

## **Remote Partnering Project**

# Literature study

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## **Introduction & Methodology**

As part of the Remote Partnering Project (<u>www.remotepartnering.org</u>) the partners agreed that undertaking a literature review of any research on the subject would be a very good place to start. It was felt that such a study would provide a solid foundation to our action research and, in due course, to our workshops exploring dynamic new approaches to partnering 'long-distance'.

In order to explore what has been published about remote partnering in the academic literature, I conducted a reasonably systematic search. The database I used was *Web of Science*. Because of the rapid developments of Skype and other tools used in remote partnering, I restricted my search to papers published since 2006. This paper draws together what I found and suggests some areas that seem ripe for the project team and partners to explore further.

## Search terms used

#### 1. Remote partnering

Many of the results found were in categories such as computer science, robotics and artificial intelligence (probably because of the word 'remote'). Therefore, I refined results by checking the boxes for Telecommunications, Multidisciplinary Science, Psychology, Management, and Social Sciences. Results were scanned for relevance. Those that appeared relevant from the title and abstract, were selected and saved. This lead to the following results (4 papers):

- **Berchicci et al.**, 2016: Remote collaboration and innovative performance: the moderating role of R&D Intensity. *Industrial and Corporate Change*, 25, 429–446.
- **Capaldo et al.,** 2014: Partner Geographic and Organizational Proximity and the Innovative Performance of Knowledge-Creating Alliances. *European Management Review, 11*, 63-84.
- **Mueller et al**., 2013: Gaze transfer in remote cooperation: Is it always helpful to see what your partner is attending to? Quarterly journal of Experimental Psychology, 66, 1302-1316.
- **Bazarova et al**., 2009: Attributions in Virtual Groups Distances and Behavioral Variations in Computer-Mediated Discussions. *Small Group Research, 40*, 138-162.

I then also checked the references used, as well as the papers citing the result, using a snowball method. This resulted in the following results (2 papers):

- **Cramton et al**., 2007: Situation Invisibility and Attribution in Distributed Collaborations. *Journal of Management, 33*, 525-546.
- **Gibson et al**, 2006: Unpacking the Concept of Virtuality: The Effects of Geographic Dispersion, Electronic Dependence, Dynamic Structure, and National Diversity on Team Innovation. *Administrative Science Quarterly, 51*, 451-495.

#### 2. Remote collaboration

- Eligio et al., 2012: Emotion understanding and performance during computer-supported collaboration. *Computers in Human Behavior, 28,* 2046-2054.
- **Cheshin et al**., 2012: Emergence of Differing Electronic Communication Norms Within Partially Distributed Teams, *Journal of Personnel Psychology*, *12*, 7-21.

#### 3. Distributed collaboration

- Hill & Bartol, 2016: Empowering Leadership and Effective Collaboration in Geographically Dispersed Teams. *Personnel Psychology*, *69*, 159-198.
- **Bosch-Sijtsema et al**., 2011. A Framework to Analyze Knowledge Work in Distributed Teams. Group and Organizational Management, 36, 275-307.
- **Nurmi**, 2011. Coping with Coping Strategies: How Distributed Teams and Their Members Deal with the Stress of Distance, Time Zones and Culture. *Stress and Health*, *27*, 123-143.

#### 4. Distributed partnering

- Fayard et al., 2014: The Role of Writing in Distributed Collaboration. *Organization Science*, 25, 1391-1413.
- **Pena et al.**, 2007: Effects of geographic distribution on dominance perceptions in computermediated groups. *Communications Research*, *34*, 313-331.

#### 5. Dispersed collaboration

- **Malhotra et al**., 2014: Enhancing performance of geographically distributed teams through targeted use of information and communication technologies. *Human Relations, 67,* 389-411.
- **Maynard et al**., 2014: The Role of Shared Mental Model Development in Understanding Virtual Team Effectiveness. *Group & Organization Management*, *39*, 3–32.

#### 6. Dispersed partnering

No new papers found.

In total, I collected 15 papers.

It is important to note that not all of the papers collected are about partnering per se. Some, for example, look at remote collaboration in terms of teams (e.g. Bosch-Sijtsema et al.). We believe that there is a difference between working remotely as a team and working remotely as a partnership since those working in teams are usually part of the same organisation, whereas those working in partnerships are representing different organisations. Whilst there may be some similarities in the experience (sense of isolation, communication challenges etc) that can be usefully compared, it is not unreasonable to assume that those working in teams are linked by a degree of organisational culture, history and goals in ways that those working in remote partnerships are not.

It is not possible to determine how exactly these differences play out in this study, but it is important to acknowledge that they exist.

## **Findings**

What do these papers tell us? A couple of strong themes emerge.

**Berchicci et al** describe how collaboration with geographically distant partners may <u>enhance a firm's</u> <u>innovative performance</u>. They also note that communication challenges between remote partners might <u>hamper effective knowledge transfer</u>, and argue that <u>R&D intensity is key</u>. R&D intensity refers to the company having more absorptive capacity: the ability to recognize, adopt, and apply external knowledge. In this paper, R&D intensity was measured as firms' R&D expenditures as a percentage of sales revenues over the past year – not very helpful for us, but we might want to dive into how an organization or team deals with learning and knowledge transfer. Berchicci et al did find that remote

collaboration is positively related with innovation performance, but at low R&D intensity, the relationship vanishes.

**Bosch-Sijtsema et al** describe five key factors that affect the performance and productivity of teams of knowledge workers collaborating in distributed work settings. Knowledge work (KW) is defined as the creation, distribution, or application of knowledge by highly skilled and autonomous workers using tools and theoretical concepts to produce complex, intangible, and tangible results. These five key factors are:

- team task
- team structure
- team-work processes
- workplace and
- organisational context.

Each of the five has specific characteristics that can affect the work of dispersed teams. We could decide to use these 5 as a starting point and see what it reveals.

**Cheshin et al** describe how partially distributed teams function and operate in two different media environments, varying in availability of communication channels. These media environments may encourage different communication patterns, widening a gap produced by distance. They demonstrate that different electronic communication norms emerge among members of the same team based on their media environments. Those in <u>remote teams wrote more and longer messages</u>. Most of the norms regarding use of electronic communication persisted even when media environment was changed. This difference in ECNs might serve as an additional fault line, causing an additional rift within distributed teams. It might be of interest for us to ask about the emergence of norms in projects.

There is some inconsistency in the literature where attributions are concerned. Some authors argue that distributed teammates are significantly more likely than co-located teammates to make internal dispositional attributions rather than situational attributions concerning negative partner behavior, whereas other find opposite effects. It might be worthwhile to explore this: <u>do people find that they are quicker to judge the person or the situation when partnering remotely</u>?

**Fayard et al**. examine how <u>writing supports dialogue</u>, and thus collaboration, among distant partners. They identify four mechanisms of writing:

- objectifying
- contextualizing
- specifying and
- reflecting

They show how each of these they support dialogue and help to address the dialogical challenges involved in distributed collaboration<sup>1</sup>. We could explore whether writing (through email) is helpful or not, and how – though perhaps this would be too detailed for what we want to do.

Gibson et al. unpack four characteristics often associated with the term 'virtuality'. These are:

- geographic dispersion
- electronic dependence
- structural dynamism (membership changing all the time) and

<sup>&</sup>lt;sup>1</sup> For what these mechanisms entail, please refer to the paper.

#### • national diversity

They argue that each hinders innovation through unique mechanisms, many of which can be overcome by <u>creating a psychologically safe communication climate</u>. We could explore these five concepts, the paper gives a very detailed<sup>2</sup> methodology for doing so. Psychological safety is harder to measure but authors indicate that it deals with concepts such as <u>'empathy,' 'openness' and 'understanding'</u>. I know from my psychology studies that allowing for failure is a big part of safety, and my suggestion is that we do explore this concept, if we can.

In the **Nurmi** paper, the focus is not on team performance but rather on the <u>stress team members</u> <u>experience by working remotely and how they cope with that stress</u>. Remote collaboration is demanding, as partners have to be <u>flexible and put in extra effort to communicate</u>. We could explore to what extent our respondents experience stress and how they cope with that.

Finally, **Pena et al** found that <u>dominance perceptions were more extreme</u> when group members did not share a geographic location (distributed groups) than when they did (co-located groups). It might be interesting to explore how people <u>form perceptions in their remote groups</u>.

It should be noted that the concepts that emerge from this literature search are largely about performance-related issues, and not so much about possible emotional elements to partnering, such as feeling isolated and not being listened to. Also, there were not obvious themes that are very specific to partnering, such as building alignment or exploring each other's values.

This is interesting in that so little has been written in the academic sector about remote partnering but in terms of giving us insights to enhance our action research it is of limited use.

#### Practice-oriented publications:

Additionally, I looked at 2 practice-oriented publications<sup>3 4</sup> on partnerships in the humanitarian assistance sector provided by other project team member<sup>5</sup>. These studies are somewhat context-specific (one, for example, is set in Syria) but they are particularly focused on partnerships and the specific challenges of partnering long-distance. These publications provide us with a few important insights:

- 1. That the notion of 'equity' in a partnership is questionable when one side has all the money and holds most of the decision-making power. This is a common dynamic of partnerships between international and national actors, but becomes more nuanced in a remote setting because while the international players continue to hold all the money, the local players hold all of the access.
- 2. The nature of the context (in these cases, conflict scenarios) in which the partnership is operating is very personal to the local partner, and far less so for the international partner. The experience is therefore very different with the international partner finding it hard to comprehend the scale of the threat or risk for the local partner. This influences the relationship significantly. <u>Trust and trust-building becomes far more important</u>.

<sup>&</sup>lt;sup>2</sup> Probably too academic for this project

<sup>&</sup>lt;sup>3</sup> Missed opportunities: the case for strengthening national and local partnership-based humanitarian responses

<sup>&</sup>lt;sup>4</sup> Breaking the Hourglass: Partnerships in Remote Management Settings–The Cases of Syria and Iraqi Kurdistan.

<sup>&</sup>lt;sup>5</sup> Catherine Russ (PBA)

In summary, I see the following issues as relevant to the Remote Partnering Project:

- Partnering remotely might enhance creativity and innovation, it poses real challenges with regards to communication
- Those involved need to be able to learn from each other and for that they need a safe environment
- Perceptions of each other might become more extreme when partnering remotely, and this may impact a partnership significantly

I have also listed a number of specific topics that recur in the literature. These are:

- Learning environment
- Partnership task(s)
- Partnership structure
- Work processes
- Work place
- o Context
- Communication norms
- Attributions for negative behavior,
- o On-line communication and its limitations
- Geographic dispersal
- Electronic dependence
- Partner turnover
- Cultural diversity
- Psychological safety
- Assumptions and perceptions
- Isolation and stress
- Coping strategies

These concepts would all be good topics for further exploration – including at the Design Workshop in January 2017 – though we may need to be selective and / or align them with concepts that have emerged from our face-to-face interviews and on-line practitioner survey.