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method
report

How to create and sustain peer networks for open data leaders

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Table of contents

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1. Executive summary

This report reviews the theory and practice behind peer networks as a method for building leadership capacity. Its main purpose is to help organisations, researchers and global development practitioners to **create successful peer networks that support leaders implementing open data initiatives**, whether in the private or public sector.

Peer networks have emerged as a popular means of developing leadership and sharing knowledge in different areas. As peer networks within the open data sector are still in their formative stages, there is limited literature available on their specific impacts. However, we can learn from the experience of more established peer networks in other fields, such as not-for-profit management, research for development and good governance.

This report explores peer networks, their key features and what makes them most effective. It also raises ongoing challenges, such as how to sustain a network beyond initial engagement stages.

We find that although individuals often learn from each other within peer networks, the impacts may not extend to wider institutional and societal change. Further, research is required to monitor and evaluate outcomes at various stages of network evolution, in order to improve their impacts broadly.

Drawing lessons from a body of literature on network theory and peer network evaluations, we propose the following recommendations for organisations or practitioners interested in convening peer networks to support open data leadership (though they are also broadly applicable to other fields):

> 1. **Promote 'network thinking' among participants.** Network thinking describes an emerging horizontal approach to communication and decision making. It helps a group to form new ideas, share diverse perspectives and adapt, rather than be bound by rigid or pre-determined plans. This mindset encourages collaboration and working in more connected, open ways.

> 2. **Help to build relationships through face-to-face and virtual engagement.** Using action-learning and appreciative inquiry methodologies that emphasise reflection, dialogue, feedback and joint problem solving can improve trust and relationships among members.

> 3. **Be flexible and adaptive to the needs of network members.** The network must be able to adapt to meet external opportunities or demands, and respond to the shifting expectations and needs of its members.

How to create and sustain peer networks for open data leaders | Open Data Institute 2016

4. **Appoint a dedicated and highly motivated convenor.** Network growth and sustainability often hinges on a committed coordinator or steering group who can help to attract resources, mobilise members and engage new participants.

5. **Use platforms that enable members to self-organise, engage others and take ownership over actions.** Social networking tools are increasingly being used to help members to collaborate on joint projects, share resources and communicate easily.

6. **Collaborate on outputs that will build your external credibility and influence.** The external credibility and influence of networks over time often depend on whether they produce high-quality research, policy papers or other outputs such as stories, tools, resources and guidance.

7. **Intentionally monitor and evaluate network outputs and outcomes at various levels** such as 'individual', 'institutional' and 'national/policy'. In particular, follow up with individual members regularly to understand how effective the network is in supporting leadership capacity, and adapt approaches where necessary.

2. Introduction: networks and network thinking

The idea of a **'network'** can seem complex, so it is important for our purposes to conceptualise it as a distinct organisational form.

To clearly define a network, it can be helpful to establish what it is not. A network is not simply a group of people with a shared passion for a particular topic, who seek to learn how to do it better through unstructured interaction.[1] This is often referred to as a 'community of practice'. While communities of practice are self-selecting and informal, networks have more established structures.

A network is also not a traditional hierarchical organisation. While traditional organisational structures have individual leaders who decide what should be done, networks use a distributed authority model, where network members have more autonomy to decide what to do, contribute and create – sometimes with the help of a coordinator.[2]

A network can be defined as a social arrangement that is based on members building relationships, sharing tasks and working on mutual or joint activities.[3] Networks consist of a set of **interconnected members ('nodes')**, which are connected by social bonds ('links') formed through common activities and communication.[4] Networks are adaptive structures that can be easily expanded by incorporating new members or by merging with other networks. The points at which networks cross over are known as 'hubs'.

'Peer' networks are horizontal organisational structures, comprised of members ('nodes') who share similar identities, circumstances or contexts. Peer networks often distribute resources and support to members via social bonds and activities ('links'). A member could be an individual person or organisation, but the key is that members enjoy equal participation rights. As organisational models, peer networks are flourishing with the combined influences of increasing economic and social interdependence, new media and the growth of information communication technology. Supportive technologies such as instant messaging, free video conferencing and online platforms now help nodes to communicate across transnational boundaries and global north-south divides.

1 Wenger, E. (1999). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.

2 Plastrik, P. and Taylor, M. (2006). *Net Gains: A Handbook for Network Builders Seeking Social Change*. Available at: http://networkimpact.org/downloads/NetGainsHandbookVersion1.pdf [Accessed 2015-12-20].

3 Willard, T. and Creech, H. (2006). *Sustainability of International Development Networks, Review of IDRC Experience* (1995-2005). Winipeg: International Institute for Sustainable Development. Available at: https://www.iisd.org/pdf/2007/networks_sus_int_dev.pdf [Accessed 2015-12-20].

4 Castells, M. (2000). *Toward a Sociology of the Network Society*. Contemporary Sociology. 29(5), p. 695. Available at: http://www.jstor.org/stable/2655234 [Accessed 2015-12-20].

Encountering networks can encourage us to re-examine the ways we work, the ways we interact and even the ways we think.[5] **Network thinking** has emerged to describe the way decisions are made and activities are organised in an increasingly interconnected society.[6] It involves moving from vertical to horizontal approaches to decision-making, and is characterised by open systems of communication, knowledge exchange and dialogue facilitated by new media. It helps to form new ideas, share diverse perspectives among multiple contributors and adapt, rather than be bound by rigid or pre-determined plans.[7] In the last five years, networks and network thinking have emerged around open data.

Open data is data that anyone can access, use and share. Open data can help bring efficiency to policy-making and service delivery, boost citizen engagement and stimulate innovation and economic growth.[8] Governments of all levels (central, regional and local) are developing an increasing number of open data initiatives: building capacities to use and produce open data for social, environmental and economic benefits.

The conference report of the International Open Data Conference (2015) recommends:

> *"Government open data leaders need increased opportunities for networking and peer-learning. Models are needed to support private sector and civil society open data champions in working to unlock the economic and social potential of open data."[9]*

Peer networks can be important in supporting the capacities of open data leaders within sectors, cities and countries, and across regions.

The remainder of this report is structured in three parts. The first section outlines the **different types of peer networks and their impacts**. The second section analyses the **characteristics of effective peer networks**, and the challenges of creating and sustaining a network. The final section provides our **conclusions and recommendations** for convening peer networks effectively.

5 Mitchell, M. (2006). *Complex Systems: Network Thinking*. Santa Fe Institute Working Paper 2006-10-036. Available at: http://www.santafe.edu/media/workingpapers/06-10-036.pdf. See also: Watts, D. (2003) *Six Degrees: The Science of a Connected Age*. New York: Gardner's Books; and Barabrasi, A. L (2002). *Linked: The New Science of Networks*, New York: Perseus.

6 See Castells, M. (2000). As above; and Van Djik, J. (1991). *The Network Society: Social Aspects of New Media*. Houten: De netwerkmaastchappij Bohn Staflen Van Loghum.

7 See Ogden, C. (2011). *Network Thinking*. [Blog] Interaction Institute for Social Change. Available at: http://interactioninstitute.org/network-thinking [Accessed 2015-12-20].

8 See for example: Tennison, J. (2015) *The Economic Impact of Open Data: What Do We Already Know?* [Blog] Huffington Post Blog. Available at: http://www.huffingtonpost.co.uk/jeni-tennison/economic-impact-of-open-data_b_8434234.html [Accessed 2015-12-20].

9 Enabling the Data Revolution: An International Open Data Roadmap (2015). Conference Report, 3rd International Open Data Conference, Ottawa, Canada May 28-29, 2015. Available at: http://1a9vrva76sx19qtvg1ddvt6f.wpengine.netdna-cdn.com/wp-content/uploads/2015/09/IODC2015-Final-Report-web.pdf [Accessed 2015-12-20].

3. Peer networks as an approach to capacity building

Maximising network benefits

With their horizontal organisational structure, peer networks can easily distribute resources and support among their members. Knowledge and insights can be developed by sharing, distributing and building upon information held by individual members, thereby increasing the potential for collective impact.

Leadership development programmes often employ peer networks to expand ties between leaders who have shared interests, work objectives or experience.[10] In a peer-leadership network, members are encouraged to share information, offer advice and support, and learn management techniques from each other.

The rationale for connecting peers within networks is that often the most practical or relevant information for people can be obtained from reliable contacts at the same level, rather than from further up the organisational hierarchy or back in institutional archives. In a new and fast-moving field like open data, ties between practitioners at the forefront of the movement are particularly important. There is not yet a well-established bank of wisdom to draw upon, so networks may help to spread and solidify emerging knowledge much faster.

Exploring different types of peer networks

The purposes, scope, size, membership and governance of peer networks we surveyed for this review varied greatly. Some networks aimed to link sector leaders within community groups, donors and non-governmental organisations (NGOs). Other networks aimed to influence policy through voluntary association and mobilising members. Others provided social connections and developed 'soft skills' among their members.[11]

Open data networks exist at different levels: regional, national or international. Some open examples of data networks are listed below.

- The **Open Data for Development Network** is a global initiative of NGOs, donors and research organisations seeking to understand and then scale open data solutions for economic and social development.

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10 Hoppe, B. and Reinelt,C. (2010). Social Network Analysis and the Evaluation of Leadership Networks. *The Leadership Quarterly,* 21, p. 600.

11 Bernard, A. (1996). IDRC Networks: An Ethnographic Perspective, IDRC Evaluation Unit.

- The **Latin America Open Data Initiative** is a regional initiative that seeks to promote research, use and re-use of open data across Latin America.
- The **UK Government Linked Data Group** is a UK-based initiative which brought together civil servants working across departments to optimise technology for government.
- **GODAN (Global Open Data for Agriculture and Nutrition)** is a sector-based network of NGOs, researchers, universities, private sector actors, global institutions and governments to support global efforts making agricultural and nutritionally relevant data more available, accessible and usable.
- The **Open Data Leaders Network** is a global network of public sector open data leaders at different levels (city, regional and national) to promote peer-learning and knowledge exchange.

See the appendices for a fuller list of existing open data networks.

Assessing peer networks and their impacts

Defining and measuring the results of peer networks is challenging, particularly when desired impacts depend on other actors or take a long time to achieve, such as policy change.

Frequently reported positive impacts of peer networks include:[12]
- personal and professional relationships being formed
- members gaining social capital
- members promoting new thinking and solutions
- improved professional approaches within a sector, through the development of shared standards and best practice

Other reported impacts of peer networks are:
- enhanced institutional, sectoral or organisational capacity within members' respective organisations
- increased public awareness of the network's cause, credibility, quality of training or activities, and increased membership levels

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12 See for example Brown, L .and Gaventa, J. (2008). *Constructing transnational action research networks: Observations and reflections from the case of the Citizenship DRC*. IDS Working Paper, 302. Available at: http://r4d.dfid.gov.uk/PDF/Outputs/ CentreOnCitizenship/gaventabrownwp302.pdf [Accessed 2015-12-19]; and Taschereau, S. and Bolger, B. (2007). *Networks and Capacity: A theme paper prepared for the study 'Capacity, Change, and Performance.'* European Centre for Development Policy Management. Available at http://ecdpm.org/publications/networks-capacity [Accessed 2015-12-20].

- improved government policies or laws as a result of joint network activity or influence
- broader social outcomes through leveraging resources, improving decision-making, influencing policy affecting social change and catalysing civic engagement

As this list shows, network impacts can occur at different levels: individual, network, policy or institutional and broader community or societal.

The levels of impact can be interpreted by applying Donald Kirkpatrick's 'four levels of evaluation'. Kirkpatrick created this model for evaluating training programmes, which is considered a standard in the fields of education, training and capacity building. The four levels consist of reaction (customer satisfaction), learning (knowledge and skills gained), behaviour (change in behaviour, attitudes or performance), and results (impacts on individual productivity, business, or society).[13]

While there is substantial evidence of impact of peer networks at the 'reaction' and 'learning' levels, the evidence of impact is weaker further up the chain. One of the most commonly reported impacts is increased social capital, through the formation of new connections and professional relationships outside the individual's original sphere (known as 'bridging' bonds). However, there are fewer examples of peer networks leading to demonstrated behaviour and institutional change. This could be due to a lack of end-to-end studies unpacking the entire process from initial peer-engagement through to broader societal impact.

Ongoing research and monitoring of networks is required to understand various large-scale impacts over time, and value for money of investments into network-building, especially as the range of open data networks mature. There is a growing body of research about how to evaluate networks, the details of which are outside the scope of this paper.[14] Researchers are trying to define what to measure (indicators) and methods to measure networks (such as social network analysis).

13 Kirkpatrick, D. L. (1998). *Evaluating training programmes: The four levels*. 2nd ed. San Francisco, CA: Berrett-Koehler Publishers.

14 See for example Durland, M. M. and Fredericks, K. A. (2005). An introduction to social network analysis. *New Directions for Evaluation*, 2005 (107), p. 5–13.

4. Features of effective peer networks

This section explores the features that contribute to creating and sustaining effective peer networks. Due to a lack of literature available on open data networks, these features have been drawn from reports that evaluate peer networks from other sectors, which may nonetheless have broader applicability.[15]

We have structured network features into three phases: **preparing, convening**, and **sustaining**.

The **preparing** phase establishes the foundations of a network structure, while the **convening** phase is oriented towards building the social (bonding) capital of members. The final **sustaining** phase is focused on moving from peer engagement to driving broader social and institutional impact.

Constructing an effective network is an iterative task, which involves developing formal structures and informal norms, and defining tasks to guide collective action and accomplish shared goals. Nascent networks often have informal systems based on general consensus around activities, but develop more formal systems later on.[16] Over time, formal systems may be become embedded, but the focus on continual improvement and adaptation should remain. Network coordinators or facilitators should continue to take advice on structure, processes and direction from members of the network.

How to create and sustain effective peer networks

Below is a summary of actions within each phase of creating and sustaining peer networks, drawn from reports assessing and evaluating peer networks in different sectors.

1. Preparing the network

- **Identifying participants.** Network conveners should be explicit about the network's initial objectives and the desired qualities of prospective members.[17] Network members need not be homogeneous – a well-

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15 See bibliography for list of the 'evaluations of peer networks' referenced.

16 Fox, J. and Brown, D. B. (1998) Assessing the Impact of NGO Advocacy Campaigns on World Bank Projects and Policies. In Fox, J. and Brown, D. B (eds.) *The Struggle for Accountability: The World Bank, NGOs and Grassroots Movements*. Cambridge MA: MIT Press.

17 Sabet, Z. (2014). *Becoming Better Capacity Builders: What GDNet has learned about developing researchers' confidence and ability to communicate their research*. [Blog] Department for International Development R4D. Available at: http://r4d.dfid. gov.uk/pdf/outputs/GDNET/Becoming-Better-Capacity-Builders_GDNet_30_06_14.pdf. [Accessed 2015-12-20].

managed, diverse group of members can work successfully where dynamics are managed sensitively.[18] Participants should be treated as individuals (rather than representatives of their agencies), and members matched according to similar function.[19]

- **Developing a flexible inception workshop design.** The initial network meeting (or 'inception workshop') should be tailored to participants: their backgrounds, familiarity with the subject, previous work and affiliated organisations. Conducting a survey prior to the workshop is an effective way to help curate content. The content itself should strike a balance between theory and practice, and include hands-on sessions for members to apply what they have learned to their own contexts.[20]

2. Convening the network

- **Articulating shared values and purpose.** The network should be organised around shared values and objectives that make sense in light of the strategies of individual members.[21] A shared vision is constructed through reflection and debate, and may evolve over time.

- **Building connections across boundaries.** Members must be introduced to establish bonds among groups or individuals who are not already connected. Helpful techniques to facilitate this include 'study circles' and 'world cafés' to promote dialogue among people with different perspectives or experience.[22] These connections can later help members to self-organise and innovate around common interests or challenges.

- **Developing trusting and respectful relationships.** Networks depend on relationship building, particularly when other tools – such as binding contracts or enforceable rules – are not available.[23] Forms of engagement include workshops, field visits and meetings that enable intensive interaction.[24] Well organised face-to-face meetings are important in building trust, mutual understanding and motivation to

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18 Powell, W. W. (1990). As above.

19 Andrews, M. and Manning, N. (2015). Mapping Peer-Learning Initiatives in Public Sector Reforms in Development. *CID Working Paper* (298), p. 49. Available at: http://bsc.cid.harvard.edu/files/bsc/files/andrews_peer_learning_298_0.pdf. [Accessed 2015-12-22].

20 Sabet, Z. (2014). As above.

21 Castells, M. (2000). As above (p. 694); and Powell, W. W. (1990). As above.

22 Meehan, D. and Reinelt, C. (2012). Leadership and Networks: New ways of developing leadership in a highly connected world, Leadership Learning Community, 9, Available at http://leadershiplearning.org/system/files/LLCNetworkNLfinal4.pdf. [Accessed 2015-12-20].

23 Church, M. et al. (2002). *Participation, Relationships and Dynamic Change: New Thinking on Evaluating the Work of International Networks*, UCL Development Planning Unit Working Paper,121, pp. 1–43.

24 Brown, D. L. and Gaventa, J. (2008). As above.

continue (often virtual) engagement between meetings.

- **Promoting network thinking from the outset.** This involves working in more connected ways, being willing to share ideas, information and contacts.[25] Cultivating the network-thinking mindset can happen during the course of working together on joint projects, or through soft-skills training within networking strategies.

- **Leveraging collective expertise and resources.** Access to the technical knowledge and expertise of other members is an important attraction for prospective members, and a condition for network legitimacy. Successful networks offer possibilities for members to use their experience and skills to create new projects and leverage resources.

3. Sustaining the network

- **Encouraging informal leadership.** It is important to develop a leadership style that is informal, fluid and open. Coordinators must be able to facilitate participation from people with diverse perspectives, articulate a vision, persuade individuals to work together, and tap into members' knowledge, skills and experience.[26]

- **Building platforms for self-organisation and ownership.** Creating platforms (virtual or face-to-face) that enable individuals to self-organise is essential for sustaining strong networks. Strong networks create many avenues for engagement and for members to take ownership over actions.

- **Cultivating communities of learning.** Increasingly, action learning sets are being used to create opportunities for joint problem solving by drawing on the knowledge of participants. Effective networks also invest in knowledge management systems, document collective knowledge, and create story banks of network activity.

- **Using existing tools for ongoing communication and collaboration.** Effective networks often harness communications technology to enable interaction between members across boundaries. In some cases, social media can facilitate more efficient collaboration, especially for regional and international networks.

- **Formalising a governance structure.** A wide variety of network governance structures exist – from loose and voluntary to formal fee-based models of membership with a secretariat or steering group. Smaller, informal networks can be quite effective with the support of a

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25 Hoppe, B. and Reinelt, C. (2010). As above.

26 Taschereau, S. and Bolger, B. (2007). As above.

relatively small number of members who donate time on a continuous or rotational basis. However, as networks grow they often require a dedicated coordinator or secretariat with an operating budget.[27] No one structure is reported to be more effective than another, but generally those networks with a relatively simple programme design, strong core focus and small number of activities seem to be easier to develop and maintain.

- **Connecting with other professional networks.** By engaging with other groups with similar goals, networks can expand their reach. This can be interpreted as 'bridging capital'. However, some authors warn against expanding too quickly and recommend ideally first consolidating a small core membership base.[28]
- **Ensuring adaptive capacity.** Effective networks are capable of managing change in response to shifting contexts. This means identifying external opportunities and threats, and continuously gathering intelligence from a range of sources to develop appropriate strategies.[29]

27 Ibid.

28 Browne, E. (2013). Effectiveness of African Regional Professional Associations. *GSDR*, 5. Available at http://www.gsdrc.org/docs/open/HDQ983.pdf. [Accessed 2015-12-18].

29 Sorgenfrei, M. and Wrigley, R. (2015) *Building Analytical and Adaptive Capacities for Organisational Effectiveness*. INTRAC Praxis Paper, 4. Available at http://www.hiproweb.org/fileadmin/cdroms/Biblio_Renforcement/documents/Chapter-2/Chapter2_1/Chap2_1Doc8_1.pdf [Accessed 2015-12-20].

Managing networks: challenges

Networks can be complicated to manage. Creating and sustaining them can take substantial effort from their coordinators, as well as resolving conflict within them. Challenges include:

Communication and building relationships

Some networks report challenges around communications when using online tools, including technical language and access problems. A related challenge is that replicating opportunities for networking – which is essential to building relationships – is difficult when confined to online tools. Online courses can be effective for training, but cannot replace face-to-face interactions when building trust.[30] To move beyond simple information exchange to joint action requires some in-person meetings.

Member diversity and enabling cohesion

Diverse membership can help bolster successful networks, but it can also lead to a lack of cohesion between members.[31] Building a network culture through defining goals, establishing a shared purpose, and confirming common values may help prevent conflict. Being voluntary in nature, another factor that can affect network growth is high member turnover, either through members leaving or changing jobs. By injecting new skills and energy, a shifting membership base can have positive effects, but it can also compromise efforts to strengthen capacity.

Member capacity

Balancing different levels of capacity among individuals and institutions can be difficult. Research networks, for example, might assume a similar level of capacity among individual researchers and organisations, but this might not be the case. It is therefore important to understand capabilities through a realistic assessment, to maximise the participation of members. A basic assessment exercise could be built into planning stages of the network to help strike the right balance.

Funding, resources and demonstrating results

Managing networks can be costly in terms of time and resources, especially in the early stages. Due to pressure from donors or the constraints of project funding, networks may be pushed to demonstrate results (concrete products and outcomes) quickly. However, networks can take between five and seven years to establish legitimacy in their sector and develop strong links with policymakers.[32]

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30 Sabet, Z. (2014). As above.

31 Bernard, A. (1996). As above.

32 Ibid..

5. Conclusions and recommendations

This report has summarised existing research and practice related to peer networks, to inform the efforts of peer networks seeking to build open data capacity.
In doing so, we have drawn on a broad range of literature on network thinking, and network evaluations from different sectors. There are a number of lessons about effective network-building that the open data community can learn from.

Building open data networks to improve open data's use and impacts in different sectors

Peer networks have great potential to support open data practice and facilitate high-level reform. Our research finds much of the visible impact of peer networks within other sectors occurs at the individual level. Network participants frequently report a sense of empowerment, learning new skills and increased social capital.

We also found several features of effective networks, including articulating a shared vision and formalising governance structures over time. However, the literature on peer networks often focuses on the formative and peer engagement stages, rather than assessing the impacts of networks at scale (at the institutional or national level). This suggests the need for continued research, monitoring and evaluation of networks as a methodology — especially as open data peer networks grow and mature.

Based on our review, we have developed a set of practical recommendations for organisations or individuals who are interested in network-building to support leadership and open data practice globally. This kind of peer-to-peer exchange will be key to overcoming implementation challenges and extending impact as initiatives mature.

Summary recommendations

1. **Promote network thinking among participants.** Network thinking describes an emerging horizontal approach to communication and decision-making. It helps a group to form new ideas, share diverse perspectives and adapt, rather than be bound by rigid or pre-determined plans. This mindset encourages collaboration and working in more connected, 'open' ways.
2. **Help to build relationships through face-to-face and virtual**

engagement. Using action learning and appreciative inquiry methodologies that emphasise reflection, dialogue, feedback and joint problem-solving can improve trust and relationships amongst members.[33]

3. **Be flexible and adaptive to the needs of network members.** The network must be able to adapt to meet external opportunities or demands and respond to the shifting expectations and needs of its members.

4. **Appoint a dedicated and highly motivated convenor.** Network growth and sustainability often hinges on a committed coordinator or steering group who can help to attract resources, mobilise members and engage new participants.

5. **Use platforms that enable members to self-organise, engage and take ownership over actions.** Social networking tools are increasingly being used to help members to collaborate on joint projects, share resources and communicate easily.

6. **Collaborate on outputs that will build your external credibility and influence.** The external credibility and influence of networks over time often depends on whether they produce high-quality research, policy papers or other outputs such as stories, tools, resources and guidance.

7. **Intentionally monitor and evaluate network outputs and outcomes at various levels such as 'individual', 'institutional' and 'national/policy'.** In particular, follow up with individual members regularly to understand how effective the network is in supporting leadership capacity, and adapt approaches where necessary.

What do you think?

If you have insights into open data or network building that you would like to share, we want to hear from you. Get in touch with fiona.smith@theodi.org or tweet us at @ODIHQ.

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33 See for example Taschereau, S. and Bolger, B. (2007).

About this report

The Open Data Institute (ODI) connects, equips and inspires people around the world to innovate with data. It is independent, nonprofit and nonpartisan, founded in 2012 by Sir Tim Berners-Lee and Sir Nigel Shadbolt. From its headquarters in London and via its global network of startups, members and nodes, the ODI oers training, research and strategic advice for organisations looking to explore the possibilities of open data.

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A partnership funded by

Appendix

Glossary of related terms

Action learning

A technique which harnesses the existing knowledge, skills and capacity of a small group of people, applied to real-world challenges. It uses a process of structured questioning and reflection to unlock understanding of familiar concepts, while producing new ideas or approaches to solving problems. It is a form of peer-learning.

Appreciative inquiry

A theory and practice for approaching change in an organisation or team through a process of asking questions in a systematic way, focusing on identifying what is already working well (strengths), analysing why, and visioning what could be possible in the future. It can be used as a method for problem-solving or action-planning.

Community of practice

While a network is created in the context of a specific network architecture, membership in a community of practice is self-selected. Communities of practice are often found in either large organisations, or across organisations where individuals are informally connected by shared expertise and passion for a common enterprise eg engineers working in a large organisation or consultants in a specialist area.[1]

Peer-learning

Peer-learning activities can range from informal communities of practice, through to lesson-sharing platforms for donors, online classrooms, to highly structured benchmarking exercises between organisations. New knowledge and patterns of behaviour are acquired by direct experience, by observing the behaviour, and the consequences of others' behaviour.[2] Peer-learning may take place at the group level (where the primary unit of analysis is the agency or the country) or individual level (where individuals gain practical insights from engagement).

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36 Wenger, E., McDermott, R., and Snyder, W. (2002). *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston, Cambridge University Press.

37 Wenger, E. (2000). Communities of Practice and Social Learning Systems. *Organisation*, 7 (2), pp. 225–246. Accessed on 18 December 2015 at http://homepages.abdn.ac.uk/n.coutts/pages/Radio4/Articles/wenger2000.pdf. [Accessed 2015-12-20].

Social capital

The OECD defines social capital as networks of shared norms, values and understandings that facilitate co-operation within or among groups. These networks are comprised of bonds (links based on common identity eg family), bridges (links that stretch beyond a common identity eg work acquaintances) and links (links to groups further up or lower down the social ladder).

Examples of open data networks

UK Government Linked Data Group (http://data.gov.uk/linked-data/UKGovLD)
Open Data For Development (OD4D) (http://od4d.net)
Global Open Data for Agriculture and Nutrition (GODAN) (http://www.godan.info)
RedGealc (http://www.redgealc.net/home/en)
Inter-American Network on Government Procurement (http://www.ricg.org/home/en)
Latin America Open Data Initiative (ILDA) (http://idatosabiertos.org)
Network of Innovators (GovLab) (http://noi.thegovlab.org)
Open Data Leaders Network (http://theodi.org/open-data-leaders-network)
Open Data Institute Nodes (https://theodi.org/nodes)
Open Data Institute Startups (http://theodi.org/start-ups)
Open Data Incubator Europe (ODINE) (https://opendataincubator.eu)
Open Data for Development Network (http://www.od4d.net)
Open Data Leaders Meetup (https://www.datainnovation.org/2015/09/open-data-leaders-meetup)
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Brennan, P. (2013). *What Do Voluntary Leaders Do? A Report on a Joint Project of the Coalition of National Voluntary Organisation and the Association of Canadian Community Colleges.* Available at http://www.vsi-isbc.org/eng/hr/pdf/nli_report.pdf [Accessed 2015-12-22].

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