

Targeting public awareness of a building development project

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Abstract. The responsible body pushing a case of a building project often gets into the situation when they have to defend and carry the project through the public. Lack of defects in a project, such as concerning green and sustainable building objectives, has positive influence on public awareness when the project is to be implemented. The building projects in question were not viewed and accepted equally by each party as different defects were pointed out by different subjects – the projects did not naturally resonate with everyone's views. In the article we present a course of action while informing the public and other subjects involved in a building project. The purpose was to eliminate defects apt to induce disagreements with the building project, to eliminate such adverse consequences as delays and extra costs, caused by some individuals' lack of information, or sometimes by others parties' disturbing or harmful plans, either based on the law or not. Some figures are available that document the time change in public attitude as the information process controlled by municipality progressed and thus modified the public attitudes.

1 Introduction

The general scenarios of the cases presented below are partially similar. The municipality or investor prepare a building project. The project must be defended effectively with the public concerned. As a rule, the public is not too interested at the very beginning. However, the municipality and the investor have repeatedly experienced the fact that the public awakened their awareness only later. The public then raises objections, relevant as well as irrelevant. The objections are considered, some are accepted and resolved, others have to be rejected. This delays the project, sometimes substantially, and if such a delay is unacceptable then the objections cannot be considered properly. Either way, unaccepted objections cause stronger adverse attitude of the public towards municipality or investor and towards the project itself.

In the below presented cases the municipality or investor adopted a modified approach. The public was to be informed and involved pre-emptively, approached by a questionnaire survey. During the survey the public was asked to comment on variants possibly reflected in the project. At the same survey the participants were asked to file comments and suggestions to the municipality.

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Another point of concern was “professional complainers” (and complainants), interferences of non-profit and non-governmental organizations and good-doers. As many preventive measures as possible were taken to avoid harms and delays in the project caused by them.

2 Case studies

2.1 Case study 1 – School sport and public leisure facilities

The municipality in P. were preparing school sport and public leisure facility project located on municipal land in the urban area. The usage of the facility was planned for alternating school activities in the morning and leisure activities in the afternoon and evening. The facility must be prepared and in working order every morning for school activities after the previous evening public activities. On the basis of another case, the municipality was aware that this problem needs to be addressed already in the preparatory phase of the project.

2.2 Case study 2 – Road network reconstruction and maintenance

The investor with the municipality of N. were preparing road repairs project after the road would stop being used as diversion. Parts of the road were in a reasonable state of repair and needed just a little more than usual maintenance. Other parts needed more substantial reconstruction [1] – these were located mainly within the urban area and the reconstruction generated significant impact to the population.

The municipality’s concern on attracting citizens’ awareness in the preparatory stage of project took also form of advertising the PPP in the project [2]. The questionnaire pushed forward topics in a way of “how do YOU prefer the repairs being done”, “how it would suit YOU” or “what is YOUR opinion on how to avoid defects in the project and construction” [3]. By making it sound personal, the municipality hoped that the residents would be more easily involved.

3 Searching for defects and remedy

In order to obtain a more complete portfolio of opinions and comments the municipality distributed two sets of questionnaires. One type of the questionnaire was anonymous. It was intended to gather information that the questioned persons might be reluctant to bind personally with. The municipality and the investor supposed that getting this kind of comments would also help decrease the number of objections raised later against the project and building process [4].

The questionnaires were distributed to residents, available at the municipal offices, and available for on-line filling. On a small scale responses were obtained by interviewing the citizens. Residents were encouraged to fill it repeatedly if they felt like that, and optionally to indicate this fact in the questionnaire.

3.1 School sport and public leisure facilities

The questionnaire survey was conducted twice before the project, with a time distance of about seven months. After the first survey the objectives of the project could be partially redefined and refined.

In the second survey, the respondents were also asked to state if and how their opinions had changed since the previous survey. The respondents could also state – according to their individual, subjective opinion – if and where some defects of the project had been eliminated.

3.2 Road network reconstruction and maintenance

The questionnaire survey was conducted twice before the project, with a time distance of three months. Some of the questions requested to rate a given numeric property on a 7-point worst – best rating scale.

In the second survey, some questions were added based on evaluations of the first survey. This helped to better tackle the concerns of the public and avoid such defects that were not originally thought of, due to their specificity of the location.

In the second survey, the respondents could also indicate whether they had changed their attitude to the questioned topics in a positive or negative direction, what caused the change of the attitude, and what other changes would be appreciated.

4 Non-public and hostile interferences

There are other subjects eligible to raise objections to a project, next to authorised residents. The above strategy cannot work in their case. These subjects can act as hostile elements, can introduce unnecessary external factors. These can be competing contractors, or just racketeering groups such as some non-profit and non-governmental organizations and good-doers. The defects caused by this kind of NGOs and NPOs are primarily the inevitable delays in the building process, and further negative moral impacts.

Although the primary and probably only goal of such NGOs and NPOs is to obtain the racketeering money, for legal reasons these agents cannot just take money and go. They need to submit some (virtual) concern or objection to be handled. But handling it takes time and thus delays the building process. However, having some notion of actual racketeering agents and their habitual concerns and objections, the municipality might preventively address them with a request for opinion. To this purpose the same questionnaire given to public can be used – this has the advantage of informing quietly the public on the imminent problem by the submitted questions. Depending on the type of hostile interference [5], the public can take active part in respective action to eliminate it. [6]

5 Making public cooperate actively

In both presented case studies, the municipality devised and proposed a similar strategy. The strategy was aimed on eliminating some defects in project, defects originating from the fact that the public would later raise objections the handling and resolving of which would consequently delay the project. The main principle of the strategy was generally a simple one – attract the public into the project long enough before any binding decisions are taken. Viewed from another perspective, the municipality strategy can be partially defined as: do not try to explain the project to the public, let the public “explain” the project to itself. And let the public adopt partial responsibility for identifying and eliminating defects that influence the public [7].

Measuring efficiency of the strategy directly is not easy if not impossible. It cannot and should not be measured by money or just by money. It is considered that the greatest benefit lies in the smaller number of subsequent comments and objections. This, however, cannot be measured directly. Intuitively, more objections handled and resolved before the

project actually starts lessens their number in the subsequent phases. However, a more testifying sign would be the change of opinions between the first and second survey. If the divergence of the opinions decreased, it might indicate greater consensus among the public (residents in these cases).

6 Question topics and defects reduction evaluation

The following Table 1 and Table 2 summarize average values for the public attitude as determined during the two surveys. For the second survey, tendency of standard deviation of the responses is indicated where it makes sense (/+ for increasing, /- for decreasing when compared to the first survey). Not all questions in the questionnaire are listed here, some are aggregated and other were omitted on behalf of their irrelevance to monitored project defects – delays and costs due to treatment of objections and comments.

6.1 Questioning school sport and public leisure facilities

The questions were about several features of the facilities. Only some of the non-quantifiable – i.e. using nominal or yes/no scales – questions (4, 5, 6) are listed here:

1. admission charges (CZK/hour),
2. opening hours for public (weekdays) – from,
3. opening hours for public (weekdays) – to,
4. sport types, non-sport leisure facilities and clubs,
5. kids', mothers', seniors' clubs,
6. restaurant, eatery and catering.

Table 1. School sport and public leisure facilities.

| Question | 1. survey | 2. survey |
|-----------------------------------------------|-----------|-----------|
| 1. Admission charges | 61 | 68 / - |
| 2. Opening hours for public (weekdays) – from | 15,1 | 13,9 / - |
| 3. Opening hours for public (weekdays) – to | 20,8 | 21,3 / - |

Only the questions listed in Table 1 can be evaluated in terms of numerical quantities obtained from respondents. All of these questions, however, exhibit decrease of standard deviation in the second survey.

The questions based on nominal and yes/no scales delivered data which were used mainly to re-tailor the facilities so as to comply with requests submitted via the questionnaire.

6.2 Questioning road network reconstruction and maintenance

The questions were on variants of reconstruction:

1. tolerable duration (3, 4, 5 months, 6 or longer),
2. convenient season (starting on Feb through Sep, 2-9),
3. partitioning into phases (no phasing, or up to 2 phases with winter interruption),
4. allocating municipal money for reconstruction improvements (mil. CZK),

5. allocating municipal money for accelerating reconstruction, (mil. CZK),
6. postponed reconstruction and provisional maintenance (up to 3years),
7. joining reconstruction with municipal networks renewal (no-yes, 0-1),
8. or with other municipal building plans (no-yes, 0-1).

Table 2. Road network reconstruction questionnaire evaluation.

| Question | 1. survey | 2. survey |
|---------------------------------------------------------------|-----------|-----------|
| 1. Tolerable duration | 3,96 | 4,41 / – |
| 2. Convenient season | xx | xx / – |
| 3. Partitioning into phases | 1,41 | 1,83 |
| 4. Allocating municipal money for reconstruction improvements | 3,45 | 5,21 / + |
| 5. Allocating municipal money for accelerating reconstruction | 1,32 | 1,46 / – |
| 6. Postponed reconstruction and provisional maintenance | 2,43 | 1,92 / – |
| 7. Joining reconstruction with municipal networks renewal | 0,68 | 0,91 |
| 8. Joining reconstruction with other municipal building plans | 0,65 | 0,80 |

While standard deviation carries no information for questions #7 and #8, for most of the other questions the standard deviation exhibits decrease in the second survey.

Question #2 needs some comments. The respondents could choose several options from the set of months {2,3,4,5,6,7,8,9}. Then the calculated average for each respondent is difficult to interpret (choosing 2 and 8 produces average of 5 – but that is not an option accepted by the respondent). Thus the average when calculated over all the respondents is out of interpretability, too. However, this does not mean that the decrease in standard deviation – calculated first for each respondent and then combined for all respondents – cannot be a consequence of 1) refined individual opinion 2) converged opinions.

There were two possible choices to question #3. If the respondent prefers the whole repair to be performed in one phase, the corresponding value is 1. If he is indifferent to whether the repair be performed in one or in two phases, the corresponding value is 2. Thus standard deviation also carries no information as in the case of questions #7 and #8 above.

7 Conclusions

The “pre-emptive” strategy adopted by municipality (in both, independent, cases) yielded positive results. It is difficult to judge how opinion on the municipality was influenced by actively involving the public into the project, by arranging two questionnaire surveys before the project started. In both cases, the opinion of the municipality ranged mainly from neutral to positive and assumed that the attitude of the public was similar. The municipality supported such opinion by public’s responses.

As for building projects and their defects, there is some support in survey data for positive expectations. The *decrease in standard deviation* in most of the obtained responses

strongly indicates that the attitude of the public converged, that the public opinions towards the relevant questions (criteria of the project) got mutually closer. Thus project content could be adapted to better satisfy various groups of citizens, hopefully decrease number of problems during its preparation phase as well.

It's probably worth of mentioning what would have happened if the second survey had proved *increase* in standard deviation, indicating higher conflict among residents and their opinions. If we disregard the possibility of putting blame on municipality for bad work with the public during surveys, this increase in standard deviation should be a warning and create an impulse to prepare countermeasures for the project to succeed. Without the data on the growing conflict in public opinion, the life would be harder for municipality staff.

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