Northumbria Research Link

Citation: Jha, Pushkar and Johnston, Lorraine (2020) Odd Couple Collaborations and Making them Tick! European Business Review, 33 (2). pp. 227-237. ISSN 0955-534X

Published by: Emerald

URL: <https://doi.org/10.1108/EBR-08-2018-0138> <<https://doi.org/10.1108/EBR-08-2018-0138>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/40688/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

**Northumbria
University**
NEWCASTLE

UniversityLibrary

ISSN 0950-534X
Volume 00 Number 00 2018

ODD COUPLE COLLABORATIONS AND MAKING THEM TICK!

Journal:	<i>European Business Review</i>
Manuscript ID	EBR-08-2018-0138.R3
Manuscript Type:	Article
Keywords:	inter-firm collaborations, technology spaces, open innovation, aspirations, market needs

SCHOLARONE™
Manuscripts

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

ODD COUPLE COLLABORATIONS AND MAKING THEM TICK!

ABSTRACT

Purpose

- Whether it be about blending intangibles to deliver to market needs, or be directed at fulfilling aspirations pushing at technological frontiers, inter-firm collaborations across industry boundaries are much in vogue. This paper classifies some collaborations as ‘odd couple collaborations. These are fuelled more by aspirations of the partner firms, and not as much by market pull. The study provides key distinguishing characteristics for these and an understanding of what makes them tick.

Design

- The paper draws on secondary sources in the public domain to understand the motives and performance of several inter-firm collaborations. Odd couple collaborations are examined and some essential performance enablers are highlighted.

Findings

- A typology that distinguishes odd couple collaborations from other inter-firm collaborations is drawn out. Analysing the performance of such collaborations, and a need for partners to work on the visibility and appeal of such collaborations, is discussed. Stringent market evaluation of the offering, and careful creative blending of intangibles are also highlighted as key enablers.

Originality/Value

- The paper contributes to a vast body of research on inter-sector or distant collaborations by isolating and examining a niche that is fast becoming pronounced. The analysis of odd couple collaborations provides cues towards effective strategies for superior value from such collaborations. As organisations constantly seek to extend their innovative potential, these insights may prove useful for both practice and research.

Keywords: inter-firm collaborations; markets; technology spaces; open innovation; aspirations; market needs

Introducing Odd Couple collaborations

Whether it be about configuring new value for consumers, redesigning systems and processes, and in the process outmanoeuvring competition, inter-firm collaborations are notable for how they bring together capabilities outside the confines of any one organisation (e.g. Allee and Toug, 2006; Sammarra and Biggiero, 2008; Kljin et al., 2014; Murphy et al., 2015).

With the need to deliver ever more novelty in offerings, firms are seeking to innovate and diversify their collaboration remits to include ever more unrelated domains, i.e. relative to conventional collaborations, bringing together partners far apart in market offering and/or core technology. These collaborations are becoming a significant and distinctive sub-population of inter-firm collaborations.

When these are based on partners' aspirations and not as much by market pull, we label them as 'odd couple collaborations'. The nomenclature used is a simplification to pairs though more than two parties may mark contemporary -collaborations. They Such collaborations are much less obvious in terms of what (and how) resource and capability complementarities shape them. Typically cutting across conventional industry boundaries and apparent value networks, they have often resulted in shaping new technology spaces and market offerings.

There is a considerable body of research on 'distant collaborations' examining network effects, technology and cognitive distances in 'distant collaborations' with implications for absorptive capacity and cross industry innovation (e.g. vom Stein, et al., 2015; Enkel and Heil, 2014; Moodysson and Jonsson, 2007). We posit that odd couple collaborations, have a similarity with distant collaborations, as in very different technology and industry contexts of partners. However, in our articulation, they have a distinguishing characteristic of higher

unpredictability ~~le the collaboration is~~ in terms of not being aligned with existing market needs and being more about aspirations of the partners, and, therefore, more of a surprise.

In this paper we attempt to generate a typology of odd couple collaborations and bring forth characteristics that relate to risks and performance in such collaborations. We present some conjectures that are likely to be useful for organisational strategists, and for researchers interested in value networks and innovation strategies.

Collaborations: Some perspectives from literature

The defining variables

There are several variables that have been used to characterise collaborations. These ~~include~~ ~~refer to~~ how repetitive the collaborations are, the size and time frame of collaborations and also, the relative power of collaborating partners (Zheng and Yang, 2015; Cumbers et al., 2003). Grey (1989) describes collaborations in context of commonalities or similarities between partners, highlighting their problem-solving potential. Efficacy of relationship management for business creation and innovation has also been emphasised in research (Castells, 2011). This stream of work ties in closely with discussion on social networks beyond organisational boundaries for superior outcomes (Kim and Hastak 2018)).

Innovation literature puts markers down for further variables to be brought in, for instance, to do with the nature of the collaboration i.e. whether it is looking at a well-defined problem, or alternatively, is rather exploratory to seek new frontiers in a domain (Satell, 2017). In all these expressions, the distant-ness of a collaboration, as noted before, is- a ~~relativ~~relatively e recent ~~concern and interest in it has grown very quickly. This is where~~ ~~arena where interest has grown and where~~ we further thinking by classifying a distinctive niche of ~~labelled~~ 'odd couple collaborations'.

Risk and return in distant and odd couple collaborations

A risk and return perspective could be useful to open up the contrast between a broad understanding of distant collaborations and what we have defined as odd couple collaborations. If an odd couple collaborations ~~w~~a~~s~~~~e~~~~r~~~~e~~ to be ~~more~~ disjointed from market needs, one risk would be that of an outcome with poor market uptake. Of course taking such a risk and coming out at the right end could yield a result that startles industry pundits and erstwhile competitors ~~by~~ through strong disruptive outcomes (Satell, 2017).

Distant collaborations that are tuned to market needs are not risk free. For starters, they are more predictable and by the time they yield results, competing collaborations could already have got there. The benefits surely include the fact that resourcing them carries greater legitimacy by virtue of the need for a solution (Jiang et al., 2015; Gulati, 1999). Another important contrast is that odd couple collaborations have this ‘aspirational momentum’ from the top management. Arguably, it makes the rigor and commitment to make them work ~~more~~ stronger than in solution seeking distant collaborations (Hoskisson et al., 2017). The management literally sticks its neck out in committing resources with relatively weak legitimacy. An outcome from this work in trying to understand what makes odd couple collaborations tick, could help this part. An analysis of odd couple collaborations from the past could be a ~~strong~~ basis for informing strategic choices: -for designing such partnerships.

The traditional take on collaboration performance

The traditional take on collaboration performance argues role of leadership, and a clear idea of appropriation of returns, as crucial. Extent of complementarity in partner capabilities that can help shape value is an area that has also been emphasised in such research (e.g. Soda and Furlotti, 2017; Emden et al., 2006). Design issues in how inter-organisational teams are set up, cultural alignment and communication of partnership’s significance ~~of the partnership~~ are ~~also considered important, and are~~ much discussed under the role of leadership ~~in~~

~~driving, delivering and maintaining- in~~ collaborations (Crosby and Bryson, 2010; Seitanidi and Lindgreen, 2011; Murphy et al., 2015). ~~The role of leadership is not explicit in our case examples, but are to some extent implied from a vantage point of aspirations dominating risk aversion. In odd couple collaborations contribution of these factors is not typically explicit in research till date. This and this~~ paper is an effort in understanding impacting factors for design and performance of odd couple collaboration~~this direction. The role of leadership and the intent of surprise is of course pronounced but from a vantage point where aspirations dominate risk aversion.~~

Method and Observations

Rationale and experience of collaborations we discuss are drawn from published sources. We started with a search on inter-firm collaborations and as a **first step** extracted the ones which could be clearly argued as distant collaborations. The **criterion** for extraction at this step was: collaborations that were far apart in terms of technology and industry context of partners, typically lying across industries. This was done jointly by the authors using Google search on ‘news’ and ‘all’. Google scholar and academic papers were not included at this stage to prevent bias. The time frame of search ~~was last five years i.e. from 2013-2018~~, but also included prior collaborations mentioned as central to collaborative trends during the five-year period.

In the **second step**, of the 34 distant collaborations we extracted as unambiguously ‘distant’ - based on the criterion in the first step, each of the authors now independently rated them with brief comments in terms of them being odd couple collaborations or not (Y/N), in instances where this was found to be unclear at first sight an ‘O’ label was given, for further examination. The central **criterion** for this was: led by partner aspirations alone and not linked with market pull/ requirement. Evidence for this was to be provided by the raters in

brief using secondary sources. We agreed to a simple tabulation template with a brief description of the collaboration in first column (rationale, experience and performance), the second column comprising evidence to support or negate the ~~primary~~ criterion for the second step, third column having the evaluation code Y/N/O and the fourth column referring to sources for the evidence presented.

In the **third step** we assessed the inter-rater reliability (percent agreement) for the third column. This was just over 88% (30 of 34). We carried forward with 31 observations to shape our narrative here, after evidence for one of the not agreed observation (an O) was resolved in favour of it being a YN. Of these 31 observations 7 were clearly odd couple collaborations that were taken forward to critically assess ~~their~~ rationale and experience. Contrast from the distant but ‘not’ odd couple collaborations also helped shape the narrative.

To control for any bias, each interpretative assertion used to develop the -narratives was carefully checked to be supported by at least two published sources, each with a different affiliation. Working on a primary data basis for this sample was also attempted. However, because the examples are spread over time and personnel involved were not accessible even if identifiable, this yielded very little data. Furthermore, respondent bias in terms of what they were involved with themselves could be strong. A published source supported by another in terms of rationale and performance expressions thus offered relatively more reliability. It may be useful to note that we use some observations as benchmarks (which therefore draw relatively more discussion to elaborate and to contrast) to then contrast others as we work towards our classificatory framework and distil key issues in performance of such collaborations. A series of observations are presented in the sections to follow. Some of these come with a discussion of performance and implications, and others, where the verdict is still out, a reflection on rationales behind the collaborations.

Rationales for and experiences of odd couple collaborations

Pushing technology frontiers to form new market spaces

Driverless cars are a recent outcome from an odd couple collaboration of yesteryears. They already on the roads and being fast tracked by policy and industry, with competitive performance and technology development already being informed from use feedback (Levin and Harris, 2017; Kerr, 2018). Initial and conventional research collaborations for driverless cars between universities and corporations over 1980s could not generate enough critical mass to capture public imagination. The efforts did provide adaptive cruise control prototypes but not close enough to the true proposition of a driverless vehicle (Cassetta et al, 2017). Visibility of these pursuits gained considerable amplification from 2004 onwards. This was over a series of collaborative ventures between Google and Defense Advanced Research Projects Agency of the United States Government (DARPA), challenging innovators to pit driverless vehicles in races designed to test their functioning, a much discussed ‘innovation tournament’ or ‘design competition’ (Hutton, 2015; Lampel et al., 2012; Chesborough 2010). At least at the time, Google and DARPA were quite distant in terms of industry affiliations (Etzkowitz, 2008). The collaborative venture was driven by aspirations of the army to deploy such vehicles for reducing human casualties, using the reach platform that Google had, to support open innovation in competitive settings (Battelle, 2006). It was also alongside a drive for visibility by Google, as it sought to go beyond being a search engine to an information technology and knowledge repository giant (Arthur, 2014). The spin off from this collaborative venture into the automobile market went from strength to strength. In recent times car manufacturers like Ford, Jaguar Land Rover, BMW, Volvo and Audi have all continued to step up their act towards a commercial driver less cars market (Levin and Harris, 2017).

Waymo, a firm in Alphabet Inc Group -parent company of Google and subsidiaries after corporate restructuring, launched a driverless car in 2016. The outcome from this collaboration with Fiat Chrysler has been quite close to functionality requirements for commercial use. Alphabet Inc. and its lead firm Google continue to collaborate making an odd couple collaboration of yesteryears spin off into more aligned ones ~~-~~, ~~also~~ a testimony to persistence and aspirations of technological leadership (Hobday et al., 2004; Levin and Harris, 2017). For DARPA the driverless car pursuit has fuelled a generation of initiatives seeking breakthrough innovation in the area of minimising human risk in expeditionary US military contexts (Friedell, 2016). ~~Capturing public imagination~~ ~~This venture thus~~ did not only generate innovation inputs but also shaped the market ~~for~~, and ~~the~~ uptake of driverless cars. The momentum was owed to a rather intriguing and visibility amplifying open innovation platform (a design competition), and surprise of an unpredictable collaboration between lead partners capturing public imagination.

In another interface, NASA is collaborating with Sony to use ~~their~~ Playstation's virtual reality acumen for space training ~~seeking~~ to control robots remotely from earth. The partnership seeks work on novel inputs for functionality of robotics - aspirational by way of pushing technology frontiers where enhancing such aspects is not really holding back any functionality from an existing needs point of view. Aspirations of both partners fuel this collaboration- enhancing the appeal of virtual reality technology and acquiring visibility in terms of being the leader in it, for Sony and, pushing space exploration frontiers for NASA (Connelly, 2015).

However, efforts at visibility for this by Sony have not gone much beyond corporate announcements, and some business and technology news. This is a relatively closed technology development initiative, multiple ways to publicise it more exist, including to resource this pursuit - through open innovation tournaments, promotions, and ~~enhanced~~

~~visibility~~ through popular media. Such inputs could allow NASA to generate public interest in its initiatives, and in the long run, support the often-debated spending of public money.

Overall, while the verdict on this collaboration is still out, contrasting the narrative of the Google-DARPA collaboration and developments, thereafter, allows some useful conjectures to be flagged: Odd couple collaborations tend to acquire visibility by the sheer nature of ~~the~~ surprise-~~of such partnerships~~. The visibility can be amplified further through deployment of open and inclusive innovation schemas that extend ~~the~~ aspirations to a wider set of potential innovators and the public. In turn, this could create useful innovation resources and support forming of a 'market space', if not market creation itself (Kim and Mauborgne, 1999).

Creating value synergies from leveraging intangibles

Odd couple collaborations have also seen intangibles beyond just technological capabilities being leveraged to create novel blended offerings. While this agenda may arguably be less punchy than stretching technology frontiers, aspiring for value synergies from blending of intangibles ~~beyond technological capabilities~~ has been noted quite extensively- and with a marked attention to the individual acclaim of the brands under purview (Bianchi, 2017). An example is that of Giorgio Armani, a fashion house venturing into luxury hotels business in collaboration with Emmar properties. Emmar operates a range of luxury hotels and holiday resorts across the world. Since 2008 the Giorgio Armani brand has provided signature design inputs into Emmar buildings to enhance value for the luxury and prestige connoisseur. This odd couple collaboration between a Dubai developer and a fashion house informed the design and decor of hotels in Burj Khalifa and Milan at the turn of the decade (Penner et al, 2013). With the blending of ~~a~~ fashion designer inputs into architecture being somewhat sceptically received, plans for further expansion have been slow as the collaborators seek to peddle with caution. However, new Emmar buildings including Malls have Armani fashion shows as a major attraction- continuing the collaboration with a reduced level of blending. Long-term

aspirations through novelty from blending across industry boundaries continues to fuel thinking at the two organisations. While initially the collaboration was quite prominent due to ~~the its~~ surprise element and consequent attention in popular media, not being able to capitalise on it is a sore point with the top leadership at the organisations (Blige, 2006; Penner et al, 2013).

To contrast, the need to work this visibility further as in the case of DARPA and Google collaboration was missing. There is another clear contrast between the two collaborations- the Armani and Emmar collaboration brought forth a relatively definitive and quicker to market offering (McNeill, 2013). The severity of market evaluation seems amplified when it is about bringing forward a blended offering rather quickly, and without whetting the appetite of the market ~~for it~~.

Another case in point is the Apple and Hermes collaboration. ~~Thise~~ collaboration between the lead technology brand and the luxury brand Hermes has not been doing too well. The technology savvy affluent customer sees a lot of evolution to come in the Apple watch, while the luxury connoisseur arguably does not see the Apple watch as ~~much of~~ a luxury artefact (Debrod, 2016). Irrespective of the promise articulated by both parties the intangible blending has arguably diluted value for both. Similarly, Google's technology and Luxottica's fashion acumen have come together in Google glasses allowing Google to expand its technology reach and Luxottica to break out of price wars with other branded glasses (Lawler, 2014). ~~Though I~~ the partnership is facing problems to do with technology not being embedded well enough, and a come-back is on the cards (Curtis, 2015). However, as with other odd couple collaborations, it seems the push forward into the market too quickly ~~was -~~ a cause for initial lack of uptake. Given Google's own experience with driverless cars discussed before, was this collaboration not allowed enough gestation before calling on the market? The BMW and Montblanc partnership is also useful to flag for an important contrast

with examples discussed so far. Matching Mont Blanc line with the new seven series seems more of bundling than blending for an offering because ‘Mont blanc for BMW’ is more about BMW non-tech accessories like bags and wallets that are branded Mont blanc (Worldwide, 2017).

Overall, the Taiwanese airline EVA Air’s Hello Kitty-themed Boeing 777 flying between Taipei and Houston is an odd couple partnership that arguably leads the pack by way of surprise (Lotman, 2016). Not only do iconic Japanese cat and her fellow cartoons make jets stand out at terminals, the flight experience is also themed around them. The visibility in popular media of this themed flight experience on regular flights has been quite high relative to other odd couple collaborations we have followed. While the verdict on this collaboration is still out, its performance, and potential uptake thereafter in the airline industry, may provide useful cues to dig deeper into creative and ingenious blending of intangibles in collaborations.

A view from the third sector context

There are odd couple collaborations to ponder over in the third sector context as well . UNICEF’s Kid Power Partnership with Target, the second largest retail store chain in the United States is one such collaboration. This serves Target’s CSR profile and direct market expansion alongside UNICEF’s wellness goal for kids: “As kids in the U.S. complete fitness-based missions, they earn points that can be used to ‘unlock’ therapeutic food packets that UNICEF delivers to malnourished children around the world” (Lotman, 2016, p.34). We refer to the UNICEF and Target collaboration as an odd couple partnership because it is beyond conventional CSR initiatives of hand holding or resource support. It dwells further into each partner’s offering to affect a blended approach of earning points for releasing food packets. However, a ~~good~~ large proportion of collaborations that address requirements of the ‘non-

market environment' through Corporate Social Responsibility (CSR) partnerships could not be argued as odd couple collaborations. This is because several global Multinational Enterprises (MNEs) and Non-Governmental Organizations (NGOs) hold hands for support provided to the latter with less embeddedness in how their offerings come together (Perez-Aleman and Sadilands, 2008). While the Target and UNICEF example is a case of effective and creative blending, often when corporations become involved with NGOs beyond the remits of a straightforward resourcing support, they face difficulties in delivering due to capabilities or reduced alignment with shareholder interests. The Case of Heinken in looking after interests of serving girls in Combodia (Cranenbourgh, 2016), and that of Bodyshop in participating with NGOs for conservation of Amazon Rain forests championed by its late CEO Anita Roddick (Slavin 2017), are examples of such difficulties.

A contrast of aspirations

Overall, observations of brands coming forth in distant collaborations, whether in market ~~of~~ or non-market offerings, suggest that 'better' blending for value synergies seems to be pivotal for success, and this is often difficult to achieve. There are of course collaborations that have yielded path breaking innovations but are quite conventional. Conglomerates and pairings where resource and capability complementarities are relatively more apparent abound. For example, that between Hollywood studios and Consumer Electronics firms to develop Blu-ray formats, and Panasonic's collaboration with Mozilla to bring in the Firefox operating system (Brown, 2015). These are collaborations where technology spaces are not too distinct. They are less surprising in terms of what the complementarities are, and how they would come together to work towards a market need / driven by a market pull, more than providers' aspiration. Healthy gaming simulations and virtual trainers for physical therapy activity in rehabilitation programmes isare another example (Lee, 2017). These are collaborations

~~that are~~that are therefore not ‘odd’ as they work to a needed solution. The market uptake is thus faster and evaluation relatively less stringent as they evolve.

Odd couple collaborations however have the potential to deliver innovation outcomes that go much beyond the industry and market boundaries of either collaborators. These extend the partners’ offering and often shape new market spaces through such cross breeding.

In addition to the criterion of coming together of distant technology and industry domains, we have emphasized another central criterion for being classified as an odd couple collaboration - they do not respond to market needs but are more aspirational, by the same token being a surprise. For instance, Blu-ray format development was clearly a felt need driven innovation where high density storage was becoming quite a pull from the market and ~~also the~~ content providers. In contrast, there was no pull for driverless cars or for a Hello Kitty Boeing experience. By extension, and despite the promise, odd couple collaborations may ~~usually be~~ staring down a relatively risky path. ~~Here where the~~ propensity of market uptake is often amplified beyond what it may be, because of biases that stem from aspirations of the partners.

~~There are also collaborations across industries that are ‘distant’ but at the same time are clearly about working towards a felt need as a solution. Healthy gaming simulations and virtual trainers for physical therapy activity in rehabilitation programmes are one example (Lee, 2017). These are collaborations that are therefore not ‘odd’ as they work to a needed solution. The market uptake is thus faster and evaluation relatively less stringent as they evolve.~~

Insert Figure 1 here

Discussion and Conclusions

Typically, design and execution of collaborations is relatively easy when technology, capability and offering alignments are apparent (Hallen et al, 2014). Numerous examples of near collaborations exist, in addition to the few referred to in the paper so far. For instance, code sharing agreements among ~~air~~ carriers in the airline industry ~~such as American Airlines and Delta~~ have been around for decades and; ~~the recent~~ technology exchange collaborations like between Sony and Olympus, among others. Inter-industry collaborations between content providers like Netflix, M-GO with carrier providers like Samsung and Sony, can either be clustered within a broader description of the ‘industry’ or seen as spatially aligned in the technology space (Sytych and Tatarynowicz, 2014; Wang et al, 2014). They come with related prior experiences, and are arguably easier to learn for and from, and therefore not quite as unique or risky as odd couple of collaborations. Recent and past collaborations between competitors like the recently announced collaboration for developing Artificial Intelligence (AI) and machine learning between Apple, Amazon, google and Microsoft may come as a surprise (Tilley, 2017). However, they are working towards a felt need of the market, and of the competitors to cope with a strong momentum in the AI technological trajectory. This does not therefore meet the aspirational criteria of odd couple collaborations (relative to what is owed to market pull here) and of course also the criteria of being distant in technology space is not met.

While we seem to be able to deliver heuristics on deciding what is an odd couple collaboration and what is not, it may be pertinent to ask - So what about odd couple collaborations ? Are they something that we should be concerned about or are they sporadic events that transpire more often now? Odd couple collaborations provide the opportunity of exploring beyond convention i.e. taking a leap of faith into the ‘Blue Ocean’ (Fawcett et al., 2012, 163). This is not only in terms of the outcomes they pursue, but also by way of ~~the~~

strong aspirational conception and the process they entail, or 'should be' rigorous about, for performing. The conjectures that we articulate from observations in this paper may be useful for blue ocean aspirants to contemplate odd couple collaborations as a strategic choice.

The key tenets to take forward maybe listed as: an emphasis on enhancing visibility through popular media, promotions, and/or innovation tournaments; keeping a look out for spill overs as Google has done to ride the wave to a new technology space and; making sure that the offering is prepared for a critical market evaluation that is more stringent than experienced before. ~~This is~~ - even more crucial if the partnership is seeking to present an offering for the market rather quickly. The need for better blending in odd couple collaborations may be crucial, and will require much creative thought, ~~when premised on~~ for bringing intangibles into play for a partnership.

Future Research

Our case vignettes relate mostly to resource rich organisations demonstrating their aspirations in odd couple collaborations. Audia and Greve's (2006) work with behavioural and prospect theories suggest that there is a strong likelihood that firms with superior resource endowments and less perceived risks - of and from failure, will have their aspirations rise above risk mitigating behaviour. A chronological study of odd couple collaborations, that can only happen in time as the experience accumulates over time, could shed further light on how performance helps shape firm behaviour for subsequent odd couple collaborations. One issue to resolve would be that of data on direct experience, as it is not very likely that odd couple collaborations are going to characterise a firm very frequently- such research is likely to be reliant on indirect experiences that firms can draw on in configuring such collaborations. Examining these experiences, and deploying the key tenets presented in this paper for supporting understanding the design and performance practice of odd couple collaborations,

1
2
3 is likely to be of interest to researchers seeking a better understanding of inter-firm
4
5 relationships and innovation, with organisational behaviour as an underpinning theoretical
6
7 domain.
8
9

10 ~~Inter-firm collaboration seeking to create collaborative synergies and collaborative advantage~~
11 ~~in disruptive innovation environments need integrative and ethical leadership. Such research~~
12 ~~may This will~~ help enhance strategic cooperation and at the same time overcomes issues to
13 do with ~~aspects of~~ conflict, risk and opportunistic behaviours to advance aspirations from
14
15 and performance of future odd couple collaborations. ~~Studies Research~~ examining top
16
17 management's decision making and their propensity to choose between types of
18
19 collaboration, will also find it useful to engage with the ~~a novel research trajectory given the~~
20
21 typological context presented in this paper.
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

References

Allee, V. and Taug, J. (2006), "Collaboration, innovation and value creation in a global telecom", *The Learning Organisation*, Vol. 13 No. 6, pp. 569-578.

Arthur, C. (2014), *Digital Wars, Apple, Google, Microsoft and the Battle for the Internet* (2ed.), London, Kogan Page Ltd.

Audia, P. G. and Greve, H. R. (2006), "Less likely to fail: Low performance, firm size, and factory expansion in the shipbuilding industry", *Management science*, Vol. 52 No. 1, pp. 83-94.

Battelle, J. (2007), *The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture*, London, Nicholas Brealey Publishing.

Bianchi, P. (2017), *The economic importance of intangible assets*, Routledge.

Blige, M.C. (2006), "Surviving Post-Merger 'Culture Clash': Can Cultural Leadership Lessen the Casualties?", *Leadership*, Vol. 2 No. 6, pp. 395-426.

Cassetta, E., Marra, A., Pozzi, C. and Antonelli, P. (2017), "Emerging Technological Trajectories and New Mobility Solutions. A Large-Scale Investigation on Transport-Related Start-Ups and Implications for Policy", *Transportation Research, Part A*, pp. 106 -1 11.

Castells, M. (2011), *The Rise of the Network Society* (2ed.), West Sussex, Wiley-Blackwell.

Chesbrough, H. (2010), "Business Model Innovation: Opportunities and Barriers", *Long Range Planning*, Vol. 43, No. (2-3), pp. 354-383.

Connolly, A. (2015), “NASA and Playstation team up for a VR Space training project”, available at: <https://thenextweb.com/dd/2015/12/15/nasa-and-playstation-have-teamed-up-for-a-vr-space-training-project/> (accessed 18 November 2017).

Cranenburgh, K.C van. (2017), “Money or Ethics Multinational corporations and religious organisations operating in an era of corporate responsibility”, available at: <https://repub.eur.nl/pub/93104> (accessed 10 January 2018).

Crosby, B.C. and Bryson, J.M. (2010), “Integrative leadership and the creation and maintenance of cross-sector collaborations”, *The Leadership Quarterly*, Vol. 21, pp. 211-230.

Cumbers, A., Mackinnon, D. and Chapman, K. (2003), “Innovation, collaboration, and learning in regional clusters: a study of SMEs in the Aberdeen oil complex”, *Environment and planning A*, Vol. 35, No. 9, pp. 1689-1706.

Curtis, S. (2015), “Has Google Glass failed”, *Telegraph*, available at: <http://www.telegraph.co.uk/technology/google/11350810/Has-Google-Glass-failed.html> (accessed 3 April 2018).

Debord, M. (2016), “Apple’s Partnership with Hermes”, UK Business Insider, available at: <http://uk.businessinsider.com/apples-hermes-partnership-2016-1> (accessed 21 February 2018).

Emden, Z., Calantone, R. J. and Droge, C. (2006), “Collaborating for new product development: selecting the partner with maximum potential to create value”, *Journal of product innovation management*, Vol. 23, No. 4, pp. 330-341.

- Enkel, E. and Heil, S. (2014), "Preparing for distant collaboration: Antecedents to potential absorptive capacity in cross-industry innovation", *Technovation*, Vol. 34, No. 4, pp. 242-260.
- Fawcett, S.T., Jones, S.L. and Fawcett, A.M. (2012), "Supply Chain Trust: The Catalyst for Collaborative Innovation", *Business Horizons*, Vol. 55, No. 2, pp. 163-178 (March-April).
- Friedell, M.D. (2016), "Additive manufacturing (AM) In Expeditionary Operations: Current Needs, Technical Challenges, and Opportunities, Calhoun", The NPS Institutional Archive, available at: <https://calhoun.nps.edu/handle/10945/49461> (accessed 8 February 2018).
- Grey, B. (1989), "*Collaborating: Finding Common Ground for Multiparty Problems*", San Francisco, Jossey-Bass, California.
- Gulati, R. (1999), "Network location and learning: The influence of network resources and firm capabilities on alliance formation", *Strategic management journal*, Vol. 20, No. 5, pp. 397-420.
- Hallen, B.L. Katila, R. and Rosenberger J.D. (2014), "How Do Social Defenses Work? A Resource-Dependence Lens on Technology Ventures, Venture Capital Investors, and Corporate Relationships", *Academy of Management Journal*, Vol. 57, No. 4, pp. 1078-1101.
- Hoskisson, R. E., Chirico, F., Zyung, J. and Gambeta, E. (2017), "Managerial risk taking: A multitheoretical review and future research agenda", *Journal of Management*, Vol. 43, No. 1, pp. 137-169.
- Hutton, W.(2015), *How Good We Can Be: Ending the Mercenary Society and Building A Great Country*, London, Little Brown Book Company.

Jiang, X., Jiang, F., Cai, X., ~~and~~ Liu, H. (2015). How does trust affect alliance performance? The mediating role of resource sharing. *Industrial Marketing Management*, 45, 128-138.

Kerr, D.(2018), “Uber-self-driving-cars-reportedly-lag-behind-competitors”, *Tech Industry*, available at: <https://www.cnet.com/news/uber-self-driving-cars-reportedly-lag-behind-competitors> (accessed 2 January 2018).

Kim, W.C. and Mauborgne, R. (1999), “Creating new market space”, *Harvard Business Review*, Vol. 77, No. 1, pp. 83-93.

Klijin, E., Reuer, J.J., Buckley, P.J. and Glaister, K.W., 2014. Combinations of partners’ joint venture formation motives. In *The Multinational Enterprise and the Emergence of the Global Factory* (~~pp. 203-219~~), Palgrave Macmillan, London, pp. 203-219.

Kim, J. and Hastak, M. (2018), “Social Network Analysis: Characteristics of online social networks after a disaster”, *International Journal of Information Management*², Vol. 38, No. 1, pp. 86-96.

Lawler, R. (2014), “Ray-Ban and Oakley are working with Google Glass”, *Engadget*, available at: <https://www.engadget.com/2014/03/24/google-glass-ray-ban-oakley-luxottica/> (accessed 2 January 2018).

Lampel, J., Jha, P.P. and Bhalla, A. (2012), “Test-Driving the Future: How Design Competitions Are Changing Innovation”, *Academy of Management Perspectives*, Vol. 26, No. 2, pp. 71-85.

Lee, B.Y. (2017), "Virtual reality a growing reality in health care", *Forbes*, available at:

<https://www.forbes.com/sites/brucelee/2017/08/28/virtual-reality-vr-is-a-growing-reality-in-health-care/#5a47e6484838> (accessed 15 January 2018).

Levin, S. and Harris, S. (2017), "The Road Ahead: Self-Drive Cars on the Brink of a Revolution in California", *The Guardian*, available at:

<https://www.theguardian.com/technology/2017/mar/17/self-driving-cars-california-regulation-google-uber-tesla> (accessed 06 February 2018).

Lotman, J. (2016), "10 High-Profile Brand Partnerships That Struct Gold", *Entrepreneur*, available at: <https://www.entrepreneur.com/article/254742> (accessed 21 December 2017).

Moodysson, J. and Jonsson, -O. (2007), "Knowledge collaboration and proximity: The spatial organization of biotech innovation projects", *European urban and regional studies*, Vol. 14, No. 2, pp. 115- 131.

Murphy, M., Arenas, D. and Batista, J.M. (2015), "Value Creation in Cross Sector Collaborations: The Roles of Experience and Alignment", *Journal of Business Ethics*, Vol. 130, No. 1, pp. 145-162.

Penner, R.H., Adams, L. and Robson, S.K.A. (2013), *Hotel Design, Planning and Development* (2ed), Oxon, Routledge.

Perez-Aleman, P. and Sadilands, M.(2008), "Building Value at the top and bottom of the Global Supply Chain: MNC NGO partnerships and Sustainability", *California Management Review*, Vol. 51, No. 1, pp. 24- 49.

Satell, G. (2017), " The 4 Types of innovation and the problems they solve", *Harvard Business Review*, 21 June.

1
2
3 Sammarra, A. and Biggiero, L. (2008), “Heterogeneity and Specificity of inter firm
4 knowledge flows in innovation networks”, *Journal of Management Studies*, Vol. 45, No. 4,
5
6 pp. 800-829.
7

8
9
10
11 Seitanidi, M.M. and Lindgreen, A. (2011), “Cross Sector Social Interactions”, *Journal of*
12
13 *Business Ethics*, Vol. 94, No. 1, pp. 1-7.
14

15
16
17 Slavin, T. (2017), “The spirit of Anita Roddick is strong with us: Why Natura bought Body
18 Shop?”, *Ethical Corporation*, available at: [http://www.ethicalcorp.com/spirit-anita-roddick-](http://www.ethicalcorp.com/spirit-anita-roddick-strong-us-why-natura-bought-body-shop)
19
20 [strong-us-why-natura-bought-body-shop](http://www.ethicalcorp.com/spirit-anita-roddick-strong-us-why-natura-bought-body-shop) (accessed 2 January 2018).
21
22

23
24
25 Soda, G. and Furlotti, M. (2017), “Bringing tasks back in: an organizational theory of
26 resource complementarity and partner selection”, *Journal of Management*, Vol. 43, No. 2, pp.
27
28 348-375.
29
30

31
32
33 Stein, N. vom, Sick, N. and Leker, J. (2015), “How to measure technological distance in
34 collaborations—the case of electric mobility”, *Technological Forecasting and Social*
35
36 *Change*, Vol. 97, pp. 154-167.
37
38

39
40
41 Sytch, M., and Tatarynowicz, A. (2014), “Special Research Forum: Relational Pluralism of
42 Individuals, Teams, and Organizations Friends and Foes: The Dynamics of Dual Social
43
44 Structures”, *Academy of Management Journal*, Vol. 57, No. 2, pp. 585-613.
45
46

47
48
49 Tilley, A. (2017), “Why Apple Joined Rivals”, *Forbes*, available at:
50
51 [https://www.forbes.com/sites/aarontilley/2017/01/27/why-apple-joined-rivals-amazon-](https://www.forbes.com/sites/aarontilley/2017/01/27/why-apple-joined-rivals-amazon-google-microsoft-in-ai-partnership/#19119d335832)
52
53 [google-microsoft-in-ai-partnership/#19119d335832](https://www.forbes.com/sites/aarontilley/2017/01/27/why-apple-joined-rivals-amazon-google-microsoft-in-ai-partnership/#19119d335832) (accessed 2 April 2018).
54
55

56
57 Wang, C., Rodan, S., Fruin, M. and Xu, X. (2014), “Special Research Forum: Relational
58 Pluralism of Individuals, Teams, and Organizations Knowledge Networks, Collaboration
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Networks, and Exploratory Innovation”, *Academy of Management Journal*, Vol. 57, No. 2, pp. 484-514.

Worldwide. (2017), “BMW partners with Montblanc”, *ILM*, available at:
http://internationalleathermaker.com/news/fullstory.php/aid/3767/BMW_partners_with_Montblanc_for_leather_creations.html (accessed 22 April 2018).

European Business Review

Figure 1: Odd couple Collaborations Vs. (relatively more) Predictable Collaborations