# Partnership Innovation: a complex combination of managing multi-level and explorative processes.

Inovação de parceria: uma combinação complexa de gerenciamento de processos multi-níveis e exploratórios.



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## Abstract

This paper explores the fundamental aspects of innovation and partnership innovation processes and describes a methodology designed, based on those aspects, for a third party to initiate and facilitate partnerships for innovation between organisations. The research and methodology described in this article have been conducted and designed in 2007 and are relaunched, after an incubation time and increasing necessity for partnerships in all layers of society, as a starting point for further research to understand the scientific and academic implications.

#### **Keywords**

Partnership Innovation; New Product Development; Initiation; Facilitation.

#### Resumo

Este artigo explora os aspectos fundamentais da inovação e dos processos de inovação de parcerias e descreve uma metodologia projetada com base nesses aspectos para que um terceiro inicie e facilite parcerias para a inovação entre organizações. A pesquisa e a metodologia descritas neste artigo foram conduzidas e projetadas em 2007, e são relançadas, após um período de incubação devido a uma crescente necessidade de parcerias em todas as camadas da sociedade. Sendo assim, pode ser aplicada como ponto de partida para novas pesquisas em prol do entendimento das implicações científicas e acadêmicas deste assunto.

#### **Palavras-chave**

Inovação de Parceria; Desenvolvimento de Novos Produtos; Iniciação; Facilitação. 1060

#### 1 Introdução

In 2007, a methodology to initiate and facilitate partnership innovation between different organisations was developed for, and in co-creation with, the company SunIdee as part of a Masters-thesis. Sunidee, specialised in the facilitation of innovation within organisations, identified a growing interest among Dutch companies to search strategic partnerships for innovation. This heightened interest was driven by the big success of Senseo, a coffee machine developed by a powerful partnership between Douwe Egbert, a Dutch coffee company, and the Dutch electronics multinational Philips.

Introduced in spring 2001 (HOLLENSEN, 2007), Senseo became a worldwide success and a public poster child for the innovative power of partnerships during the years to follow. SunIdee was frequently asked if they could help organizations find them a suitable innovation partner. The identification of this market need inspired to develop a new methodology focused on the creation of strategic partnerships for innovation.

The assignment was to develop a method that helps SunIdee to facilitate the initiation and creation of partnerships between companies for new product development. Focus of the method had to be on the first stage of the innovation process with the goal to create a letter of intent, in which companies state their intention to develop and / or market a product together. In order to achieve this goal, it was necessary to identify the fundamental aspects for partnerships during the innovation process and combine these with SunIdee's core values, strengths and working method.

The Master-thesis resulted in the development of a programme of hands-on workshops. designed to become a new service within the portfolio of SunIdee. An important conclusion during the process was the need for a specialized initiator to bring organisations together around a specific topic of joint interest. SunIdee initially offered the workshop--programme but experienced at that time the tool required a lot of additional investment to keep in their portfolio.

Today, over 10 years later, a strong need for partnerships can be seen in many layers of society, not only in industry, but also within the field of science, education and politics. These years served as a time of incubation, with the researcher applying the acquired knowledge in different environments: first in industry through R&D Consultancy and more recently in the field of Applied Science Research & Education and within the world of FabLabs, i.e. maker movement. As many of the research

findings from 2007 become more and more relevant in a fast changing global environment, now is the time for further research to understand the scientific and academic implications.

As Johnson (2010), describes in his book "Where do good ideas come from", most breakthrough ideas grow slowly into their full potential. Ideas often start with slow hunches and during an incubation time, a slow hunch collides with other hunches to present solutions for missing pieces. Meanwhile the environment evolves and provides access to a collective mind to help nurture and grow into breakthrough ideas.

#### **2** Fundamental processes of innovation

Van der Meer (2007, pp. 192 apud VAN DER MEER, 1996) defines innovation as both a process as well as a result: "the total set of activities leading to the introduction of something new, resulting in strengthening the defendable competitive advantage of a company." And refers to 'new' as the newness of the development for the ones who introduce the innovation, so new to the company (BUIJS & VALKENBURG 2005; VAN DER MEER 2007). "The main reason why companies innovate is to strengthen their competitive advantage "to live long lives and prosper." (VAN DER MEER, 2007, p.193)

Take into account that this advantage is directly related to the business environment, which changes constantly as competition is innovating as well. The number of dimensions for innovation varies, depending on how the dimensions are defined. Sawhney et al. (2006, pp.76) identify 12 different dimensions for innovation, while Doblin1 identifies 10.

Buijs & Valkenburg (2005) emphasise that real innovation is a discontinuous change in perspective to the past. The discontinuous change is what makes New Product Development (NPD) different from existing product development: a change in the combination of product, market and technology or on organisational level. Alves et al. (2007) and Mostert (2007), state that innovation is about turning ideas into products. To come up with ideas, and how to turn them into products, creativity is an essential part of the NPD process (BUIJS, VALKENBURG, 2005) and belongs to the total set of innovation activities (VAN DER MEER, 2007).

1 - Doblin is an American innovation strategy firm, www.doblin.com., dd 2007

There is no fixed answer to the question of "how to innovate". Each case of innovation deals with a different set of variables for which several options are available and no one knows which option is best beforehand. Alves et al. (2007) give a characteristic description on what it takes to innovate.

No clear-cut solutions or ideal approaches exist for dealing with creativity, innovation and new product development. The effective process requires continuous re-tuning to get the balance right. This means to add or remove structure, to advance or retreat in the 'funnel' of innovation, to eliminate and recuperate ideas. Organizations need to be creative and innovative in the management of creativity and innovation." (Ibid., p.33).

Buijs (2007) defines innovation as a Multi-process Process and describes four key processes that act simultaneously: Innovation process, Creative process, Group process and Leadership process. Each process has to be handled differently and often conflicts with the other ones. Conflicts may concern real actions, time horizons or effect.

The innovation process of NPD requires management of all the product lifecycle stages, e.g. from scratch to the actual product in use and even up to the recycling stage. The end result of an innovation project can be an innovation or a project abandoned successfully, i.e. project accepted to have failed and rounded off properly. Failures and mistakes are inherent in the process and learning from them is an essential part of innovation (JACOBS, 2003; BUIJS, 2007). Well-known innovations such as penicillin, post-its, gore-tex, nylon, tefal and the microwave are products based on failures which were put into different perspective (JACO-BS 2003 apud FARSON, KEYES 2002). Van der Meer (2007) divides the innovation process into three basic stages, shown in Figure 1: the concept stage sees new ideas being found and is often referred to as the stage of 'invention' and free creativity, the development stage sees ideas being transformed into innovation projects and the business stage sees projects being turned into new business.

Figure 1: the innovation process concerns all stages (Concept - Development - Business) of NPD.



Source: Timmers, 2007

Buijs (2007) divides the creative process into five non-sequential parts: problem definition, compiling relevant information, generating ideas, evaluating and prioritising ideas, and developing an implementation plan. During each part, an important sub-process takes place, which consists of three steps: Diverging - Clustering - Converging, as illustrated in Figure 2.



Figure 2: focus of the creative process is ideas generation

The group process is about the driving force behind innovation: people. Each of the very different activities needed for innovation depends on the effort of people and the support from their teams and organisations. Successful innovation requires a good overall performance of the innovation team, on the entire set of activities, and involves teambuilding as illustrated in Figure 3. Multidisciplinary teams have proven to perform better than teams with less diversity among its team members, with 'multidiscipline' referring to functions, competences, experiences, networks, perspectives, personalities and backgrounds of the individuals. (JACOBS, 2003; BUIJS, VALKENBURG, 2005; BUIJS, 2007; HARGADON, SUTTON, 2007; MOSTERT, 2007; VAN DER MEER, 2007).

Important characteristic for an innovation team to be successful is the capacity of its members to share knowledge and develop shared understanding both within the team as between different teams within the organisation (KLEINSMANN, 2006). For people to understand each other, a focus on communication is essential, especially for complex and insecure processes such as innovation.

Source: Tassoul & Buijs (2007)

Figure 3: the group process involves teambuilding



Source: Timmers, 2007

The leadership process, shown in Figure 4, concerns the management of innovation, which is according to van der Meer (2007, pp. 194) best described as "Managing innovation really is managing paradoxes". According to Buijs (2007), innovation managers need to display "schizophrenic" behaviour counteracting the behaviour of their innovation teams, to realise the necessary and continuous change between creative, motivated and task oriented mindsets. For this purpose managers use both a generative and a focussing mode of leadership (HOHN, 2000 apud BUJIS, 2007). Innovation managers also need to make sure that communication is used sensibly and effectively to inform all the necessary and useful individuals, involved in the process. This requires both internal communication within the innovation team and external communication within the team's environment. Three main activities for external communication are: ambassadorial activities, task coordinator activities, and scouting activities (ANCONA, CALDWELL, 1992 apud KLEINSMANN, 2006).

Van der Meer (2007) identifies two ways for management to approach innovation, 1) Culturally: managing the set of attitudes and values favourable to innovation resulting in the creation of an innovative climate; 2) Structurally: managing the available organisational entities for new product and business development, i.e. systematic use of innovation mechanisms.

The concept stage of the innovation process requires management to create a favourable climate for innovation, which demands a cultural approach. The development stage requires management to apply the innovation mechanisms, which requires a structural approach. The business stage requires management follow the classical project management approach of planning, action and control (VAN DER MEER, 2007).



Figure 4: leadership process, bringing all processes together

Source: Timmers, 2007

As mentioned previously, no clear-cut solutions or ideal approaches exist for dealing with innovation. However, certain situations are recommended to avoid. Mostert (2007) and van der Meer (2007) identify several barriers preventing innovation after creativity has taken place: lack of ownership and commitment; lack of resources, such as budget; lack of time to work on ideas and wrong or inconsistent innovation strategy.

Over time, the systems within companies to manage innovation have evolved to match the changing business environment. These changes include "changing consumer preferences, eroding industry boundaries, changing social values and demographics, new government regulations, new technologies, and other exogenous developments" (KRAATZ, 1998, p.621). Instead of acting alone, evidence suggests that an organisation should use its network in order to access different sorts of information, "affecting its ability to recognise and respond to environmental threats" (Ibid, p.623).

Emden et al. (2006, p.311) suggests co-development being one way to face the increasing challenge of product innovation, which drives managers "to employ a different model to stay competitive". Chesbrough (2003, p.36-37) formulated a different model called it Open Innovation. Open Innovation is about combining both internal and external resources for opportunities to innovate: "firms commercialise external (as well as internal) ideas by deploying outside (as well as in-house) pathways to the market". Faems et al. (2005, p.238) reveal "a positive relationship between inter-organisational collaboration and innovative performance. At the same time, the impact on innovative performance differs depending on the nature of the partner(s) involved. These findings strongly suggest the relevance of adopting a portfolio approach to inter-organisational collaboration within the context of innovation strategies". These finding show that collaboration between companies can be a successful strategy for innovation.

#### **3 Fundamentals of partnerships**

'Partnership' refers to inter organisational relationships (IORs) and can take many different forms. Oliver (1990) defines IORs as: "the relatively enduring transactions, flows, and linkages that occur among or between an organisation and one or more organisations in its environment". Important to note here is that organisations "are assumed to make conscious, intentional decisions to establish an IOR for explicitly formulated purposes". BARRINGER et al. (2000) discuss the most common forms of IORs and classify them on how the organisations are linked to each other. Tight relationships are characterised by formal structures to link the organisations and their people, and may involve joint ownership. The most common forms of tight IOR's are Joint Ventures, Network structures and Consortia. Loose relationships involve less structure and no joint ownership. The most common forms of loose IOR's are Alliances, Trade associations, and Interlocking directorates.

Based on these finding any partnership is a relationship for a specific purpose and therefore strategic. In this article each 'partnership' is perceived to be strategic and defined as "the formal collaboration between different organisations, on a mutual win-win proposition that fits the strategy of each organisation and involves a cultural match, complementary competences, mutual trust and commitment."

Collaboration between companies is generally acknowledged as a strategy to increase competitiveness as well as a form to reduce environmental uncertainty & risks (e.g. KRAATZ, 1998; BARRINGER, HARRISON, 2000; CHESBROUGH, 2003; FAEMS et al., 2005; EMDEN et al., 2006). By building partnerships a company can exploit different advantages such as: economy of scale, access to particular resource, learning, speed to market, flexibility, collective lobbying, neutralizing or blocking competitors, to name a few (BARRINGER, HARRISON, 2000).

#### **4** Fundamentals of Partnership Innovation

In literature, the process of partnership innovation is referred to in many different ways, as summarised in Figure 5. Based on these studies, 'partnership innovation' is defined as the use of partnerships for innovation.

Figure 5: different ways to refer to partnership innovation

Collaborative (new) product development (Littler et al., 1995) Collaborative innovation (Nooteboom, 2006a) Co-development (Emden et al., 2006) Open Innovation (Chesbrough, 2003) Inter organisational collaboration (Faems et al., 2005) Partnering (Van der Meer, 2007)

Source: Timmers, 2007.

Marshal (2004) identifies partnership development for innovation a multi-level and explorative process.

Multi-level because the challenge includes coordination and development in two dimensions: (1) The operating mechanism through which key personnel negotiate, make commitments and act in order to develop their relationship. (2) The entrepreneurial effort of new product development. Explorative because the appropriate alliance strategy can hardly be identified prior to its execution (Marshal, 2004, p.138)

To underline the process complexity, Marshal (2004, pp.138) quotes Eisenberg (1990, pp.13) on the characteristics of partnership innovation: "coordination of action over the alignment of cognitions, mutual respect over agreement, trust over empathy, diversity over homogeneity, loose over tight coupling, and strategic communication over unrestricted candour."

Emden et al. (2006) identify a process that managers followed to select their partners for co-development, during successful projects. The process concerns different levels of alignment: technical alignment, strategic alignment and relational alignment. These findings imply that competences of synergetic partners need to be complementary to formulate a win-win situation, while knowledge bases, strategies and cultures need a certain overlap. The same study reveals several other interesting findings: Companies seem to prefer contractual relationships over joint ownership. (HAGEDOORN, 2002 apud EMDEN et al., 2006) The level of relational flexibility is higher in horizontal alliances, compared to vertical alliances (RINDFLEISCH, MOORMAN, 2001 apud EMDEN et al., 2006). Consumers are most valued as an external source to generate ideas for innovation, while research centres are last on the list. However, research centres are most likely to be chosen for co-development activities (SAEZ et al., 2002 apud EMDEN et al., 2006).

#### **5 Key aspects of partnership innovation**

Nooteboom et al. (2006a & 2006b) identify two crucial mechanisms: Optimal cognitive distance and Relationship reliability. Optimal cognitive distance: Cognitive distance is the difference in the knowledge of organisations, and its people. A large cognitive distance provides the opportunity to learn from each other and produce novelty together. However, for people to understand each other and be able to collaborate, the cognitive distance must not be too large. "Novelty without being able to collaborate leads to nothing, and ability to collaborate without novelty does not generate innovation" (NOOTEBOOM, 2006a, p.3). Theoretically there is an optimal cognitive distance for peak innovation performance, as shown in Figure 6. In practice, these variables (ability to collaborate, cognitive distance and novelty value) are constantly changing, influenced by several factors.

Figure 6: Optimal cognitive distance



Source: Timmers, 2007, adapted from Nooteboom (2006a, p.4)

The ability to collaborate increases by strong collaboration skills, past experience, and through accumulation of the knowledge from the different people. The result is a capability to deal with a larger cognitive distance. Cognitive distance decreases by collaboration due to knowledge sharing and mutual understanding. Novelty value decreases with a decreasing cognitive distance. Furthermore, at the same cognitive distance novelty value will increase when dealing with implementation in comparison to exploration. Result is a larger optimal cognitive distance for exploration.

Relation reliability is needed, both on an organisational level as well

as within the relationship itself, to manage relational risks successfully. Reliability depends on a combination of control and trust, as illustrated in Figure 7. Trust becomes more important with increasing uncertainty, as uncertainty is difficult to control. "Innovation contains too much uncertainty to manage risks completely by contract, monitoring and control" (NOOTEBOOM, 2006a, p.4).

Within a relationship other sources are required to establish control and trust than on an organisational level. One source for control on an organisational level is the reputation of the partner, while trust within a relationship can be based on the empathy for one's intention or competences. Empathy is the ability to understand the needs, weaknesses, and strengths of someone else (Ibid.).





Source: Timmers, 2007.

Both control and trust are limited, and can replace the other up to certain limit. More trust allows for less control and vice versa. However, control should not go so far as to break down the basis for trust (KLEIN WOOLTHUIS et al., 2005; NOOTEBOOM, 2006a & 2006b). Limitations of trust according to Nooteboom (2006a, p.5) are that people become less trustworthy when their existence, or job, is in danger. Similar for companies: "the more intense competition, the less trustworthy firms will be". Trust may go too far when a relationship and its continuation are taken for granted. Resulting in overlooking more innovative or profitable alternatives.

The duration and flexibility of relationships impose another limit. Relational investments will only be made when there is confidence that the relationship will last long enough to, at least, earn the investment back. On the other hand, (exclusive) long term relationships see the cognitive distance, and with it the innovative performance, decline.

A solution for keeping long innovative relationships is to not make them exclusive and "have both partners tap into other, non-overlapping

sources of variety, so that the relationship is continually fed with new impulses and insights" (Ibid.). New impulses and insights help to stimulate excitement, commitment and other sentiments that are more important for development and survival of collaboration than calculations of benefits and costs (KREINER, SCHULTZ, 1993 apud EMDEN et al., 2006).

Littler et al. (1995, p.27) summarises important variables that contribute to the success of a partnership, of which the following are seen as most discriminating factors between successful and less successful partnership innovation projects. Factors in all the successful product development projects, whether or not collaborative, are: having frequent communication between those involved in the development, the product development relationship being perceived as important and having in place a product or collaboration champion. Factors of "unique or heightened relevance" in partnership innovation projects are: ensuring partners contribute as expected, the perception of even benefits between partners and building trust between partners.

Besides advantages, partnerships can offer potential disadvantages that obviously should be avoided. It is recommended that companies first consider the potential disadvantages before entering a partnership. This way a company can come well prepared and is less likely to be unpleasantly surprised during the partnering process. Some clear disadvantages are loss of proprietary information, management complexities, financial & organisational risks, partial loss of decision autonomy, partners' cultures may clash, antitrust implications or risk of becoming dependent on a partner (BARRINGER, HARRISON, 2000).

#### **6** Roles for third parties

According to Nooteboom (2006a) third parties, or go-betweens, can play very valuable roles in managing partnerships:

• Monitoring and clarifying the collaboration process, i.e. facilitation of collaboration. When a go-between helps to clarify what is going on, the partners involved will not jump to conclusions easily which prevents potential conflicts.

 Supporting a reliable reputation mechanism: to verify accusations of opportunism or incompetence and to broadcast them to all relevant parties.

Conflict arbitration or intermediation to control conflicts.

### 7 Developed methodology

The previously described fundamental aspects of innovation and partnerships were combined with Sunldee's values, core strengths and working method in order to develop a new methodology, a programme of workshops to initiate and facilitate partnership innovation.

Most essential strengths of Sunldee for its successful services are: the simplification of complex processes, solid preparation and customisation of each project and skilled management of both the group and creative process. The company's philosophy is that people are key in the process of innovation and that the internal support and commitment of employees is necessary to realise actual innovations within organisations. Although each project is customized, they all follows a structured 5-step approach as show in Figure 8:

Figure 8: SunIdee's 5-step approach to each project



Source: Timmers, 2007.

Before a partnership can be developed, companies need to define their objectives and consider their own strategy, culture, competences, and criteria for trust and commitment. This is illustrated in Figure 9.

Figure 9: each company, with its own culture and competences, has to formulate its objectives before entering a partnership



Source: Timmers, 2007.

Partnerships are personal relationships between people, representing different companies, shown in Figure 10. This requires reliable relationships to be built on both personal as well as organisational level. The important topics for a partnership, partner choice, ground rules, equality, process -, people -, and environmental factors are vital on both levels.

Figure 10: partnerships are personal relationships between people representing different companies



Source: Timmers, 2007.

Partnerships can evolve from different situations and three common situations have been identified: Problem owner challenge, Limited Open Innovation and Future Driven Innovation

The developed methodology is based on the rapid changing business environment in which innovation is necessary for companies to survive. By developing a future vision for the business and relating it back to the present, a company can identify valuable new business opportunities. Developing future visions in collaboration with other companies makes it possible to combine different points of view, which benefits the reliability of the vision, and explore opportunities for a partnership. The chosen starting point, Future Driven Innovation (FDI), focuses on a safe and informal exploration of partnership opportunities for innovation and builds on the basic principle of strategy development, shown in Figure 11.

#### Figure 11: Basic principle of strategy development



Source: Timmers, 2007.

This basic principle is to build a vision of the future based on different scenarios to identify directions for innovation for the business of tomorrow, and used by Sunldee in its existing Innovation strategy programme. Translated to the philosophy of the methodology: companies with a similar interest look at the future together and decide whether or not to partner individually, shown in Figure 12.

Figure 12: philosophy: companies with a similar interest look at the future together and decide whether or not to partner individually.



Source: Timmers, 2007.

The final series of workshops developed for the partnership innovation programme have been made to fit the 5-step approach of Sunldee, with three clear roles for Sunldee to fulfil: project manager, mediator and expert. The workshops included both individual sessions for each company and collective sessions for the representatives of each company together, with individual referring to a separate workshop for each company and collective referring to a group session with the representatives from each company together. The development process of partnerships has been simplified into two strongly related stages: the development of a partnership strategy and the actual partnership creation. Figure 13 shows how in which step of the programme each or both stages are being focussed on.

Firstly, a company needs to define its own strategy concerning partnerships, by answering two intertwined questions:

- Why does it want to form a partnership, what are the objectives?
- Who might be interesting for achieving these objectives with?

Secondly, once a potential partner has been identified, the companies

have to decide together and mutually agree on two other intertwined questions:

• What are the companies going to do together i.e., what is the win--win proposition?

• How are the companies going to collaborate i.e., for how long and who will do what?



Figure 13: Partnership innovation programme focus for each of the five steps

#### **8 Discussion**

The management of innovation itself, within one organisation, is a challenging multi-layered process. As Alves et al (2007) stated, no clear-cut solutions exist and organisations need to be creative and innovative in managing innovation. One of the possibilities is establishing partnerships with the goal to accomplish innovation. This approach can potentially be a very powerful one, although it also brings an extra level of complexity to the table.

Research findings show a broad scope of key factors and variables that are important to be considered in one way or another to successfully accomplish innovation through partnering between organisations. Some of these key factors are thoroughly researched topics themsel-

Source: Timmers, 2007.

ves, amongst others: modes of leadership (HOLMS, 2000) and culture (VAN DER MEER, 2007).

This paper is presented as the relaunch of a thesis from 2007, which findings and conclusions seem very relevant today as experienced in daily practice within the field of Applied Science & Education. Next step is to set up and conduct further research for testing (parts of) the methodology for partnership innovation in both industry and Applied Science & Education with the aim to validate the study and its findings in order to understand the scientific and academic implications.

Possible future research questions could concern linking the partnership innovation methodology with the approaches, and variables, used in many (internet) dating services offered by the industry.

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