

Chapter 18

BENCHMARKING MUNICIPAL PUBLIC PROCUREMENT ACTIVITIES IN FINLAND

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INTRODUCTION

This research is based on a larger research project, called Lighthouse-project. The research problem of this paper is to find out: (1) whether there were differences in procurement between the municipal public organisations in Finland; (2) how the Finnish municipal public entities differ from benchmarking information in other countries; and (3) the best practices in different parts of municipal public procurement. Results of the project with nine municipalities and three hospital districts are presented.

OVERVIEW

Background

Procurement usually consists of physical and operational level tasks needed to overcome the in-bound logistics operations (Baily & Farmer, 1993). However, procurement can be considered from strategic point of view as well, leaving operational level aspects in a minor role. Procurement coordinates the action between the external resources and the organisation, and aims to create value for the organisation. So procurement can also be regarded as management of external resources. Procurement and the utilization of external capabilities are becoming one of the most important development areas in the public sector.

The definition of procurement, which we use for quantitative analysis, is everything that creates an invoice (Schwab, 1977; Telgen, 2004).

Benchmarking has many definitions, from which we use: Benchmarking is a process in which an organization targets key improvement areas, identifies and studies best practises by others in these areas, and implements new processes and systems to enhance its productivity and quality (Korpela & Tuominen, 1994).

Benchmarking can have many levels: (1) internal best practices by function; (2) competitor's best practices; (3) industry best practices; (4) functional best practices in any company; (5) functional best practices – world class (Korpela & Tuominen, 1994).

Watson (1993) has found five distinct generations in benchmarking development:

- First generation: reverse engineering;
- Second generation: competitive benchmarking;
- Third generation: process benchmarking;
- Fourth generation: strategic benchmarking;
- Fifth generation: global benchmarking.

According to Tuimala (2003), benchmarking is one of the commonly used development tools in procurement. Carr and Smeltzer (1999) stated that benchmarking of the procurement process, performance and strategies have been especially popular issues.

The public sector as a whole differs from traditional industry and trade companies in the following respects:

- The aim of the public organisation is not to produce profit but wealth for citizens using the available means.
- Companies usually focus on one core business, whereas municipalities cover a wide range of services.
- In industry and trade, the material turnover is a major issue, whereas in municipalities none or a very small percentage is stored, and hospitals have a larger share of stored materials.
- In Finnish municipalities, 77% of purchases are services; of which 61% services to direct spend and 16% in capital investments

Because of these reasons, there is need for a special benchmarking in the public sector.

Some Previous Procurement Benchmarks

In a Finnish NetMan project (Aminoff, Hyppöne & Pajunen-Muhonen, 2002) procurement department of 24 private sector organisations were benchmarked. NetMan project started parallel with this project, so we compared the results afterwards. The Centre of Advanced Purchasing Studies has made figure-based benchmarks on American municipalities in

2001. Dutch benchmark in municipalities by de Boer and Telgen (1998) is more process oriented. The study has been replicated in Holland and in Florida.

Procurement of Non-Production Resources

A closely related area to public procurement is procurement of non-traditional items or non-production resources, because public procurement also involves non-production resources.

Procurement of non-production resources is under development in private enterprises. According to Bales and Fearon (1995) the procurement department covered 41% of the non-production resources. In later research (de Boer & Pop Sitar, 2001; Merminod & Barryre, 2002; Cox, Chicksand, Ireland & Davies, 2004), the procurement organisation of the non-production resources is still under development and the procurement service concept is being searched.

Objectives of this Study

The main objective of this study was to find out which are the most typical development areas in municipal procurement using benchmarking between public entities in Finland, public entities internationally based on accessible data and comparing with private sector. Another objective was to find benchmarking methods that yield good results.

RESEARCH METHODS

Case Selection

The selection of target organizations to be investigated is one of the critical aspects in case research. The basic selection criterion is that the case organizations are typical representatives of the theoretical category in question. By considering the basic purpose of this study, logical reasons could be found for case organizations selection. The project was marketed among municipalities from 12,000 to 220,000 inhabitants and all hospital districts. The case organizations are 9 municipalities and 3 hospital districts. The municipalities range from 13,000 inhabitants to 82,000 inhabitants and the hospital districts from 130,000-165,000 inhabitants. The municipalities represent Finnish middle-sized cities and some of largest rural municipalities. The hospital districts were also middle-sized organisations.

Methodology for Benchmarking

The benchmarking questionnaire used in this research was based on the following four sources:

1. Dutch benchmark used by Telgen;
2. CAPS Research municipality benchmark (partly);
3. Procurement price benchmarks; and
4. Additional questions on processes.

The aim was to achieve international comparison to the results and find whether different type of questions yield good results. The questionnaire consists of 214/225 questions or information requests partly tailored for municipalities and hospital districts. The questions were divided as shown in Table 1:

TABLE 1
Questions by Municipalities and Hospital Districts

Types of Questions	Municipalities	Hospital Districts
Procurement policy	35 questions	32 questions
Procurement process	52 questions	77 questions
Organisation	35 questions	24 questions
Information systems and methods	37 questions	44 questions
Quantitative information	36 questions	34 questions
Price benchmarks	19 products	14 products

According to the classification, the benchmarking is industry best practice benchmarking – with international context. The questionnaire was sent to all respondents to be filled in. After receiving a completed questionnaire the researcher visited organizations and the answers were mutually checked.

Method for Quantitative Analysis

The quantitative analysis is based on accounts payable data, accounts on material purchases, service purchases, other expenses and investments. All respondents were asked to deliver the data in a prescribed form. Eleven of 12 organizations delivered the data, and 10 of them were analysable.

RESULTS

Results from Questionnaires

Benchmarking gave the following results in the procurement policy section. It was discovered that most of the organizations claimed to have a procurement strategy, but when interviewed, they meant procurement guidelines. Many of the organisations had foreign suppliers, but usually one occasional one. Make-or-buy decisions as a part of procurement strategies were used only in very limited areas. The organisations claimed to use ABC-analysis, and when interviewing it turned out to be on a product group level. Most of the organisation belonged to a procurement consortia, and ideological choices meant environmental issues.

In procurement processes section of the questionnaire, the respondents claimed that 60% of the organisations had standardised products to be used and most have received few claims. Organisations claimed to conduct negotiations with suppliers during the contract time, but there is a doubt that the initiator for the negotiations is usually the supplier. Delivery accuracy is measured in hospital districts.

When questioning procurement organisation, all departments have in principle the right to purchase directly. Procurement is also done centrally, but the percentage of total procurement can be low. Customer service measurements were done by hospital districts, and in few municipalities.

Benchmarking data processing in procurement organisations gave the following results. Most of the organisations had an invoice handling software and a warehousing software with internal invoicing directly to the ledger. Electronic customer orders were received in hospital districts and in few municipalities. Competitive tendering was used in two hospital districts and in two municipalities. Two organisations published their request for proposals on the Internet homepages.

Comparison with CAPS Benchmarks

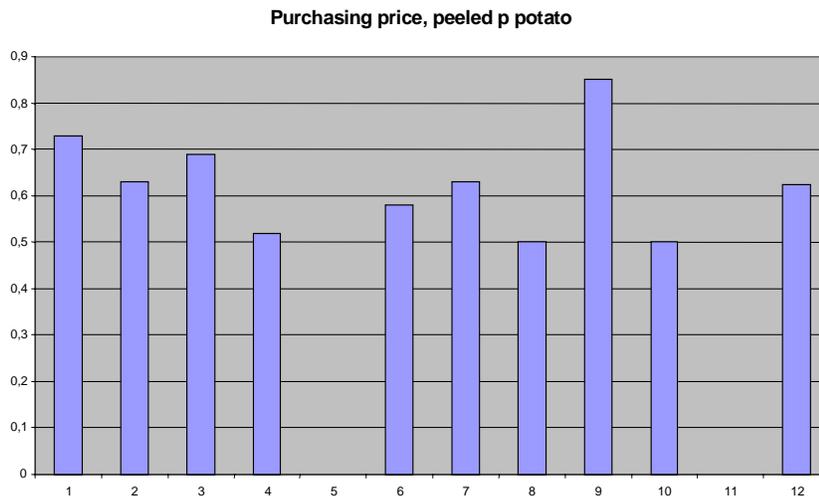
Comparison with the CAPS Research benchmarks was made in what percentage of procurement is handled or assisted by the procurement department. Few organisations were aware of procurement coverage. With some municipalities who had up-to-date contract lists it was measured between 6% and 11%, and in hospital districts it was 30-35% of the total purchases. CAPS municipality benchmarks indicate that the percentage of total municipal dollars influenced/assisted by procurement in medium sized cities is 80%, and in small cities is 85%.

Procurement Prices

Procurement prices for a few selected products were asked, mainly focusing on materials. The basic assumption would be that the prices differ maximum 10% according to the procurement volume. The results for a major product, peeled potato, showed procurement price differences as in Graph 1.

The results for procurement price-benchmarking shows that prices vary from 10 to 180 percent with no major difference in procurement volumes. We also questioned whether there were differences in the product itself. In paper towels, we found that prices were quoted for either one-ply or two-ply paper. In exactly the same product the differences were still big. Another question arises whether to measure the same product or same function.

GRAPH 1
Procurement Price for Peeled Potatoes in Different Organisations



Results from the Quantitative Analysis

From the accounts payable, we analysed the number of suppliers. Accounts payable data can include actual invoices, purchases from local stores by employees and occasionally return payments to the customer. The total number of suppliers in case organisations ranged from 2,925 to 8,765 suppliers.

We developed a hypothesis of the optimum number of suppliers by dividing the ledger accounts to procurement packages (i.e. similar type of purchases which could be bought from one supplier). Then, we by experience, estimated how many suppliers we would need for each package. From this judgment we received 170 suppliers for materials and 283 for services. In hospital districts, the figure is 240 for materials and 210 for services.

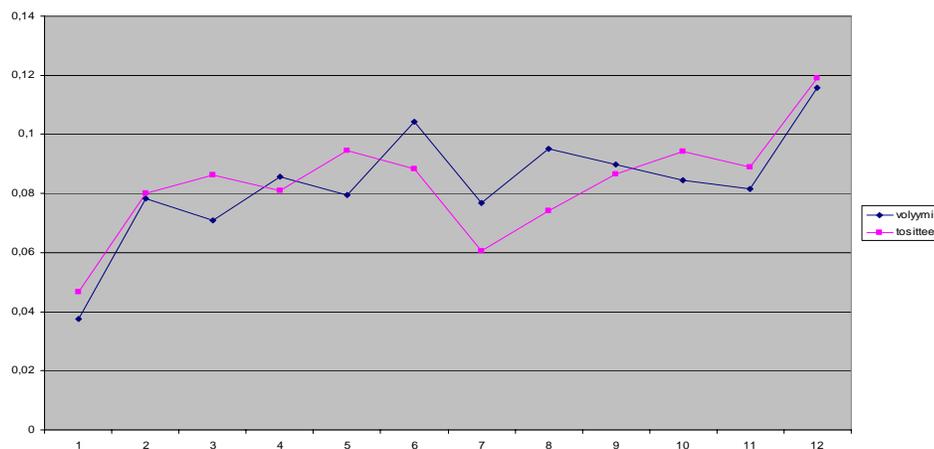
We tested this hypothesis for each organisation by setting a 5,000-Euro limit for an estimated contract supplier, resulting in 1.5-2 times the estimated number of suppliers. The limit neglects the fact that over the limit there can be non-contract suppliers, and under the limit there can be contract suppliers for special materials or services.

According to an estimate 65 to 85 percent of suppliers can be eliminated from the suppliers list. For one organisation the remaining 85% of suppliers counted for 50% of the number of transactions.

A second analysis was done for two organisations for procurement volume distribution based on months. The first one had 50% more procurement volume in December and 50% less in January than the average month (Graph 2). The analysis shows that the fiscal year has an impact on spending, and so-called end-of-year purchases exist.

A third data analysis was made for one municipality to investigate how the procurement transactions are suitable for electronic data processing. We

GRAPH 2
Procurement Distribution in Months



found that in municipalities 15-20 percent of the transactions could be ordered with a buyer updated catalogue system, with another 15-20 percent based on a supplier updated catalogue system. The transactions to be ordered are mainly materials and services. Twenty five percent of transactions are based on long-term contracts as telephone services. Forty percent of the transactions are from occasional or marginal suppliers where automation is not useful. In hospital districts the overall distribution is the same, but the number of occasional suppliers is lower (25%). It must be noted that a corporate procurement card is rarely used in Finland.

DISCUSSION

Procurement Importance in Finnish Municipalities

It can be claimed that procurement management is not seen as an important issue in Finnish municipalities. No one of the studied organisations had a coordinating role of procurement or a procurement strategy. This conforms to the Dutch results, according to de Boer and Telgen (1998).

The benchmarking inside Finland showed that the level of procurement knowledge and practice is low. Among case organisation the best practice searched is not found. Better benchmarks will be found outside Finland, in the United States of America among others.

Procurement Outside the Procurement Organisation

According to our findings, there are organizations without a formal procurement organization. It means that all procurement is handled by cost units. The discussion about centralizing and decentralizing procurement in the literature means decentralizing procurement departments, not dealing with the fact of procurement handled outside the procurement department, as addressed by Telgen (2004).

Graphs about the maturity of procurement function or supplier development (Starling & Burt, 2003) usually refer to organisations have a procurement department. Organizations without a procurement department fall outside the graph on the left side. The outcome was the same with the NetMan-project (Aminoff, Hyppönen & Pajunen-Muhonen, 2002). Evaluation of procurement performance could be made in two dimensions, first performing with the present procurement coverage, and second how well the coverage is handled.

Procurement Price Benchmarking

Procurement price benchmarks indicate that there are major differences in prices, beyond the logistics causes. One of the possible reasons for this is low level of procurement competence. The competitive tendering is made operationally and not strategically. The indication shows that price benchmarks yield good results.

e-Procurement

The quantitative analysis shows that 15-20% of the invoice transaction volume could be ordered with an e-procurement system where the catalogue update is organized by the municipality. Another 15-20% could be ordered if the supplier updated the catalogue. In these circumstances, we do not recommend an e-procurement system.

In IT-support, the recommendation is to create a contract record with invoice matching and e-invoices, which both affect 100% of procurement transactions. When achieving a substantial level on contract compliance, one could consider orders issued from an e-procurement system.

CONCLUSION

In summation, the findings in this study have shown that:

- (1) There are differences in procurement in municipal public entities in Finland; there are great differences in prices and also in the number of suppliers;
- (2) Finnish municipalities differ from U.S. municipalities greatly in procurement coverage;
- (3) As whole, we could not find a best practice for public procurement, because the overall level of all questioned parts was so low. We could find some processes which we could name as best practices

Further research will focus on user agencies procurement without an official procurement department. Further suggestions for research are trying to identify the competence in conducting the tactical procurement to achieve better results in pricing and overall performance.

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