Customer Attraction in a Design-Build-Finance-Maintain-Operate Contract

Citation for published version (APA):

Document status and date:
Published: 01/01/2009

Document Version:
Publisher’s PDF, also known as Version of Record (includes final page, issue and volume numbers)

Please check the document version of this publication:

• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher’s website.
• The final author version and the galley proof are versions of the publication after peer review.
• The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the “Taverne” license above, please follow below link for the End User Agreement:
www.tue.nl/taverne

Take down policy
If you believe that this document breaches copyright please contact us at:
openaccess@tue.nl
providing details and we will investigate your claim.
CUSTOMER ATTRACTION IN A DESIGN-BUILD-FINANCE-MAINTAIN-OPERATE CONTRACT

Favié, Ruben
Eindhoven University of Technology
r.favie@bwk.tue.nl

Nordennen van, Angela
BAM Utiliteitsbouw bv.
(aa.van.nordennen@bamutiliteitsbouw.nl)

Kleine, Hans
Eindhoven University of Technology
kleine@iae.nl

Maas, Ger
Eindhoven University of Technology
g.j.maas@bwk.tue.nl

In the Netherlands, large public customers use integrated contracts more and more often for complicated civil engineering and architectural works. Projects with integrated contracts such as Design, Build, Finance, Maintenance and Operate require tenderers to behave differently than they are accustomed to in traditional projects. This paper discusses the different requirements tenderers have to meet in terms of communication with their customers in order to create sufficient customer value in projects with integrated contracts. Customer value theories provide insight into the elements of these contracts that demand greater attention. Application of these elements in a case study shows that responsiveness, interaction moments and visualisation are the primary ‘soft elements’ that can bring about improvements in the communication with public customers.

KEYWORDS: Public Customer, (customer) Value, DBFMO Contract, soft elements

INTRODUCTION

Nowadays, an increasing number of Dutch government projects are being developed in Public-Private Partnerships (PPP). The main reason to develop projects this way is to create added value. The Dutch government believes that PPP’s can add more value compared to the traditional types of contract by combining the strengths of the public and private sector. In this context only the most commonly used PPP form in The Netherlands has been taken into account in this research: Design-Build-Finance-Maintain-Operate (DBFMO)
The focus of PPP contracts in the tender phase is on the Economically Most Attractive Bid (EMAB). In comparison with the traditional contract the focus isn’t only on the price but also on the quality of the bid. The quality of the bid can be described as the requirements of the client, such as flexibility and comfort.

Just as the traditional contract the price and the result is a part of the bid. These are called the hard elements. However, to create added value, one of the characteristics of a PPP contract, the tenderer has to know the requirements of the public client to offer the economically most attractive bid. Soft elements may provide a solution to recognize these requirements and so the tenderer can offer the client a bid which is exactly what they expected and needed. By using soft elements the client receives a bid which meets his expectations.

The question is which elements to use to come up with a bid that meets the client’s expectations. The aim of this research is to gain insight in the soft elements that contractors can use in order to come up with the Economically Most Attractive Bid.

**Business-to-Government**

There are different types of client-customer relationships. Business-to-Business (B2B) and Business-to-Government (B2G) are industrial markets which are confronted with private firms and public entities that need the procured goods to ensure their existence. Next to that, the Business-to-Customer (B2C) market is confronted with consumers that need an immediate and simple fulfilling of needs (Matthijssens en De Rijcke, 1982).

The B2G market consists of public and private parties that develop agreements with each other. According to Alison (1980), the most important difference between public and private parties is that private parties have the aim to make profit and public parties execute their tasks according to the political needs. In this research, the focus is on the B2G market.

**Purchasing**

According to Webster and Wind (1972) and Sheth (1973) the influence of psychological, social, organisational and external factors on the purchasing process is big. Both authors describe the complexity of the purchasing process in organisations. Decisions are usually not made by one person, but by a so called Decision Making Unit (DMU). The DMU of a DBFMÔ tender usually consists of 20-25 persons.

According to Van Weele (1994), the industrial purchasing process can be seen as an interaction-process in which two organisations participate. An interaction process has been divided into physical and social characteristics by Hakansson et al. (1977). Physical characteristics are the (a) number of times that the organisations meet each other, (b) the characteristics of the purchased good, (c) the way of formalising the process and (d) the characteristics of the parties involved. The social characteristics of an interaction are: (1) the smoothness of the process, (2) trust between the parties and (3) understanding between the parties.
Value

Value is a subjective concept that is determined by the client’s needs and the expected benefit of the transaction. This value differs for each client and is therefore subjective. A private party will try to keep their clients satisfied. They will do this by creating customer-value. Heskett (1997) developed a model (see figure 1) to determine customer value. This “costumer value formula” can be split up in two elements. First the hard elements:

- The Result (What do I get?)
- The Price (What will it cost?)

Secondly the soft elements:

- The Process (How will I get my product?)
- Emotion (What do I feel with the product?)
- Effort (What do I have to do for it?)

All these elements have influence on the determination of the customer value and so it’s important as ‘seller’ to be aware of the influence of all these elements. The soft elements that are used in this paper are:

Processes
1. Responsiveness can be defined as the way in which a person or organisation responds to an external stimulus.
2. Interaction moments are the moments on which client and contractor physically meet each other during the tendering process.
3. Visualisation is a means of clarifying something to the customer. Visualising helps to make implicit knowledge explicit.

Emotion
4. Trustworthiness
5. Image of the contractor

Effort
6. Uncertainties: the extent in which the contractor can help solving the uncertainties of a client.
METHODOLOGY

The challenge for a DBFMO consortium is to come up with the most valuable bid for the client. In the last paragraphs has been discussed that the relation between the consortium and the client is a Business-to-Government relationship. The consortium has to attract the client during the tendering phase which is a part of the purchasing process. In this study the focus is on the value that a consortium can add to the bid in order to meet the client’s expectations. In order to do this, two case studies have been done. These cases were:

- The construction of an office building for the Dutch Tax Authorities in Doetinchem
- The construction of a prison for the department of juridical institutions on Rotterdam Airport

Interviews have been held with 5 experts from the field that have participated in these projects. Next to that two reports that evaluated the project have been used. The data from these interviews and reports have been put in a confrontation matrix. In a confrontation matrix the theoretical elements of customer value are ‘confronted’ with the practical elements from the open interviews with the client and with the data from the reports. The confrontation matrix provides insight into the elements that require attention. The aim of this confrontation is to see if there is influence of soft elements in the process of DBFMO tenders.

RESULTS

In order to be able to develop the confrontation matrix, a stream diagnostic chart has been made. A stream diagnostic chart is an analytical method determining how elements are interrelated to each other. In the study the stream diagnostic chart is been used for the soft
elements. The question was; ‘What is the influence and the dependence of the soft elements?’ The conclusion is that responsiveness, one of the sub elements of Process, has the most influence on ‘creating’ customer value. Responsiveness will influence all other elements. The stream diagnostic chart that has been developed can be seen in figure 2.

![Stream Diagnostic Chart](image)

Figure 2: Stream Diagnostic Chart

This stream diagnostic chart can be used for filling in the confrontation matrix. The results of the interviews were 47 statements that the interviewees made. These 47 statements were placed in the confrontation matrix. Next to that the six soft elements were placed in the matrix and confronted with the statements.

In table 1 the confrontation matrix can be seen.

Table 1: the confrontation matrix

<table>
<thead>
<tr>
<th>Interaction moments</th>
<th>Responsiveness</th>
<th>Visualization</th>
<th>Trustworthiness</th>
<th>Image</th>
<th>Uncertainties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &quot;The direction in which the consortium wanted to go was not very clear during the tendering phase. A lot has been discussed without any feedback.&quot;</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2 &quot;The design that the consortium made as well as their organisation looked fragmentary. There is not one total concept with one vision.&quot;</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3 &quot;The consortium did not really understand the client's culture, while the client clearly showed his culture in the documentation.&quot;</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4 &quot;The client's questions were not always rightly interpreted.&quot;</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5 &quot;Stay with your own design!&quot;</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6 &quot;There was not one integrated organisation.&quot;</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
“The monitoring system is not clear.”

“The quality of the consortium’s tender documents was very high.”

“The presentation was not convincing.”

During the tendering phase, the design has been improved strongly.

“Not all the client’s requirements have been rightly interpreted by the consortium.”

“Some of the client’s critics haven’t been used at all by the consortium.”

“The design does not fit the user’s culture.”

“The consortium could not present itself as one organisation.”

“The consortium’s tender documents were highly appreciated.”

“The consortium must be able to tell why they made certain choices.”

“The consortium should be able to empathize with the situation and the environment.”

“Architect’s reference works are very important.”

“We are not robots, of course we can go into raptures about a nice scale-model.”

“Young architect have no chance in PFI projects because the can not show reference works.”

“For a new project, one subconsciously knows which architect is suitable for the project.”

“The ambition document prepared by the client is list of ingredients that ask for an architect that is able to prepare the best meal out of it.”

“The client must recognize one self in the design.”

“Consortiums carelessly handle the client’s tendering documents.”

“It is not very good if a consortium does not meet the standard criteria.”

“The client likes to be surprised by innovations and novelties.”

“The consortium’s presentation is highly important.”

“The softer sides of the process are also important for the client.”

“The way the consortium treats their architect, tells you something about the consortium.”

“The consortium must show their ability to let several parties integrate successfully.”

“A consortium with firms that belong to one company might be a little one-sided.”

“The client likes to see one integrated consortium.”

“The client can be very compliant, if the consortium uses the right arguments.”

“Consortia need to find their own distinguishing characteristics.”

“Cooperation in the process is very important.”

“The consortium should search for aspects that the client did not think about, but which he finds important.”

“We search for a consortium that is focused on solutions.”

“Consortia rather negotiate on the risks than thinking about the solution for the client.”

“Searching for solutions together, makes a better result.”

“There is often a lack of cooperation between client and consortium.”

“It is important to empathize with the client.”

“It is important to ask a lot of questions and suggest solutions during the dialogues.”

“Cocksureness leads to vexation.”

“Interaction moments and a focus on service are the most important during the tendering phase.”

“Visualisations stay in the clients’ minds.”

“A consortium with firms that belong to the same company is seen as arrogant.”

“Always be kind and make sure that you won’t be seen as a nagging consortium.”
DISCUSSION AND CONCLUSION

The elements that are used to confront the statements are elements of a social nature, the soft elements. A characteristic of this is that they are subjective and, therefore, difficult to measure. To what extent does a tenderer’s image play a role in attracting the customer? The only thing that can be said about that is that it does play a role, but the extent to which is not clear and is not examined any further in this study.

All 47 statements from the study can be connected to the six soft elements (responsiveness, interaction moments, visualisation, image, reliability and uncertainties) from the customer value comparison. It can be assumed, therefore, that even though officially clients award the project based on the final result and the price (hard elements), they also, subconsciously, take into account the soft elements. From this study can be learned that the six soft elements that have been found in literature: responsiveness, Interaction moments, Visualization, trustworthiness, and contractor’s image are all important for the contractor to keep in mind when participating in a (DBFMO) tender. Soft elements can increase or decrease customer value.

REFERENCES


Matthijssens, P. en de Rijckie, J. (1982), Unieke dimensies van industriële marketing, Tijdschrift voor marketing, Juli / augustus, pp. 3-10


Tillema, H.H. en Westhuizen van der, G.J. (2003), Knowledge productive teams: professionals learn collaboratively. Lifelong learning in Europe, 19-25
