MASTER

# Successful development of innovation networks
# a partner selection approach

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## A Partner Selection Approach

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# Abstract

Philips Semiconductors, Business Line Digital Television systems, Eindhoven, The Netherlands, commissioned this research project. Philips Semiconductors wanted to know how it could create a network of partners to grow its Digital Television Business. For this purpose a Partner Selection Process for the development of High Tech products with multiple partners in a network is developed, including supporting methods, techniques and selection criteria to come to a considered partnering decision. This model describes the process from 'identifying partnering opportunities and requirements' up to the engagement. The model was pre-tested by experts on partner selection. This led to an improved Partner Selection Process. Applying it on a real Business Case tested that improved model. As a result recommendations were made for improvements to partner selection processes in the development programs for High Tech products. With the outcome of the application of the process on the Business Case, recommendations were made on how Philips Semiconductors can create a network of partner and successfully grow in the Digital Television Business.

# Summary


**Cause**

Collaboration between firms is not a new phenomenon. Though, the impact of the cooperation between firms on their business is increased substantial. This is due to the changes in reasons to collaborate. In the early days collaboration was generally undertaken in order to gain access in foreign markets or to bypass government regulations [Duysters, G. Kok, G, Vaandrager, M, 1999]. External acquisition of technology by cooperation was considered to be difficult and rarely necessary. In contrary to nowadays, where collaboration for innovation increase the efficiency and shortens the time-to-market of R&D resources. As a consequence, increased the number of partnerships for reasons of technology over the last twenty years enormous. This lead to a network of inter-firm collaborations in which not al partnership are long-term strategic anymore. Instead many partnerships only serve narrow technological objectives for short-term results.

The same situation applies for the Digital Television business of Philips Semiconductors. TV-systems became far more complex. The digital era brings far more functionality to the TV. The TV-experience becomes real interactive and personalized. This is possible because the amount of embedded software is growing exponentially. The value network was reshaping. New Rolls for Independent Software Vendors (ISV) and System integrators (SI) originated in bringing a system solution to the market.

**Research assignment**

This lead to the initiative of this research project. The first problem description was:

*How can Philips Semiconductors create a successful network of partners to grow the Digital television Business?*

In other words, there is a need for collaboration in system solution development of DTV products at BL DTS. However, the literature showed that the failure rate of partnership is high (50 – 60 %). In the orientation phase it appeared that BL DTS found it difficult to select, create and manage partnerships in a network. Furthermore, needs BL DTS insight in the collaboration market for potential partners and their potential roles in the value network.

Based on these observations the following assignment is formulated:

Develop a Partner Selection Process for the development of High Tech products with multiple partners in a network and test this by *applying* this on the DTV business of Philips Semiconductors, so that a successful network of partners can be established.

Reasons why this research was concentrated at partner selection are:

- Literature showed that many reasons for failure could directly be derived from a weak partner selection.
- Network development is the *repetitive* sequence of *selection*, negotiation, commitment and execution stages, each of which is assessed on terms of efficiency and equity [*Ring, 1994*]. Therefore, partner selection is on the basis of Network Development, which is a goal of BLDTS.
- Partner selection gives insight in the market for potential partners and their roles in the Value Network. Again an issue at BL DTS.

**Focus & approach**

The research project was focused specific on the partner selection process. Like already mentioned above, new rolls for ISV and SI originated in the semiconductor industry. ISV can fulfill Software and Middleware development rolls, while SI can fulfill system design rolls. Besides the focus on the selection process and these two sorts of partners, was the focus on the competences above the API level of the chipset.

The graduation project started with an orientation phase that showed the development that is described before. The result of this orientation phase was a project proposal about the research assignment. The succeeding phase contained several steps. First, a desk-research was carried out on partner selection in innovation processes. Theoretical perspectives were combined with desk and field research within Philips. This internal research comprehended an analysis to the described processes and tools on NHMT level and insights from different involved managers of Philips. The combination of these theoretical- and practical insights led to a Partner Selection Process. Experts on Partner selection were then consulted to validate the model (pre-tests). This led to an improved partner selection process that was to be tested by applying it to the Business Case TV520.

The first analysis phase concluded with collecting the necessary information for the Business Case. Furthermore, this phase should give insight in the position of partner selection in the other business processes. However, during the Business Case this position was to be confirmed.

A second validation is the application of the partner selection process on the business case TV520. This gave insight in the practicability of the partner selection process and, again, led to further improvements of the model. Thereby, gave the results of the Business Case insight in potential partners and their potential roles in the value network for TV520.

**Results Partner Selection Process**

The research project resulted in a final Partner Selection Process for the development of High Tech product in with multiple partners in a network. Four layers can be distinguished; Process steps at program-level, process steps on project-level, selection criteria categories and External influence factors.

The process steps form the basis for this model. A distinction is made between process steps on program level and project level. Program level is from orientating nature, while at project level a more detailed selection should take place. It is an iterative process.
Along the steps the selection fit criteria are identified and assessed. This is the third level of the model. Five selection fit criteria are identified. In the first steps of the process the partnering opportunities are identified. This should exactly describe what roll the partner should fulfil. What are competences that the partner will complement Philips with? Which companies are able to fulfil that roll? This selection category is in the middle and driven by the value proposition of a program/project. Other identified selection criteria categories are Strategy, Operational, Cultural and Network. Finally, 'external influence factors' is all across the model. The process is based on the drive to create a win – win situation. This is necessary to secure the commitment of the partners and is the foundation of a successful partnership.

The thesis will go into more detail about how the process should be applied. It describes approached and methods to implement specific process steps. Besides the conclusions and recommendations that led to the partner selection model, two important issues are recommended:

1. The model is a general Partner Selection Model, which is applicable to all type of development programs. Philips Semiconductors should use this model to identify partnering opportunities, support the partnering decisions and provide insight in the parties active in these markets and needed to build a successful network of partners to grow in the Digital Television Business. There is a live 'excel-model' of this process.
2. A new function as partner manager should be created. This person should control all partnerships for BL DTS.
   This job of 'partner manager' should manage all partnerships and should have the knowledge about the situation in the market for the specific business. This Partnering Manager should make the first orientation selection (program level). Subsequently, a partnering team should make the selection at project level.

**Results TV520 Business Case**

Besides the recommendations to the partner selection process, some additional recommendation can be made specific for the TV520 business case. The 'Supplement TV520 Partner Profiles' provides all detailed information and recommendations per profile.