues addressed, especially to currently relevant topics (e.g. climate change, Corona).

"You need to invest in it. It cannot be run by volunteering members, as the members are too busy".
(Survey participant)

"Not to abandon the community it created through its program of activities so far". (Survey participant)

"Keep supporting the operational framework of the BAN while embracing a more inclusive, bottom-up approach". (Survey participant)

"[...] to work more in LatAm region" (Survey participant)

"To continue growing into a "Facebook for journalists" and to engage as many journalists as possible".
(Survey participant)

While some of these comments related to the BAN, other desires seemed to be addressing the work of the foundation in a more general sense:

"To invest more in creating opportunities for alumni whose interest are in filmmaking, using film and theatre for change". (Survey participant)

"The Stiftung has stopped funding Fellowship programs at the very time when international connectivity is at its weakest". (Survey participant)

"Soziale Innovationen auch ohne das formale Siegel der Gemeinnützigkeit unterstützen". (Survey participant)

"Remain a positive force for promoting transatlantic cooperation". (Survey participant)

"Remain a philanthropic support of international projects". (Survey participant)

A similar issue is related to the foundation's future plans and strategy. Members express both **uncertainty** and **the desire to take part in the strategy process** as an impulse giver of Robert Bosch Stiftung.

"Bring us more often to the table to discuss things. Not in a forum. One on one with each of the organizations. I know you could now say 'but this takes away a huge capacity to do'. But until we have a conversation on an eye-level, we will always have a hierarchy between us, and small organizations will constantly be seen as wanting nothing but money, and RBSG will be seen as wanting nothing but results without the money". (Survey participant)

"To learn about their new strategy towards cultural funding". (Survey participant)

"Identify new programmatic priorities based on current realities and involve the biggest asset of the BAN - people- for meaningful implementation of the programs". (Survey participant)

"Dass die Stiftung bei der Erarbeitung ihrer Strategien und Neuaufstellung von Bereichen auch die Bosch Alumni miteinbezieht". (Survey participant)

Apart from that, the members expressed **high satisfaction** with the work of Robert Bosch Stiftung and their initiative to create and sustain the Bosch Alumni Network. Linked to this, many members expressed gratitude, hoping that the combined work of the BAN and the foundation will continue.

"Keep supporting the edges of civil societies in a changing world". (Survey participant)

"[We] will always see the RBS as a fundamental partner, whether they financially contribute or not". (Survey participant)

"The time spent as a [RBSG Program] member was one of the most interesting and useful in my personal and professional life". (Survey participant)

"Keine Erwartungen, ich finde es toll, dass sie in Alumni investieren". (Survey participant)

"Keep promoting and investing in the BAN as a fantastic resource (lab of ideas, scouting of talent and ideas, support for CSOs/culture, etc.)". (Survey participant)

"Just to keep doing the good work they're already doing". (Survey participant)

"Winning a Nobel Prize and [be] recognized as a world-wide Honorable foundation". (Survey participant)

5. Summary and conclusion

5.1. THE RESULTS AT A GLANCE

This report presents the findings of an exploration into the operating principles, benefits and social impact of the Bosch Alumni Network, an impact-oriented network that brings together more than 6,800 current fellows, grantees, staff and partners of Robert Bosch Stiftung from all over the world. It builds on the results of a 12-month research project (09/2019-08/2020), comprising of the review of scientific literature (80+ sources) and company documents, 13 background interviews, 22 interviews with members, a participatory observation and an online survey of 634 members.

Our findings provide evidence for a circular model of impact creation in the network, comprising of five elements:

- The three key actors, Robert Bosch Stiftung, iac Berlin and the members, each provide unique contributions to the network. While the foundation contributes its relationships with a pre-selected pool of 10,000+ impact-oriented professionals, its reputation and resources, iac Berlin has taken care of designing, curating and constantly improving the network infrastructure. What members bring to the table is their diverse competences, backgrounds and shared commitment to impact. Together, we estimate that **members voluntarily invest 5,920 hours per month** to the network (which equates to the work of 37 full-time employees). Their work takes the form of supporting other members, offering events and trainings, and being active as regional coordinators.
- Together, all of these working-hours result in the creation of a diverse range of **online and offline interactions** that many members engage in with high frequency. These interactions help to create the structure of **relationships and exchanges** that make up the network. An average member has an individual network of 40 other members, 13 of which they are in regular contact with. These networks are diverse and international and go beyond the scope of typical alumni work, with 75% of members being in touch with one or more other members who were not in the same RBSG program and 66% having made new contacts through the BAN.
- Based on these interactions, members experience direct benefits. They **build knowledge and skills**, access **resources and opportunities**, gain **legitimacy** and receive **social and emotional support**.
- Interactions and benefits also translate into social impact. 54% of members received support in building a new project, venture or idea, 44% started a new project or organization together with

another member and 29% co-developed an innovation. In total, this led to the creation of **over 3,300 new projects** in the network. The network is also associated with increased **resilience** for individuals who work in difficult economic, social and political environments, as well as with an increased ability to act as a collective. Moreover, the increased capacity of members helps improve their impact-oriented professional work. Against this background, **they attribute 24.9% of their success and impact to the Bosch Alumni Network.**

- The beneficial effects of the network create **positive reinforcement effects**, leading to stronger willingness among members to engage in the network and contribute ideas, time and content. Similarly, iac Berlin and Robert Bosch Stiftung experience positive reinforcement through learning, access to ideas, training and collaboration opportunities, and the fulfillment of their social mission.

Likewise, it can be argued that the Bosch **Alumni network indeed does fulfill the goals** of iac Berlin and Robert Bosch Stiftung to (a) support and encouragement of individuals (e.g. through trainings, mutual learning), (b) capacity building in the sectors and fields the members are working in, and (c) addressing societal challenges.

Similarly, our results suggest that the BAN functions as an **“active memory”** for members: about 70% of former members are registered on the platform, 91% of RBSG employees on the BAN have already found valuable information on it. The network was also found to serve as an **“idea laboratory”** for all three of the key actors. Having created an estimated 2,000 innovations since its inception, 79% of the surveyed members express active interest in collaborating with iac Berlin and Robert Bosch Stiftung.

Results also provide insights into the **factors that make a network effective**: they confirm the hypothesized importance of feelings of belonging and trust, transactional values, as well as the chance to experience positive transformation, such as learning and creating impact. In addition, findings identify a range of factors that also contribute to better functioning of the model, such as a flexible mindset, young age, network diversity, different BAN formats, onboarding or distributed governance.

Members expressed a lot of **praise**, but also identified **areas for potential improvement**, including new member onboarding, transparency in communication and the wish for more inclusive governance of the network. Some members also articulated a need to better overcome geographical and cultural barriers in the network.

5.2. DISCUSSION

In this report, we have developed and tested a model of impact creation in the Bosch Alumni Network. Our research has enabled us to analyze drivers and outcomes of this model, as well as to engage with members on a qualitative basis to understand their perspective in more depth. The results provide many implications for the work in and around the BAN. In the following, we describe some of the main themes with particular focus on recommendations for the future of the network.

1. Members benefit from network effects and growth

Our data shows that BAN members experience what literature described as network effects, i.e. the effect that an additional user of goods or services has on the value of that product to others (Uzzi, 1996). When a network effect is present, the value of a product or service increases according to the number of others using it. The effect does not only affect new users, but instead, each new user creates additional utility for all the *existing* users in the network.

This underlines the value of an alumni network that reaches beyond single classes or programs. Not only does it help alumni to stay in touch with each other (which it clearly does; even members who were predominantly in touch with alumni from the same program reported that they likely were not in touch with many of them, if not for the BAN), but to build ties to other, new pools of people, which in turn expands their networks as well. Our analyses underline that larger individual networks as well as more diverse networks increase many benefits, impact and the reinforcement of members' contributions.

Moreover, it implies that further growth in size and diversity, e.g. through inviting new program alumni or other groups into the network, can be a particularly rewarding strategy to increase the network's value for *all* its existing members.

2. Fragmentation remains a challenge

The downside of increasing network size and diversity is fragmentation. Indeed, as shown above, more than 60% perceive the BAN increasingly as a fragmented network (as opposed to one large community). While it is hardly surprising that fragmentation exists in a network that started out from almost entirely separated programs, it is nonetheless important to consider it a challenge. Fragmentation reduces the potential of the network and the likelihood of serendipitous encounters that can enable novel joint projects, unexpected referrals and innovation. Moreover, further growth and openness of the network is likely to increase this challenge.

Some other member complaints provide an indication of how such fragmentation might be addressed in the BAN. Only 36% of the survey respondents agreed to the statement that the network has enough "bridge-builders" while 51% believe that "the network depends on a few critical members. Without them, it would not function properly". Finding and empowering more such bridge-builders and members willing to hold key functions, e.g. through new roles and recognition (cp. point 6 of this list) could therefore help avoid fragmentation.

Similarly, a number of BAN interventions were associated with a perception of a more unified network, including clusters, Learning Exchange Grants, Regional Activity Grants, Cluster Kick-Offs, Network strategy meetings, offline trainings and workshops, and most types of engagement on boschalumni.net.

In addition, better onboarding processes are likely an important element to create higher identification with the network as well as provide new members with the tools and mindset to overcome the fragments if needed (see also point 6).

3. Opening up the network: the non-alumni perspective

Moving forward, it is important to understand, to what degree the network can offer benefits to members who were *not* members of a program of Robert Bosch Stiftung. The quantitative survey sample already contained 19 such respondents, who indicated that they had “not taken part in a Robert Bosch Stiftung program (yet)”.

Analyses suggest that they suffered a small “penalty” from this status. Non-alumni were less likely to take part in offline activities and online activities, reported fewer connections (surface level as well as deep connection, on average 21.1% fewer surface level connections, 13.6% fewer deep connections) and were less likely to perceive BAN as a place in which norms of reciprocity are governing social interactions. They were also less likely to identify with the BAN.

Nonetheless the analyses did not point at any negative effects in this group with respect to benefits and creating more impact through their BAN membership. All of this suggests that the network is capable of delivering value also to and through individuals who have not been previously members of a Robert Bosch Stiftung program. The lower number of connections, activities and identification does however suggest that this group requires more meaningful onboarding and selection than program alumni.

In combination with the aforementioned network effects, the benefits of diversity and potential strategic interests of Robert Bosch Stiftung, this provides a case for opening up the network to other impact-oriented individuals, groups and philanthropic networks.

At the same time, our results imply that such a strategy of opening can create new risks, e.g. with respect to the name and branding of the Bosch Alumni Network. While non-alumni and potential philanthropic partners are likely to require a more inclusive name and branding than the current one to feel welcome in an open network⁴⁸, many members still identify strongly as alumni of an RBSG program or seek collaboration opportunities with the foundation. Therefore, it seems advisable to make sure, the brand and experience of being an RBSG program alumni remain clear and visible parts of any future brand and narrative of the network.

Moreover, any type of opening to new individuals or networks is likely to further increase challenges of fragmentation as outlined above (point 2). Against this background it seems advisable to monitor any

⁴⁸ This issue was pointed out in a number of background interviews, e.g., “*Ein bisschen, ich sage das ganz offen, war das am Anfang bei den Kollegen aus anderen Stiftungen und Institutionen ein bisschen misstrauisch gesehen worden, nach dem Motto: ‚Wollen die nicht einfach unsere Alumni abschöpfen?‘*”. (Background interview 4)

potential expansion closely with respect to the successful integration of non-program members (their boundary-spanning contacts, identification with the network, etc.) as well as the effect of such changes on the extant membership (sense of belonging, fragmentation, etc.).

4. Engineering serendipity

One starting assumption of this project was that the Bosch Alumni Network is able to facilitate of serendipitous exchanges and connection and thereby of innovation. The underlying thought is that in a complex system, collaboration opportunities are not always be anticipated by actors, but reveal themselves in course of undirected, unintentional interactions or chance encounters.

The surprisingly high number of novel projects and innovations hints towards the ability of the BAN to “engineer” such encounters by proving a rich and diverse network, places to exchange in an open setting, as well as incentives for innovation. While some interventions seem particular useful to encourage innovation (Cluster Kick offs, Learning Exchange Grants or being part of more than one cluster) it is worth noting that almost any form of interaction in the network was positively associated with innovation and collaboration. This underlines the notion for an emergence of an innovation-friendly environment: it mainly takes high interaction frequencies, a climate of trust and openness and chance, rather than one specific process or method.

Our findings also speak to the mindset needed for using such spaces. Interestingly, both a goal-oriented networking approach as well as an emergence-oriented network approach were associated with more direct benefits and innovation in particular. This suggests that members are best served with an “ambidextrous” mindset, providing clear search strategies for existing needs while remaining open for emerging opportunities⁴⁹.

5. Overcoming geographical distance

A recurrent theme across all measurement instruments was the important role of geographic distance to the network’s center, Berlin. The good news in this respect was that the main elements of the model, interaction, benefits, impact, and feedback were fairly robust against effects of geographical distance: while the size of social networks was somewhat smaller in more distant groups, benefits of knowledge acquisition and innovation were even more prevalent in these groups (Section 3.2.4).

Yet, the aggregate nature of these quantitative results might mask some regional and structural gaps, as the analysis of the open survey fields suggests. Here, respondents complained about a general “Berlin-centricity” or “Europe-centricity” of events and pointed to travelling, funds, visa and time constraints

⁴⁹ O`Reilly and Tushman (2004)

as major barriers as well as many job and funding opportunities being unevenly spread across geographies (cf. Section 4.3).

The installment of regional coordinators appears to be a very adequate solution to address some of these issues. Member feedback however suggested that there is still some space for improvement, pointing out that some countries and areas are not presented by coordinators and that coordinators' interpretations of their roles tend to vary (4.3). One coordinator also expressed his frustration with the high workload and mentioned sometimes wondering why "he was not paid for this work" (undisclosed interview).

A further, more radical step to address geographic and cultural disparity could be to share power more broadly in the operating team of BAN and build a (virtual) team including staff in several locations, as one interview partner shared with us:

„Es sitzt halt ein Managementteam in Deutschland in Berlin und spricht davon ein globales Netzwerk zu managen, da sind die Regionalkoordinatoren schon mal ein erster guter Schritt, aber ist das wirklich der konsequenteste Weg? Oder könnte man nicht auch sagen, es gibt irgendwie 2 oder 3 Personen überall auf der Welt, die auch noch ein bisschen, nicht nur diese ehrenamtliche Rolle haben, sondern faktisch wirklich auch in dieser Infrastruktur auch mitarbeiten?“ (Survey participant)

6. Improving member onboarding and engagement

As described in Section 3.3.4, a large share of members evaluated onboarding practices negatively or had doubts about whether they exist. At the same time, our results associate a positive onboarding experience with numerous benefits among members.

This suggests that improving onboarding practices might be a worthwhile investment for the BAN. Amongst others, onboarding could be facilitated through online tutorials, handbooks or certain gamification elements on boschalumni.net (badges, etc.) that pull new members into the network. In addition, dedicated webinars or offline events for new members could be an important step to provide a better overview of the network. Such events appear particular important for members who do not come from an RBSG program and thus might lack important context information and connection. Another approach could be to build tandems of mentoring relationships between "newbies" and "network veterans" for onboarding. This would have an added benefit of strengthening weak ties in the network structure as well as create additional roles and symbolic capital as recognition for highly active members of the network.

Such onboarding practices could also represent a way to newly engage with the "activatable" ideal type group (2.1.4). Unlike other groups (such as the "grateful") this group tends to use boschalumni.net sporadically and mainly relies on information through the "weekly digest". Targeted invitations through the feed or direct mailing to members could help raising awareness for opportunities and functions of the network that this group might not even be aware of.

Finally, surveys, like the one conducted as part of this report, can help too. Questions about network engagement, interactions and benefits presented participants repeatedly with lists of opportunities and possible activities in the network show them the wide range of potential experiences in the network in a subtle way.

7. Fertile ground for growth from within

After three years of operation one might ask whether members have reached a plateau of excitement and motivation for the platform or whether there is potential for further growth. The steady growth of member activities over time suggests the latter, and so did the stated intentions of respondents about their future engagement in the network. Large parts of the sample indicated that they wish to be involved more in the BAN in future (81%), plan to share more opportunities and resources (67%), take on a more active role in the network (54%) or to collaborate more with other members (84%).

In our view, the network also provides other, potentially untapped opportunities for growth: Amongst others, the BAN could be used as “*eyes and ears*” into the field for Robert Bosch Stiftung and iac Berlin. For example, the network could provide perspectives and intelligence on emerging topics (e.g. political crises in a certain country) as well as issues, in which a comparative perspective is important (e.g. development of migration policy across Europe and Africa, effects of COVID-19 on global civil society) and help getting fast access to trusted and unfiltered information on developments of strategic relevance. The method for such exploration could range from quantitative research, to participatory events, informal interactions between staff and members as well as data-driven techniques, semantic analyses etc. The highly diverse perspectives and experiences in the network as well as the willingness of members to share them suggest that there is potential and readiness for such undertakings in the network.

Results also suggest that iac Berlin and Robert Bosch Stiftung could potentially benefit more from the network themselves. In addition to using the network as window into the field, both institutions might benefit from increasingly use the network for their own human resource development, for finding collaborators or to test ideas. At least from the perspective of members, there seems to be high openness for further collaboration.

8. Balancing the online experience with a human touch

Finally, the use of boschalumni.net is associated with many benefits with respect to interaction, impact, etc. While correlation and causation are difficult to disentangle with respect to such behavioral aspects, our findings and the high frequency of platform use nonetheless suggest that the platform itself is an important centerpiece in the network structure. In spite of the fact that, from a user perspective, it competes with social media platforms that can invest billions in user experience and functionality, members seemed largely satisfied with the platform (79% perceived it positively). Their wishes with regard

to the platform mainly concerned smaller functionality upgrades (e.g. better media gallery, better management of the weekly digest for members of multiple clusters etc.; see 4.3).

Nonetheless, many respondents pointed to the importance of direct, human interactions with other members as well as with the teams of iac Berlin and the foundation (see 4.3. and 4.3). One interview partner puts it this way:

„[Es ist] total wichtig irgendwie so ein bisschen diese Menschlichkeit da drinnen zu haben, dass man immer noch weiß wer ist eigentlich der Absender dieser Information, was ja z.B. bei LinkedIn oder Xing ist das ja so ein anonymes Portal zu dem glaube ich kein Mensch der Welt eine Beziehung hat zu dem Portal per se, sondern zu zeigen wer sind auch die Personen, die dahinterstehen“ (Background interview 2)

Overall, this suggests that the BAN represents one of the not too many good practices of a blended network in which virtual and physical experiences are well integrated. We recommend that the team of iac Berlin consciously aims to continue striking this delicate balance well also in future.

5.3. ALUMNI NETWORKS AS TOOL FOR PHILANTHROPIC INSTITUTIONS

In recent years, the support of talent, communities and systemic change through programs has gained traction in the philanthropic world, with an increasing number of foundations moving beyond grant giving and setting up operative programs and direct means of support⁵⁰. Establishing alumni networks can thereby represent an attractive option to go one step further. They offer the opportunity to gain additional “return on investment” on a group of actors which has already been identified as relevant for the foundations strategic objectives and with whom relationships are already established. Moreover, alumni networks hold the promise of overcoming the linear and somewhat limited theory of change behind training and grant giving by unlocking collaboration potentials between actors.

Unfortunately, while the effectiveness of singular programs is increasingly measured and understood, little is known about whether networks of program alumni – which are by design less selective and more diverse, less focused on a particular development path and more reliant on the emergence of serendipitous relationships and connections – are an effective instrument in a philanthropist’s toolbox. Our evaluation offers some first insights for philanthropists interested in this approach.

1. Impact-oriented alumni networks are a versatile tool

First and foremost, the study underlines that alumni networks can indeed be used as a tool to support impact-oriented professionals in society and thereby facilitate further social impact (Chapter 2). Results show that the promise of alumni networks in the field of commercial business, consulting and higher

⁵⁰ Anheier (2018)

education – informational sharing, collaboration, mutual support⁵¹ – can similarly be realized in a philanthropic context, and with remarkable effects. By opening up the space between different actors that had been previously almost exclusively in touch with the foundation or a small group of peers, a network facilitates numerous new conversations, relationships, and collaborations.

Beyond this impact, a network is a valuable tool in the context of alumni work. It helps former program participants as well as philanthropists to stay in touch, serves as a self-updating registry of alumni and their work and allows to search for needed contacts and collaborators in a preselected, trusted group of individuals with a shared history.

Results suggest that the network also serves as a tool to redefine the relationship between philanthropic foundations and beneficiaries or grant members. By establishing a network, philanthropists have a chance to enter an eye-level relationship with these partners and to step out of the transactional and asymmetrical relationship of resource-donors and resource-recipients. The circular model identified in this study demonstrates that such a relationship is not a dead-end. Many members seek to pay the investment forward (to other members and by strengthening the network with activity or taking on active roles) or back to the philanthropist (by engaging in collaboration, sharing information, contributing to their fulfillment of a social mission and provide new impulses).

2. Impact-oriented alumni networks require patience and trust

Alumni networks, in particular when built with the intention to facilitate social impact, differ from other instruments in the philanthropist's toolbox in that they require a high level of patience and trust.

This is due to a number of factors. First, creating the concept, technical and social infrastructure and a relevant number of events and interventions in a network, takes time. Second, it also takes time for members to populate the network, from registering, over getting to know its functionalities and opportunities, to fully being able to trust it, and to gradually build up one's respective individual network within. Our findings imply that the latter process might take several years (see Section 2.2). When these two conditions are sufficiently met, members will actually start engaging with each other in an effective way, enabling exchange and collaboration. Third, any new activity or collaboration emerging from the network will itself take time to unfold. Depending on the respective field and theory of change of members, it can take additional months (e.g. in journalism), years (e.g. in education, research) or even decades (e.g. in climate change) until an outcome or social impact becomes visible.

Related to this, it is important to note that impact-oriented networks tend to be pluralistic and undirected with respect to the impact they create in society. Given the multitude of professions and theories of change of members, an alumni network will unlikely contribute to only one specific goal but will rather

⁵¹ Fuchs et al. (2017), Hwang and Kim (2009)

create a multitude of outcomes and impacts, reflecting to the respective members' impact-goals and, to some degree, the outcome of chance encounters and "serendipity moments". Against this background, it becomes evident that investing in such a network requires patience and trust in the involved actors, while offering limited options of control.

That said, some actions can nonetheless help understanding and gently steering the network. The use of impact measurement instruments allows monitoring the performance and health of the network, as well as collect evidence for its impact. Similarly, selecting individuals and organizations that have a proven track record and impact-model reduces ambiguity around actual impact outcomes. Moreover, philanthropists can direct the attention and creativity of the networks through targeted calls for ideas, events around particular topics or challenges and, of course, by inviting members into the network who work in particularly relevant fields.

3. **Establishing the network in a separate organizational entity can be an advantage**

In the case of the BAN, embedding the network as well as the entity designing and operating its infrastructure in a new organizational entity was a deliberate choice. As described in Section 1.2.1 and above, it was made to make sure that the power asymmetry of the foundation-grantee-relationships does not define the new network, but that it allows "eye-level" dialogue with members instead.

Our findings suggest that this was likely an adequate decision. Analyses show, that perceived ownership and identification with the network as well as norms of accessibility, trust and reciprocity are important drivers of members' engagement and the self-reinforcing nature of the network. All of this is difficult to establish on top of a relationship that will unavoidable also reflect an uneven distribution of resources and tasks, principal-agent-problems and limited legal and organizational opportunities for real co-ownership. Given that power asymmetries are widely-recognized challenge in the philanthropic sector⁵², one can expect that such an approach will also be sensible for other philanthropic institutions that wish to engage in a network approach.

In the case of iac Berlin, the spin out also offered additional advantages, including the opportunity to take on a different legal form as the foundation. Choosing the form of a charitable limited liability company under German law allowing increasing the speed of decision making which was especially important in the dynamic phase of setting up the network. Moreover, the network was founded with the vision to also be able to later offer knowledge, infrastructure and support to other philanthropic actors. Creating a separate entity with Robert Bosch Stiftung as founder and only shareholder has created the right combination of proximity and freedom: an entity close enough to be fully and in alignment with the foundation and its strategic goals, yet flexible enough for the entrepreneurial process of building a new network, new kinds of relationships and new interfaces to other philanthropists.

⁵² Frumpkin (2006)

4. Be mindful of geographical differences

Networks can be powerful tool to overcome geographic and cultural barriers to dialogue and collaboration. Yet, they are also constrained by these barriers. As discussed in the context of BAN, a geographically dispersed network can lead to the emergence of center-periphery-tensions: members living in proximity of the physical center of the network are able to access it with much greater ease than members living in more distant places. Related to this, topics and ideas that are relevant for members in proximity to the center can hold little relevance to members in the periphery. In spite of substantial efforts taken in the BAN with respect to covering travel costs, diversifying the location of activities, creating decentralized ownership in the network, etc., these issues have remained important and challenging.

Differences in geography, culture, and industry can also influences how the network operates on a local level, as was explained to us in a background interview:

"In Brüssel und in DC, haben wir jeweils Teams von Regionalkoordinatoren und was relativ schnell sich bei denen etabliert hat waren so After-Work Treffen: sich irgendwo hinsetzen wo auch keiner in Frage gestellt wird, warum jetzt diese Treffen stattfinden, weil, so wie sie es mir auch erklärt haben, dass man das halt einfach so macht, in Brüssel und in DC. Währenddessen hatten die Leute ein Indien relativ große Probleme [...] zu erklären warum jetzt erst mal Leute zusammenkommen, ohne dass sie ein konkretes Projekt nennen können oder einen konkreten Grund". (Background interview 7)

All of this suggests that building and operating a network requires a flexible mix of practices that is aligned with the needs and expectations in the respective location. One way to achieve this might be the creating a decentralized, multi-hub network structure, as was piloted by iac Berlin by the establishment of regional coordinators. Similarly, promoting online exchanges, events and a strong online platform can help create better accessibility in the network.

Taken together, our research has demonstrated that impact-oriented alumni networks are an attractive and underutilized instrument in the philanthropist's toolkit. Further longitudinal and comparative research is needed to better understand the prerequisites, contextual boundaries of such, and long-term impact of such networks. Nonetheless, the degree to which one can learn from a single case study, our findings imply that putting the "emphasis on the relationships between actors"⁵³ can help unlock creativity, collaboration and new impulses for a diverse range of social challenges. Given the increasing and interrelated challenges our world faces, this appears to be a worthwhile investment.

⁵³ Kilduff and Brass (2010)

References

- Armstrong, J. S., & Overton, T. S. (1977). *Estimating nonresponse bias in mail surveys*. *Journal of marketing research*, 14(3), 396-402.
- Anheier, H. K. (2018). *Philanthropic foundations in cross-national perspective: A comparative approach*. *American Behavioral Scientist*, 62(12), 1591-1602.
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). *Social and commercial entrepreneurship: same, different, or both?*. *Entrepreneurship theory and practice*, 30(1), 1-22.
- Bosch Alumni Network (2017). *Purpose, Vision & Mission*. International Alumni Center. Available at: <https://www.boschalumni.net/page/purpose>
- Buteau, E., Loh, C. & Temitayo, I. (2018). *Strengthening Grantees. Foundation and Nonprofit Perspectives*. Center for Effective Philanthropy. Accessible online: <http://research.cep.org/strengthening-grantees>
- Castells, M. (1996): *The Rise of the Network Society*. Cambridge/MA & Oxford: Blackwell.
- Easterling, D., & McDuffee, L. (2019). *How Can Foundations Promote Impactful Collaboration?* *The Foundation Review*, 11(3), 6.
- Ferris, J. M. (2016). *Is this a new golden age of philanthropy? An assessment of the changing landscape*. *Voluntary Sector Review*, 7(3), 315-324.
- Frumkin, P. (2006). *Accountability and legitimacy in American foundation philanthropy. The legitimacy of philanthropic foundations: United States and European perspectives*, 99-122.
- Fuchs, F., Füss, R., Jenkins, T., Morkoetter, S., (2017). *Winning a Deal in Private Equity: Do Educational Networks Matter?* *Swiss Institute of Banking and Finance(S/BF-HSG), Working Papers on Finance No.2017/15*
- George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). *Understanding and tackling societal grand challenges through management research*. *Academy of Management Journal*, 59(6), 1880-1895.
- Gerdenitsch, C., Scheel, T. E., Andorfer, J., & Korunka, C. (2016). *Co-working spaces: A source of social support for independent professionals*. *Frontiers in psychology*, 7, 581.
- Glaser, B. G., & Strauss, A. L. (2010). *Grounded theory: Strategien qualitativer Forschung*. Huber.
- Hwang, B. H., & Kim, S. (2009). *It pays to have friends*. *Journal of Financial Economics*, 93(1), 138-158.
- Kilduff, M. & Brass, D. J. (2010). *Organizational social network research: core ideas and key debates*. *The Academy of Management Annals*, vol. 4, no. 1, pp. 317-357.

Mayring, P. (2015). *Qualitative content analysis: Theoretical background and procedures*. In *Approaches to qualitative research in mathematics education* (pp. 365-380). Springer, Dordrecht.

Montgomery, A. W., Dacin, P. A., & Dacin, M. T. (2012). *Collective social entrepreneurship: Collaboratively shaping social good*. *Journal of Business Ethics*, 111(3), 375-388.

O'Reilly 3rd, C. A., & Tushman, M. L. (2004). *The ambidextrous organization*. *Harvard business review*, 82(4), 74.

Peterson, N. A., Speer, P. W., & McMillan, D. W. (2008). *Validation of a brief sense of community scale: Confirmation of the principal theory of sense of community*. *Journal of community psychology*, 36(1), 61-73.

Powell, W.W. (1990). *Neither Market nor Hierarchy: Network Forms of Organization*, in: *Research in Organizational Behaviour* 12, pp. 295-336.

Powell, A., Ditkoff, S.W. & Twersky, F. (2019). *How Philanthropic Collaborations Succeed, and Why They Fail*. *Stanford Social Innovation Review*, July 2019. Accessible online: https://ssir.org/articles/entry/how_philanthropic_collaborations_succeed_and_why_they_fail

Pretty, J. (2003). *Social capital and the collective management of resources*. *Science*, 302(5652), 1912-1914.

Reaves A. (2010) *Robert Bosch Stiftung GmbH*. In: Anheier H.K., Toepler S. (eds.) *International Encyclopedia of Civil Society*. Springer, New York, NY. Available at: https://doi.org/10.1007/978-0-387-93996-4_451

Robert Bosch Stiftung (2020a). *About the Robert Bosch Stiftung*. Robert Bosch Stiftung GmbH. Available at: <https://www.bosch-stiftung.de/en/about-robert-bosch-stiftung>

Robert Bosch Stiftung GmbH (2020b). *Report 2019. The foundation. Facts & Figures*. Robert Bosch Stiftung GmbH, Stuttgart.

Thomson, A. M., & Perry, J. L. (2006). *Collaboration processes: Inside the black box*. *Public administration review*, 66, 20-32.

Uzzi, B. (1996). *The sources and consequences of embeddedness for the economic performance of organizations: The network effect*. *American sociological review*, 674-698.

Van Dijk, J. (2012). *The Network Society*. Los Angeles et al.: Sage.

Vandor, P., Leitner, L., Millner, R., & Hansen, H. (2019). *Addressing Grand Challenges Collectively: A Brief Introduction to Impact-Oriented Networks*. Available at SSRN 3472979.

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Annex

A. MATERIAL FOR QUALITATIVE SURVEY

A.1 Interview guideline

Topic / Key question	Possible sub questions
<p>(1) Starting point – Person and first contact with the Bosch Alumni Network: <i>As a starting point, could you please tell us a bit about your work and how you ended up joining the Bosch Alumni Network?</i></p>	<ul style="list-style-type: none"> • Key points of the job: sector, expertise, region, type of employment, position • For how long have you been working in your field? • How would you describe the intended effects and impact of your work? • How and when did you end up joining the network? (Through a Foundation’s program? If so, which one? When?) • Prior to joining the network, have you been member of a Foundation’s Alumni Associations? • How was the onboarding process for you?
<p>(2) Description and perception of the Bosch Alumni Network: <i>From your point of view and according to your own perception, how would you describe the Bosch Alumni Network?</i></p>	
<p>(3) Activities within the network: <i>Could you tell us if you have already participated in network activities or even organized some of them?</i></p>	<p><u>3.1 ONLINE</u></p> <ul style="list-style-type: none"> • How often do you visit the platform? To do what? • So far, with whom did you get in contact with via the platform / network? • Were these contacts from a former program or new ones? <p><u>3.2 OFFLINE</u></p> <ul style="list-style-type: none"> • Do you attend events organized by the network and if so, how often and which ones?

	<ul style="list-style-type: none"> • What has been your experience with other offers (community space in Berlin etc.)? • What other network offerings / formats that you do not use yourself are you aware of? (Why don't you make use of those offers?)
	<p><u>3.3 ROLLE IM BAN</u></p> <ul style="list-style-type: none"> • How would you describe your role in the Network? • Do you organize activities and offers yourself or do you rather participate in offers provided? (active vs. passive use)
<p>(4) Non-structural Network: <i>With how many people from the network are you roughly in contact with? (at least 1-2x per year)</i></p> <p><i>Do these encounters usually take place at the events you mentioned and via the platform or do they mostly take place outside of the organized infrastructure?</i></p>	<ul style="list-style-type: none"> • If outside: How are you in contact with each other? • How often?
<p>(5) Motivation: <i>[either:] What is your motivation to be part of Bosch Alumni Network?</i> <i>[or:] What has prevented you from getting involved?</i></p>	<ul style="list-style-type: none"> • Ev.: Has this motivation changed over time? Did you have different expectations in the past than today?
<p>(6) Benefits from BAN/ Fulfillment of expectations</p> <p><i>[Depending on the interview so far – either:]</i> <i>How did you benefit from being part of the Bosch Alumni Network so far?</i> <i>Here we are interested in specific examples, anecdotes or “memorable moments”.</i> <i>[Or:]</i></p>	<ul style="list-style-type: none"> • To what extent does the platform and its functions contribute to generating these benefits? (e.g. people search) • Do you associate any professional achievements to the Network and if so, to what extent? • <i>[Depending on the situation:]</i> When you think of your / your organization's work and its social impact: how did you benefit from being a BAN member so far? How did that manifest? If possible, how would you quantify or monetize that?

<p><i>When you think of your / your organization's work and its social impact: how did you benefit from being a BAN member so far?</i></p> <p><i>Here we are interested in specific examples, anecdotes or "memorable moments".</i></p> <p><i>How did that manifest? If possible, how would you quantify or monetize that?</i></p>	<ul style="list-style-type: none"> • If you think about the benefits you just mentioned, would you say most of them were foreseeable and planned? Or did they mostly happen unexpectedly? • Did the network also have negative effects on you? If so, which?
<p>(7) Satisfaction with the network, community, change:</p> <p><i>If you think back on your membership within the Bosch Alumni Network up to now: Overall, how satisfied are you with its offers and in general?</i></p>	<ul style="list-style-type: none"> • What should be maintained in the network? Be it provided by the organizers or by other alumni. • What could be implemented in a better way? • [eventually:] How did you perceive the process of being onboarded? • [If relevant]: lac Berlin and the Bosch Alumni Network exist since 2017. You were already involved before that. Did you notice any changes compared to the Alumni Association you have been part of? • [Eventually:] Given the fact that there is Robert Bosch Stiftung, its individual programs, Alumni associations, the International Alumni Center in Berlin, the Bosch Alumni Network and various sub-groups. How would you describe (rank) your personal affiliation within this "cosmos"? • Have you noticed any conflicts between different "units" (for instance between old alumni associations and the BAN)? • Do you have any experiences with similar networks or offers outside Robert Bosch Stiftung (donors or intermediaries, professional Online-networks etc.)? If so: Did you notice any difference?
<p>(8) Community, identity and Belonging:</p> <p><i>Would you consider the network to be a community and if so, how? What keeps the network together in your mind?</i></p>	<ul style="list-style-type: none"> • Which norms characterize the interactions in the network? • Did the membership change your perception of Robert Bosch Stiftung?

(9) Observed effects – meta level:

To conclude: What benefits and impact could you observe for other alumni in the network and beyond that?

- What type of person profits the most from the network?
- What has actually changed for these alumni?
- What possible impact does the Bosch Alumni Network have on society?

On top

- Do you have any additional remarks?
- Are there any other alumni you know of we should talk to?
- Would you like to be informed about the results of the study? If so, how should we notify you?

A.2 Sample of the interview partners (along the sampling criteria)

Member interview #	Activity level in the BAN	Professional field	Level of seniority	Gender	Age	Region of impact
Member interview 1	Selectively active	Cultural Management	Self-employed	Female	50-60	Germany
Member interview 2	Active	Development cooperation	Upper Mgmt.	Female	30-40	USA & SSA
Member interview 3	Selectively active	Politics, reserach	Upper Mgmt.	Female	50-60	USA
Member interview 4	Active	Journalism	Self-employed	Female	30-40	Eastern Europe
Member interview 5	Very active	Cultural Management	Self-employed	Female	30-40	Turkey
Member interview 6	Active	Journalism	Self-employed	Female	30-40	India
Member interview 7	Very active	Research	Self-employed	Male	30-40	Romania
Member interview 8	Active	Urban planning	Employed	Male	20-30	Austria
Member interview 9	Hardly active	Social entrepreneur	Upper Mgmt.	Male	20-30	Philippines
Member interview 10	Punktuell aktiv	Research	Employed	Male	20-30	Argentina
Member interview 11	Active	Youth work	Upper Mgmt.	Female	50-60	BiH
Member interview 12	Very active	Urban planning	Upper Mgmt.	Male	50-60	Armenia
Member interview 13	Hardly active	Social work	Upper Mgmt.	Female	30-40	Germany
Member interview 14	Very active	Youth work	Self-employed	Male	30-40	D.R. Congo
Member interview 15	Very active	Journalism	Self-employed	Female	30-40	Germany & Hungary
Member interview 16	Very active	Development cooperation	Self-employed	Male	40-50	Zimbabwe
Member interview 17	Active	Theater	Upper Mgmt.	Female	40-50	Italy
Member interview 18	Selectively active	Development cooperation	Upper Mgmt.	Male	40-50	International
Member interview 19	Hardly active	Political education	Employed	Female	30-40	Germany
Member interview 20	Very active	Urban planning	Middle Mgmt.	Male	30-40	Portugal
Member interview 21	Active	Philanthropy	Middle Mgmt.	Female	50-60	MENA
Member interview 22	Inactive	Philanthropy	Employed	Female	30-40	Austria & CEE

B. ADDITIONAL TABLES AND FIGURES

B.1 BAN members' mean social network size, learning benefits, civic resilience gain, and success attribution along their regions of origin⁵⁴

Region of origin	# of surface connections	# of deep connections	% gained knowledge and/or skills	% gained civic resilience	% of attributed success
East Africa	24	12	92%	67%	46%
East Asia	48	11	75%	50%	27%
Eastern Europe	37	12	68%	67%	26%
North Africa	34	13	100%	75%	57%
North America	14	7	45%	43%	15%
Northern Europe	30	10	58%	63%	24%
South America	21	8	60%	29%	16%
South Asia	26	13	93%	71%	42%
Southeast Asia	17	4	67%	75%	40%
Southern Europe	33	11	71%	69%	27%
West Africa	38	19	67%	70%	45%
West Asia	42	15	86%	43%	41%
Western Europe	41	13	60%	43%	14%

⁵⁴ Please note: Groups with sub samples below 10 are not reported.

B.2 BAN members' mean social network size, learning benefits, civic resilience gain, and success attribution along different formats

Participation in a BAN format	# of surface connections	# of deep connections	% gained knowledge and/or skills	% gained civic resilience	% of attributed success
Bosch Alumni Network Strategy Meeting					
Yes, once	45	17	77%	45%	31%
Yes, several times	65	26	84%	86%	46%
Bosch Alumni Forum					
Yes, once	49	15	72%	53%	28%
Yes, several times	69	25	91%	52%	29%
Cluster Kick-Off					
Yes, once	58	17	82%	75%	34%
Yes, several times	135	40	93%	75%	39%
Network Conference					
Yes, once	42	15	90%	74%	38%
Yes, several times	65	21	76%	92%	41%
Learning Exchange Grant					
Yes, once	51	18	87%	77%	38%
Yes, several times	53	17	95%	93%	58%
Monday on the Couch					
Yes, once	66	20	78%	64%	28%
Yes, several times	69	26	62%	54%	37%
Practitioners Lab					
Yes, once	68	19	90%	79%	36%
Yes, several times	110	35	80%	33%	45%
Regional / thematic alumni group meeting					
Yes, once	45	16	76%	61%	31%
Yes, several times	66	21	82%	60%	26%
Regional Activity Grant					
Yes, once	53	19	78%	72%	34%
Yes, several times	42	17	100%	88%	40%
Study Trip					
Yes, once	24	8	74%	67%	31%
Yes, several times	49	14	85%	78%	30%
Training					
Yes, once	47	17	92%	79%	41%
Yes, several times	54	17	94%	75%	40%
Workshop (or other events with focus on learning)					
Yes, once	43	16	81%	68%	32%
Yes, several times	66	20	94%	80%	39%

B.3 BAN members' mean social network size, learning benefits, civic resilience gain, and success attribution along the BAN Cluster

Cluster Affiliation	# of surface connections	# of deep connections	% gained knowledge and/or skills	% gained civic resilience	% of attributed success
Cluster: Civil Society	44	15	78%	65%	31%
Cluster: Culture	45	15	74%	63%	30%
Cluster: Education	38	13	72%	60%	28%
Cluster: Europe	50	15	72%	59%	26%
Cluster: Governance	46	14	78%	65%	28%
Cluster: Health	27	12	77%	70%	36%
Cluster: Media	35	12	74%	66%	32%
Cluster: Peace	44	16	84%	71%	40%
Cluster: Science	39	15	68%	56%	29%
Cluster: Social Innovation	43	15	75%	71%	33%
Cluster: Sustainable Living Spaces	46	17	79%	71%	30%
Cluster: Other	39	16	72%	64%	25%
Cluster: I don't know	21	7	37%	23%	8%
Cluster: None	35	12	68%	55%	20%

B.4 BAN members' mean social network size, learning benefits, civic resilience gain, and success attribution along the RBSG programs

RBSG program background	# of surface connections	# of deep connections	% gained knowledge and/or skills	% gained civic resilience	% of attributed success
Actors of Urban Change...	35	12	64%	83%	18%
Carl Friedrich Goerdeler-Kolleg	26	9	69%	67%	29%
ChangemakerXchange...	38	16	76%	73%	38%
EPRIE - Exchange Program	65	15	88%	69%	34%
European Fund for the Balkans...	20	6	50%	52%	24%
Global Diplomacy Lab...	59	17	82%	39%	32%
Grenzgänger...	21	7	63%	33%	21%
Lektorenprogramm...	45	12	49%	15%	12%
Medienbotschafter Indien-Deutschland...	18	9	80%	57%	34%
MitOst...	67	20	88%	59%	27%
Netzwerk für internationale Aufgaben (nefia)	20	6	14%	0%	3%
Reporters in the field...	31	10	86%	85%	38%
Robert Bosch Foundation Fellowship Program	27	11	61%	56%	25%
START - Create Cultural Change...	72	21	88%	75%	29%
Tandem Europe...	29	9	70%	67%	22%
Theodor-Heuss-Kolleg...	56	22	88%	65%	26%
Truth, Justice & Remembrance...	24	8	80%	77%	41%
Not (yet) participated in a RBSG program	10	4	50%	50%	19%
Current staff member of the RBSG	66	26	48%	38%	10%

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