

INVESTIGATION OF STAKEHOLDERS' STRONGLY HELD PERSPECTIVES ON THE SUSPENSION OF A ROAD-WIDENING PROJECT IN THE PHILIPPINES

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1. Introduction

A road-widening project from a two-lane to a six-lane highway in San Fernando, Pampanga, Philippines, was suspended for more than ten years after various groups protested the cutting of trees that led to the termination of the project. This scenario is not an isolated case. It can be seen over the Philippines as the government widens the roads and creates new road sections according to its National Development Objective. Before implementing the project, various obstructions must be addressed, such as trees, formal and informal settlers, and utilities. However, lack of public consultation and consideration with stakeholders are mostly compromised to fast-track the commencement of the projects.

This paper investigates the most strongly held perspectives of 22 stakeholders who were interviewed about the suspended road widening project using the Q methodology, a technique that was designed to analyze people's views concerning a given topic. Determining the strongest perspectives of the stakeholders is essential to validate the unique needs of the people. It will give the road designers the appropriate design that fits the stakeholders. These perspectives will be examined through participants' responses in the Q methodology process and survey questionnaires.

2. Methodology & sample characteristics

2.1. Survey design and questionnaire

The data on the stakeholders' perspectives were collected using a questionnaire survey following the Q methodology. The contents were provided in English and done through video conferencing meetings to determine their feelings on the socio-environment impact of the suspended road widening project. They were asked to rank 25 statements about the suspension of the road widening project as a part of the process in Q methodology using a forced-choice distribution diagram (Figure 1), where +4 represents the most agreed statement, -4 the least agreed statement, and 0 the neutral, unsure, or mixed feelings.

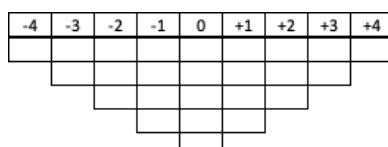


Figure 1. Forced-choice distribution diagram

At the end of each online interview, two questions were also asked about why they chose the statements in (+4) and (-4) to highlight their strongest opinion.

2.2. Participant characteristics

The survey was conducted with 22 participants composed of academe (2), the business sector (2), national government office (3), local government office (2), environmentalists (2), non-profit organization (1), private vehicle drivers (4), residents (2), contractors (2), and bicyclists (2). 64% (14) are male, and 36% (8) are female. 55% (12) of the participants are aged 21-30 years old, 18% (4) are in aged 31-45 years old, and 27% (6) are 46-70 years old. They are equally divided between with technical knowledge and without technical expertise, and in their employment, 36% (8) are from the government sector, and 64% (14) come from the private sector.

3. Results and discussion

3.1. Distribution of statements

Figure 2 shows the histogram of statements with most agreed (+4) and least agreed (-4) summarized below.

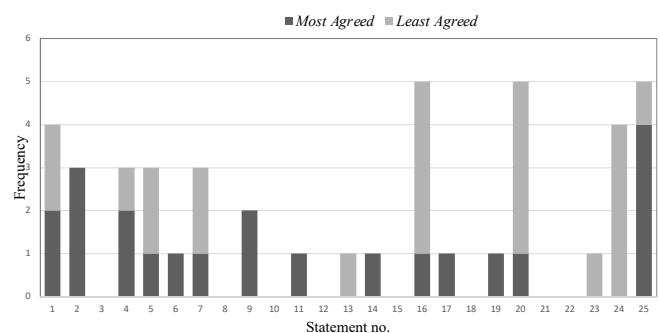


Figure 2. Histogram of frequency of most strongly held perspectives

3.2 Examination of strongly held perspectives

Statements in the survey with at least two most agreed or least agreed statements are shown in Table 1. Other statements lower than two were omitted to focus on the most strongly held perspectives. The participants who answered most agreed (+4) and least agreed (-4) are shown. The results were also categorized into four categories: the consensus statements, most agreed statement, least agreed statements, and point of conflict. The consensus statements are statements that have at least two extreme perspectives. The most agreed statement is the statement that has the most quantity of most agreed (+4) statement. While least agreed statements are statements that have the most amount of least agreed (-4) statements. Lastly, the point of conflict is that statements have at least two extreme perspectives and at least one participant's opposite extreme perspective.

Keywords: road widening, perspectives, public consultation, Q methodology

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Table 1. Statements with strongly held perspectives

	Statements	PARTICIPANTS	
		Most agreed (+4)	Least agreed (-4)
Consensus	S2 - Public consultation should have been carried out before starting the project.	local government office 1 national government office 1 cyclist 1	
	S9 - Road safety measures in this road section require much improvement.	private vehicle driver 1 contractor 1	
	S24 - Whether the project should continue or not should depend on how long the remaining construction activities will take.		academe 1 private vehicle driver 3 cyclist 2 resident 2
Point of conflict	S16 - Trees should always be preserved in road widening projects.	environmentalist group 1	national government office 1 private vehicle driver 1 private vehicle driver 2 cyclist 1
	S20 - The shoulder should be widened instead of cutting the trees.	national government office 2	local government office 2 private vehicle driver 4 contractor 2 resident 1
	S25 - The project should have been completed a long time ago.	academe 1 academe 2 resident 1 non profit organization	local government office 1
	S1 - The community's opinion about how to finish this project should be heard.	environmentalist group 2 contractor 2	national government office 2 non-profit organization
	S4 - Completing the project will help solve traffic congestion in the surrounding area.	local government office 2 private vehicle driver 2	environmentalist group
	S5 - Removing the trees will lead to more severe impacts during floods.	business sector 2	national government office 3 contractor 1
	S7 - The trees along the road are a danger to motorists, cyclists, and pedestrians.	business sector 1	academe 2 business sector 2

3.3 Consensus statements

The need for public consultations during the project's planning stage was significant for the technical and government officials. They had mentioned in the interview something in common, "it is the most important activity in any project to avoid problems in the implementation." Based on the literature, one of the government infrastructure plans' significant challenges is the unsolicited proposals [1]. Two participants also agreed on the need for improvement in road safety in the road section (Table 1).

Based on the response of private vehicle driver, the remaining trees along the road section brought hazards to the motorists, and accidents along the road section are frequent.

On the other hand, it has been a consensus among four participants that the continuation of the project is a must, no matter how much effort it will take to its completion.

3.4 Most agreed statement

Based on interviews, "the project should have been benefited for the public use if it was completed a long time ago." The account relates to one of the government's most significant challenges in developing road infrastructure – absorptive capacity.

The significant issues that affect the absorptive capacity of the agencies are road right-of-way (ROWA) problems; poor project preparation and planning; a deficit in technical capabilities; problems in bidding, contracting, and procurement; project design alteration and variation orders; difficulty in complying documentation requirements; issues on synchronization, complementation, and coordination with other government agencies including local government units (LGUs), among others [2] are the issues that contend the timely accomplishment or completion of road infrastructure projects.

3.5 Least agreed statements

Various groups do not agree on preserving trees in the road widening project unless countermeasures are taken. For example, the government official suggests that instead of cutting trees, earth balling can be used to remove the trees on the road section and relocate it to the appropriate location.

The participant also mentioned proper urban planning from a non-profit organization and a national government office. Good urban planning should have located the trees in their correct location long ago.

3.6 Point of conflict

It is noticeable that there are more disagreements than consensus. People who disagree with preserving the trees for widening were greatly opposed by environmentalists. It was also thought-provoking that statement 1, which talks about the importance of the community's opinion to finish the project, was disagreed by technical people in the government and technical people from the private sectors, as shown in Table 1. Moreover, responses stated that mass transportation is the leading solution to traffic congestion, which is opposed to road widening as a solution to traffic congestion. More road projects will attract more people to purchase cars for their transportation; thus, they will not holistically solve traffic congestion.

4. Conclusion

In this paper, it was shown that the most strongly held perspectives of stakeholders were different depending on the participants' characteristics. Their views as a stakeholder would give road designers ideas and solutions to various issues like earth balling for tree removal, the need for public consultations, proper urban planning, and mass transportation must be incorporated in designing the road infrastructures.

The investigation of why the project was terminated was a backward approach. However, the stakeholders' perspectives can be used in the implementation of the road development projects such as road widening. Unable to consider their perspectives may cause delay, and worst is the termination of the project.

Acknowledgement

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References

- [1] Asian Development Bank, "Meeting Asia's Infrastructure Needs," 2017.
- [2] J. P. Rosales, "The Philippines-national study: infrastructure financing strategies for sustainable development," 2017.