

Citizen Survey Methodology¹

Context

With increasing access to information and the democratization of knowledge, the role of citizens in the process of governance is undergoing a paradigm shift. From being mere recipients of a one-way dialogue (or should we say monologue), citizens now increasingly demand to be consulted and seek to participate in the decision-making process, rather than just serve as the 'sleeping mass' in a representative democracy. In the light of changing aspirations of the citizens, it is incumbent on the State to provide ways and means to enhance the role of citizens in the decision-making process and facilitate better State-Society articulation. Citizens' Surveys assume importance in this context. The tool below supplies the necessary information regarding survey methodology in simple, non-technical language for use by Government Departments.

Purpose of the survey methodology

Citizens' surveys provide inputs that aid and enable the government to frame policies, evaluate programmes, assess and improve service delivery, map attitudes and preferences, study voting intentions and examine demographic/socio-economic profiles.

By definition, surveys constitute a two-way communication process that enhances the nature and quality of articulation between the government and the citizens. In other words, citizen surveys are 'a good in itself and of itself'.

Description

Webster defines a survey as "the action of ascertaining facts regarding conditions or the condition of something to provide exact information especially to persons responsible or interested" and as "a systematic collection and analysis of data on some aspect of an area or group." A survey, then, is a process and goes much beyond the mere compiling of data. To yield relevant information, the data must be analysed, interpreted and evaluated.

Surveys can be divided into two general categories on the basis of their extensiveness. A complete survey is called a "census." It involves contacting the entire group you are interested in - the total population or universe. The other category is more common; it is a sample survey. A sample is a representative part of a whole group (universe). Thus a sample survey involves examining only a portion of the total group in which one is interested, and from it, inferring information about the group as a whole. By sampling only a small portion of a large population, it is possible to collect data in far less time than would be required to survey the entire group. The smaller amount of data gathered by sampling as opposed to surveying an entire population can mean large cost savings. Finally, a carefully selected sample may yield more accurate information than a less careful collection of data from the entire population. On the other hand, there are certain disadvantages of sampling. The main disadvantages stem from risk, lack of representativeness of the sample, and insufficient sample size, each of which can cause errors. Inattention to any of these potential flaws will invalidate the survey results.

Surveys can also be classified by their method of data collection. Mail, telephone interview, and in-person interview surveys are the most common.

¹ Document prepared by Centre for Good Governance, Hyderabad, India.

The citizen survey process

Step 1. Defining the purpose of the survey

The first step in producing a survey is to define the purpose or objective of the survey. A clear statement of purpose is necessary, not only as a justification of the project, but also as a guideline to determine whether future actions in the project are in support of the original purpose. Knowledge of the exact nature of the problem (objective) would determine exactly what kind of data to collect and what to do with it.

Is it aimed at gauging public opinion? Is it meant for evaluation of service delivery? Is it required for assessing the level of public awareness?

Step 2. Developing the hypotheses

Once the problem has been clearly stated, the next step is to form one or more hypotheses. The hypothesis is actually an educated guess about the answer to the problem. It ought to be based on prior experience related to the problem, or based on any knowledge one may have of previous research done on the topic. It is important, at this stage, to point out that any hypothesis must be supported by credible evidence. Hypotheses should be as specific as possible. Ambiguous words such as most and some should be avoided. A survey can more easily be designed to test whether "more than 75 percent approve" than whether "most approve." A well-formulated hypothesis, objective, or research question translates the purpose into a statement that can be investigated scientifically.

Step 3. Defining the population

It is important at this stage to identify the population or the target group that one is interested in. This is likely to emerge from the purpose of the survey and the hypotheses formulated. Not only is it important to identify the population but one should endeavor to define the target segment as well as possible. For this purpose, one could choose many different criteria such as geographical (ex: districts, hills, plains, agro climatic zones etc.), demographic (ex: urban/rural, age, sex etc.), socio-economic (ex: APL/BPL, monthly income/expenditure, type of housing, caste/class etc.) or other (such as attitudinal & behavioral characteristics etc.).

Step 4. Developing the survey plan

The next step in the survey process is construction of the survey plan. The purpose of the survey plan is to ensure that the survey results will provide sufficient data to provide an answer (solution) to the problem being investigated. The survey plan comprised the Survey methodology to be followed, the plan for collection of the data, the plan for data reduction and reformatting plan and finally, a clear plan for analyzing the data.

Step 5. Determining the sampling frame and sampling methodology

When undertaking any survey, it is essential to obtain data from people that are as representative as possible of the group that one is interested in. The basic steps in selecting a sample are given below:

1. Define the population: Who do you want to get information from? Decide the units (say BPL households), the elements (adult members), the extent (benefited from a scheme), and time (in the last one year).
2. Develop a "sampling frame": Who are the people that make up the group(s) you want to survey?
3. Specify the sampling unit and element: What specific segment(s) will get you the information you need?
4. Specify sampling method: What selection criteria will you use: probability vs. non-probability? Probability sampling means that every segment of the population will most likely be included in a typical sample. Non-probability sampling is selection based on the researcher's judgment or convenience.
5. Determining Sample Size: This involves deciding how big the sample should be.

Step 6. Designing a Questionnaire

Questionnaires play a central role in the data collection process. The questionnaire is the means for collecting your survey data. A well-designed questionnaire efficiently collects the required data with a minimum number of errors.

Citizen surveys gather information that can be classified into three types. The goal of this classification is only methodological and helps to identify types of scales and questions to use.

- (1) **Opinions.** The main elements of an opinion are cognitive structures and the main emphasis is placed on the result of information processing. If emotions are related, they do not play a main role. An opinion can be formulated on the basis of own direct experience or indirect experience.

Examples of questions:

- (a) Should solid waste collection be privatised?
- (b) Should the tax rates be modified?

Examples of scales to be used with these questions:

Level of agreement: strongly agree – agree – neither agree nor disagree – disagree – strongly disagree

- (2) **Attitudes.** Attitudes are defined here as evaluations and in contrast to opinions they include some emotional aspect. The objects of attitudes can be people, institutions, things or abstract notions. The origin of attitudes can be of three types (cognitive, emotional, own experience) or their combination. For example, the origin of attitudes toward the town's cleanliness could be heard stories about dirty streets (cognitive origin), general dislike for the city (emotional origin) or own experience of seeing how clean it is. An important element of attitude measurement is having more than one question to measure attitudes toward an object.

Examples of questions:

- (a) How do you rate cleanliness of the town?
- (b) How do you evaluate performance of municipality regarding street maintenance?

Examples of scales to be used with these questions:

Five- and seven-point Likert scales: (a) clean - dirty (b) useful – not useful, fast –slow

- (3) **Knowledge.** The main elements of knowledge are cognitive structures and the main emphasis is placed on recalling from memory information that was stored earlier. In contrast to opinions, it matters here what people remember and not what is their position against some issue.

Examples of questions:

- (a) How many streets were paved during the last year in your locality?
(c) How often do you visit the block office?

Examples of scales to be used with these questions:

- (a) 5-10 11-16 17-23 24-29; (b) once a week – once a month – once a year – less than once a year

Step 7. Undertaking fieldwork and gathering data

Key activities at this stage include:

1. Operational planning: Incorporates resource planning in order to align manpower to the survey design and time constraints;
2. Training of investigators: important for investigators, who undertake the work of interviewing respondents, to clearly understand the purpose of the survey and the target respondent;
3. Monitoring and supervision: Mechanisms should be in place to adequately monitor and supervise the fieldwork operations. This has a bearing on both the time and quality of the survey.

Step 8. Quality control/data reduction

Weighting of data: Before analyzing and interpreting the data, it may be required to 'weight' the data. Weighting refers to the construction of a weight variable. The principal purpose of weighting is to obtain as accurate parameter estimates as possible with the chosen sampling and estimation procedures.

The simplest type of surveys may be "self-weighted" in the sense that each unit (household/group) in the survey "represents" the same number of unit in the population. Indeed, most surveys are not self-weighted because they draw disproportionately large samples for some parts of the population that are of particular interest. In this case, weights must be used when presenting all descriptive statistics in order to calculate unbiased estimates of statistics of interest.

Step 9. Analysis and interpretation of survey data

Data analysis enables the extraction of useful information from the collected data which leads to informed decision-making. Every piece of the acquired data has intrinsic value. The key is extracting this value.

Broadly, analysis of data could be categorized into two types.

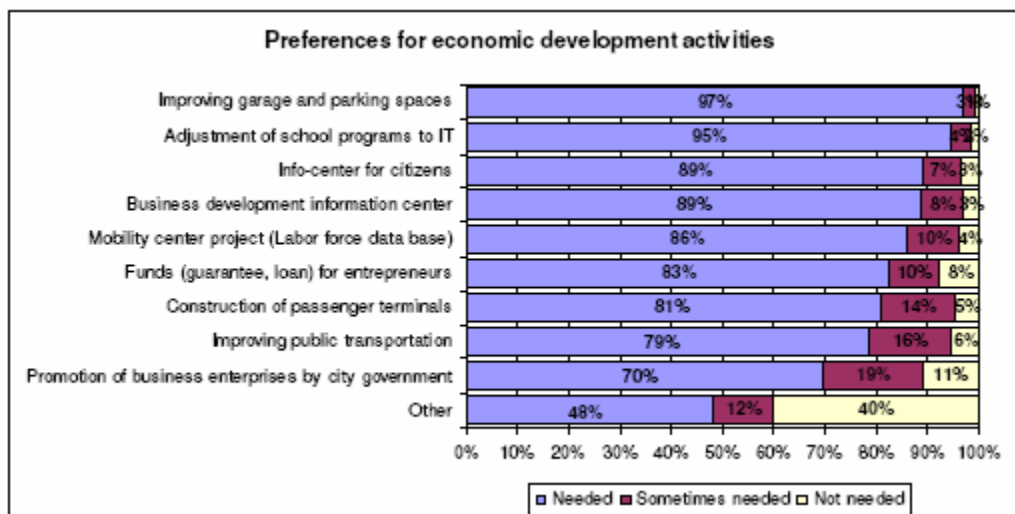
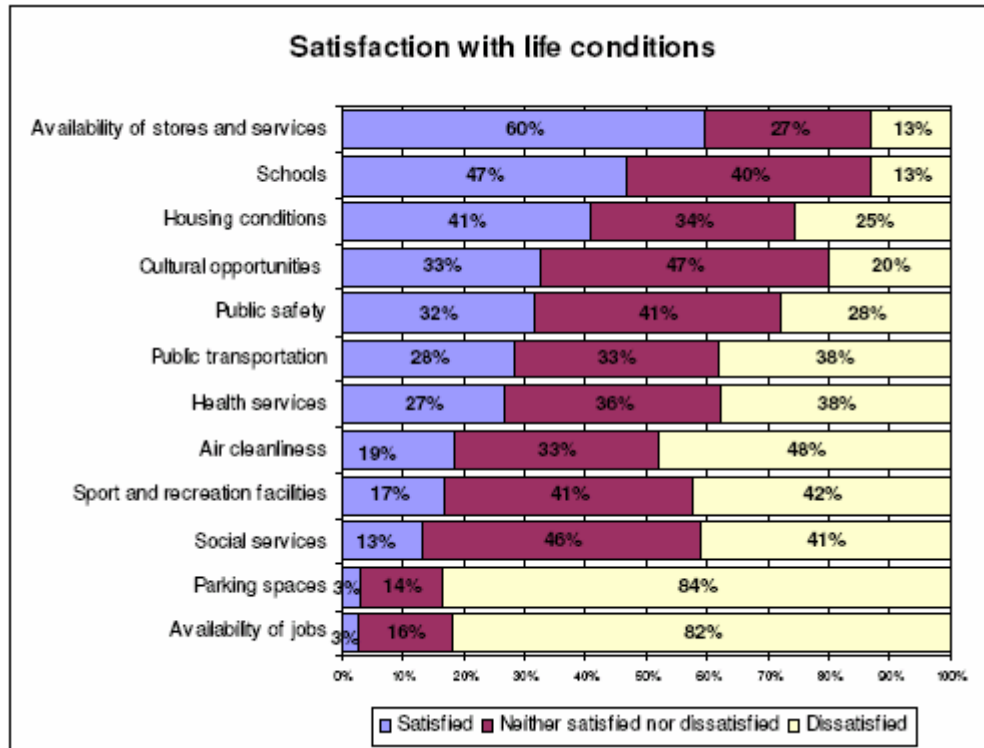
1. Descriptive data analysis helps in organizing and summarizing data in a meaningful way. Description is an essential step before undertaking statistical analyses. The goals of descriptive data analysis are to (a) summarize data and (b) get an accurate description of the variables of interest.

2. Inferential data analysis allows the researcher to make decisions or inferences by identifying and interpreting patterns in data. Inferential statistics deal with drawing conclusions and, in some cases, making predictions about the properties of a population based on information obtained from a sample. While descriptive statistics provide information about the central tendency, dispersion or skew, inferential statistics allow making broader statements about the relationships between data.

The two major types of inferential statistics are parametric statistics and non-parametric statistics. Parametric Tests assume that the variable measured is normally distributed in the population. The data must represent an interval or ratio scale of measurement. The selection of participants is independent and the variances of the population comparison groups are equal. Non-Parametric tests are less powerful means of data analysis and are used when the data represent a nominal or ordinal scale, when a parametric assumption has been greatly violated, or when the nature of the distribution is not known.

Case Study: 2001 Citizen Survey for the City Of Rijeka, Croatia

The survey was conducted as part of public participation activities component of the Local Government Reform Project that is implemented by the Urban Institute and financed by the USAID. The survey is a general citizen survey that is aimed at providing local governments with basic information about their citizens' attitudes, opinions, and knowledge about their local governments.



Citizen Survey by PRAJA

PRAJA a Mumbai based NGO conducted a complaint audit survey in all 24 wards in Mumbai, with a sample size of 2,456 citizens in December 2003. It found that a citizen went 13 times on average to the BMC to get a complaint solved. Only a third of respondents expressed satisfaction with the services. While the BMC maintained that 88% of the complaints were redressed, the citizens said only 49% were. It clearly shows a huge gap between promise and performance. Interestingly, the complaint audit survey showed that the user profile was well divided, with a full third of complainants being slum-dwellers.

Who can carry out the citizen's surveys?

The survey methodology can be used by the government, civil society organizations or any other independent agencies to communicate the citizen's feedback to the government on various issues.

The government or the civil society organizations can also outsource the conduct of the survey to professional agencies that are well acquainted with the survey techniques. However in these cases also, it is essential for the agency that is outsourcing, to have a basic level of understanding about the survey technique.

Risks involved and key success factors

The biggest risk is that of an inaccurate or incorrect representation of the actual opinion of the citizen's, if the survey techniques are not used correctly. Thorough knowledge of survey techniques is required for undertaking citizens' surveys.

As with any instrument of social and public accountability, citizens' surveys should be complemented with efforts aimed at ensuring maximum participation from the community and other local stakeholders and steps aimed to institutionalize the practice within the governance process.

References

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