



Professional article

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Lessons from practice

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Governance and financial aspects of chain-collaboration

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Abstract: The characteristics of chain environments have an influence on the way parties collaborate. In this article, two practical cases are described: (1) a program for optimizing administrative and logistic processes for the export chain of agricultural goods from the Netherlands to non-EU-countries and (2) a program for optimizing the chain of soil-monitoring for potato eelworm disease. These cases show examples of the way chain-collaboration is established in practice and governance and financial issues that arise. In the conclusion, based on the cases, we present several guidelines that might help to avoid/overcome the governance and financial issues in a chain-optimization project or program.

Keywords: chain-computerisation, chain-collaboration, business value, governance, sustainability.

1 Introduction

A chain environment has specific characteristics, which makes it different from other (collaboration) environments. There is no coordinating, commanding or enforcing authority within the chain-environment (Grijpink, 2010). This has great impact on the way chain parties collaborate in such an environment. For example, individual parties within the chain-environment might think (from their own perspective) that they act rationally. However, at chain level these decisions might appear not to be that rational (Grijpink, 1997) and the common interest of the chain parties is undetermined by the individual interests.

In this article, we describe two cases from practice: (1) a program for optimizing administrative and logistic processes for the export chain of agricultural goods from the Netherlands to non-EU-countries and (2) a program for optimizing the chain of soil-monitoring for potato eelworm disease. In the description of these cases, we mainly focus on the way chain-collaboration is established within these chain-environments and issues that arise. More specifically, we address the governance and financial aspects of chain-collaboration in both chains. We finally draw conclusions from these practical cases with regard to chain-collaboration and we present some guidelines that might help to overcome or avoid the governance and financial issues that we experienced in practice.

2 Case 1: Optimizing administrative and logistic processes for the export chain of agricultural goods from the Netherlands to non-EU-countries

The Netherlands have a strong international position when it comes to exporting agricultural goods to countries outside of the EU (Rijksoverheid, 2013). We have a world class reputation in a broad range of commodities like dairy, flowers, seeds and seed potatoes, meat and (of course) flower bulbs. With the intensifying global trade, the necessity in keeping high quality (commercial as well as human health), high speed and low transactional cost grows. Therefore, Dutch business and government joined forces (NVWA, 2013) to optimize the complete chain of administrative and logistic processes relevant for exporting agricultural products to countries outside of the EU (note: within the EU there is free traffic and trade of goods, so there is much less administrative burden and government responsibility). The main focus was on the issuance of the so-called export certificate: a document issued by Dutch government stating the health of the exported goods based on information provided by the exporter and checked by (semi)governmental agencies.

The export chain optimization program ran from mid-1996 until end 2012. Total budget was about 18 million Euros, total involved parties about 500, development costs were approximately 2% over budget, and consultancy costs were approximately 3% over budget.

2.1 Financial and governance considerations

In the optimization program, attention was paid to the financial and governance aspects of the program. On both the financial model and the governance model, several agreements were made between the participatory parties.

On the financial model, the following was agreed upon:

- Dutch government would pay for the initial investment, i.e. the costs of analysis, design, development and implementation of the new system and organization.
- Dutch exporting business would pay for the maintenance costs of the system, i.e. cost of ICT-infrastructure, costs of functional and technical maintenance and costs of the innovation.

On the governance model, the following was agreed upon:

- A high ranking officer of the Dutch ministry of Agriculture, Nature and Food Quality (now embedded into the department of Economic Affairs), would act as chairman of the steering committee. Other members of the steering committee were captains of relevant industries and policy makers of relevant (semi)governmental organizations involved in agricultural export.
- The research, analysis, design and implementation would be done by project teams consisting of experts from both government as well as business.
- In order to manage the differences of interests and viewpoints, an independent consultancy firm was contracted to act as intermediary. Also coaches and experts on methodological and process aspects of the chain optimization were contracted.
- To ensure commitment, several organizations representing business interest were involved and agreements were laid down in a memorandum of understanding.

2.2 Results

The governance model worked out fine up to a certain point in time:

- Government and business representatives were a bit sceptical at first. The proposed collaboration between government and business was not done often and where it was done it was not very successful. But as the analysis went on, on all levels of the program (strategic at steering committee, tactical in the program management and operational in the analysis teams) the parties involved began to understand each other's viewpoints and interests and the awareness for and commitment to a mutual solution grew. One of the key success factors behind this development was involving a team of consultants with the explicit assignment of keeping an objective position and creating balance between interests of government and businesses.
- In the implementation stage of the program, one of the governmental organizations, responsible for issuing the certificate, took charge of the optimization program. This changed the balance of powers slowly from all parties having a shared goal and interest back to individual goals and interests for every party involved.

The financial model appeared to have shortcomings:

- Government was paying for the initial investment; business would be responsible for future maintenance costs. This led to business being very reluctant to accept the new system and procedures. First of all they did not have to pay for the initial system so they kept demanding more and more functionality. Second, business realized that for all of the shortcomings they would miss when testing the initial release, they would have to pay for themselves during maintenance. So they were very reluctant to give the final clearance for the system to go live.
- After going live, business had to start paying for the maintenance of the system. This was implemented by adding a small fee to the initial costs of the issuance of the export certificate. So in using the new system, business would incur higher costs (instead of lower costs as they wanted). The chosen financial model had a more restraining effect instead of a stimulating effect on the use of the new system.
- Dutch government is obliged to be open about its operational costs (and therefore fees), but business is not. So it was not possible to examine the internal benefits of individual exporters. The exporters were not inclined to be transparent about these benefits, even more so they tended to (over)emphasize the investments (costs) they had to make to implement and connect to the new system. As a result of this, the use of a business case to justify the investment in the optimized agro-export chain was not possible.

3 Case 2: optimizing the chain of soil-monitoring for potato eelworm disease

Worldwide, the presence of the eelworm in soil poses a serious problem for growers of all kinds of plant material. Especially in the Netherlands crops of potatoes and flower bulbs have been infected, resulting in the loss of production and export value as a consequence.

In the Netherlands, growers, a (semi)public inspection agency and a governmental agency work together in monitoring, preventing and fighting the further spread of the eelworm disease in Dutch agricultural soil. Because of the high costs and rising need for information about the growing process, a program was started to optimize

the processes and information involved. During an initial quick scan, lots of benefits were identified for all parties involved so the analysis stage was started.

The program ran from mid-1998 to first half of 1999. Four large organizations (government, semi-private and private) were involved as well as two representatives for the growers and traders of potatoes and flower bulbs, representing about 500 agricultural entrepreneurs.

3.1 Financial and governance considerations

In the program, the participating parties made agreements on the governance and financial aspects of the program.

On the governance model, the following was agreed upon:

- The steering committee was formed within the government and contained representatives of the governmental agency responsible for the control of phyto-sanitary disease, the department of agriculture and a representative of a program for improving electronic government services.
- All parties involved provided a representative on tactical (program management) and operational level (analysis team).
- The analysis was guided by a consultant who had the explicit assignment to act as an independent intermediary, when it came to finding a balance between the different interests of the different stakeholders.

On the financial model, the following was agreed upon:

- The (business) analysis would be funded completely by the government agency.
- The business analysis should result in:
 - o an optimized chain of business processes and information providing a sound basis for the design, development and implementation of a new optimized chain system.
 - o an outline of the new system and procedures for the parties involved.
 - o a business case stating the expected initial investment, maintenance costs and benefits from the new system as well as a proposal for redistributing investments, costs and benefits amongst the parties involved.
- Based on the business case a go/no-go for the actual design, development and implementation would be given; funding to be organized in accordance with the business case.

3.2 Results

The governance model worked out fine up to a certain point:

- All parties involved were very committed to the analysis. Communication was open: discussions about differences in interests were difficult at first but the mutual respect for each other's viewpoints grew rapidly.
- A new optimized chain of processes and flow of information was created, based on input of the team in accordance with sound principles for business and chain analysis. This optimized chain model clarified for all involved stakeholders what their individual responsibility and added value would be in the new chain of processes.
- However, this clarification also led to the conclusion that the position of one of the parties involved in the 'present day' workings of the chain would change from having a central position in the chain to having a more distant position responsible for monitoring, enforcement and control.

This redefined position of the party was in complete contradiction to its ambition of being the most important centrepiece player in the optimized chain. Furthermore, the party in question was the government agency acting as the principal and sponsor for the program.

- (So) when the final report and business case of the business analysis was presented, a lot of pressure was necessary to change the optimized chain model into a model in which the government agency kept its position in the chain even reinforcing it.

The financial model worked fine during analysis, but when setting up the business case major issues came up:

- Business was reluctant in providing information about individual benefits resulting from the new optimized chain.
- Business was (over)emphasizing the necessary investments in IT-hardware/software and manpower to run the processes.
- Within the business domain, there was an irreconcilable difference of opinion about where the costs and efforts of feeding information into the system should occur. Apparently, there was a long-term, previously undisclosed tension between subsequent business parties in the chain about the distribution of costs and revenues.
- One of the major business parties was suspected of using the chain optimization program to get funding for investment in hardware, software and manpower, which this specific company also wanted to use in other areas where it was doing or going to do business. In the business case they wanted to include the full costs of their investment, without including the benefits of the investments in other areas outside of the scope of the chain optimization program.

4 Conclusions

The two presented cases are in our experience representative and illustrative for large-scale and complex chain-optimization programs where there is not one specific dominating party in the chain but a relatively well-balanced distribution of power. We have seen similar issues with respect to the governance and financial model throughout a range of programs, for example:

- Optimization of the chain of impounded goods. Parties being: police, department of justice and department of finance;
- Collaboration between the stakeholders in the New Dutch Waterline (a major cultural heritage site). Parties being: local, regional and national government, individual entrepreneurs and professional nature care organizations;
- Setting up an ecogrid resulting in a National Database of Dutch Flora and Fauna (NDFF). Parties being the department of Agriculture, Nature and Food Quality (now Economic Affairs), more than a dozen small-scale organisations gathering detailed information about flora and fauna, the two largest organisations responsible for managing the nature reserves in the Netherlands and an Academic research and education institute;
- Optimization of the export chain on an international scale. Parties being the Dutch department of Foreign Affairs, Economic Affairs, department of agriculture in Kenia, Customs in Kenia, several Kenian business representatives and the Kenia Plant Health Inspectorate Service (KEPHIS).

Based on our practical experience, we have identified several major guidelines which, in our opinion, are crucial for the success of a chain optimization project/program:

1. The principal and/or sponsor for the chain optimization program should not have a direct executive interest in the chain of business processes, nor the ambition to achieve such a position. (In some specific chain optimization projects/programs this isn't necessarily the case. For example, Albert Heijn can be principal/sponsor for chain optimization, but in that case it acts as a "chain director" and determines what happens within the chain.)
2. Commit all major stakeholders in the chain optimization by including them at strategic level (as members of the steering committee), as well as at tactical level (as members of the program management team) and at operational level (as members of the analysis teams). This will have a strong positive effect in helping chain parties understand each other's viewpoints and interests and gaining commitment for the future workings of the optimized chain.
3. Assign a third party to act as an independent intermediary with the main focus on coaching the optimization process and finding the balance between all of the interests of the stakeholders involved. This party has to be highly experienced in coaching and guiding complex chain optimization programs and has to have no direct or indirect interest in the outcome of the chain-optimization,
4. Work with a business case. A business case provides clarification of the future benefits. It also forces each stakeholder to be open about its position. A business case should at least contain a mechanism to ensure that:
 - a) the parties who reap the future benefits from the new, optimized chain should also pay for the investments needed.
 - b) the envisioned additional revenues of the optimized chain outweigh the future cost of maintaining the optimized chain.
 - c) the parties that need to invest / have higher costs are compensated by the parties who have lower cost / higher benefits.
5. After analysis, the design of the new, optimized chain should not limit itself to the design of a new computerized system. Also a governance model has to be designed, which ensures the permanent embedding of the optimized processes and procedures within each of the involved parties in the chain.

Biography: J.J.L.H. (Patrick) Laenen (1968) completed his study Business Economics at the Erasmus University Rotterdam in 1996 and he graduated in the field of Information Systems. Since 1996, Patrick is employed at Vellekoop & Meesters. Since 2003 he is partner and therefore responsible for the further development of the organisation. Patrick fulfilled different roles helping organizations with the (re)design and (re)structuring of organization and information. Currently, Patrick mainly advises and assists in complex change (information) projects between government agencies and between government and business at national and international level.

Biography: J.J. (Jesse) Dijkman (1986) earned his BSc in Computer and Information Science and MSc in Information Science at the University of Utrecht. The subject of his Master's thesis was chain-computerisation in the agriculture-export chain. Alongside this, he was involved, as a student researcher, in the Chain Landscape research with the chair of Chain-computerisation at the University of Utrecht. Jesse is now employed as a consultant with Vellekoop & Meesters, a Dutch consultancy firm in the field of information, organisation and IT.

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