Massachusetts Institute of Technology
Office of the Provost, Institutional Research
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SURVEY GUIDELINES

Overview

The Office of the Provost, Institutional Research (hereafter referred to as IR), supports the use of data in decision making and policy discussions at the Institute. To that end, we collect and analyze data from many sources, including surveys that we periodically administer to students, faculty, alumni and staff. Often, we are approached by a student group or an office on campus who would like to administer a survey. This document is intended to assist those wishing to implement a survey efficiently and productively use their time and resources.

In general, the following list provides a rough guide of the survey process:

1. Authoring survey and creating the population profile
2. Designing incentives (optional)
3. Launching survey
4. Sending out invitations and reminders
5. Collecting the data
6. Analyzing
7. Archiving

For an outline of the requirements for a survey, see this checklist on our website:
http://web.mit.edu/surveys/survey-checklist.pdf

First Steps

When designing or planning a survey, the most important step is to clearly define the question to be answered by the survey results. A survey is most effective if its purpose can be clearly and succinctly stated. Surveys with vague or overly-broad motivations can become too lengthy or difficult to analyze. Also, a survey may not be the best way to answer your question; focus groups are an example of another research method that may be useful in certain contexts.

Once a target question or topic has been identified, we suggest reviewing existing information to see if it is possible to answer your question using data that has already been collected by another office or by the answers to questions on existing surveys. At this point in the process, we encourage you to contact our office (ir-surveys@mit.edu) for a consultation. We are happy to discuss how the data we have collected may be able to answer your question or to give you feedback on your survey. Also, if you do find that your question could be answered by an analysis of existing survey data (a particular question broken out by gender, for example), we welcome specific requests for data.

Survey Options

If your question cannot be answered by existing sources of data, there are multiple options for using a survey to answer your question. We encourage you to come to us for advice on which option best suits your needs.

- Administer the survey yourself.
    - o Commercial tools, (e.g., SurveyMonkey) can allow you to create and host a survey yourself.
- Have IR administer and host the survey for you.
    - o Subject to our availability and existing survey schedule, we may be able to assist you with the design of a survey and then host and administer it for you. This service may be subject to a fee.
- Include your questions on a survey already scheduled for administration.
    - o In the past, constituencies on campus have appended a limited number of targeted questions to surveys administered to various MIT populations by IR. In these circumstances, IR maintains editorial rights and the right to refuse questions.

Regardless of which option you choose, we are always happy to help you form your survey questions. For examples of survey questions, refer to http://web.mit.edu/ir/surveys , where you can find copies of surveys we have used.

Considerations

Depending upon the population and the topic of your survey, we suggest considering the following issues:

- Permissions
    - o Before administering a survey to a population, and therefore emailing a large segment of that population, it is important to notify and get permission from the senior officer responsible for that population.
        - ▪ For Undergraduate students, that would be the Dean for Undergraduate Education, the Dean for Student Life, or the Chancellor
        - ▪ For Graduate students, the Dean for Graduate Education or the Chancellor
        - ▪ For Post-Docs, the Vice President for Research
        - ▪ For Faculty, the Chair of the Faculty or the Provost
        - ▪ For Staff, the Vice President for Human Resources, the Executive Vice President and Treasurer, or the Vice President for Institute Affairs
- Anonymity vs. Confidentiality
    - o If you choose to administer an anonymous survey, you cannot authenticate it, meaning that you cannot restrict the responses to be one per individual. Keep in mind that even if you do not authenticate or collect identifying information, even collecting IP addresses (as some electronic survey tools do in order to reduce

duplicate entries) can compromise anonymity. However, for sensitive subject matters, anonymity may yield more honest responses. At MIT, most survey data is viewed as confidential, rather than anonymous. We tend to authenticate and collect some basic identifying information. This allows us to analyze responses along a variety of demographic factors, but also gives us the responsibility of guarding sensitive information.

- Incentives
    o Depending upon the population and needs of your survey, it may be desirable to offer incentives to survey respondents. Two guidelines to consider are that the incentives must be positive (i.e. no negative consequences for non-respondents) and should be relevant to the topic of the survey (e.g., if you are conducting a transportation survey with the purpose of encouraging public transit, free parking passes would not be an appropriate incentive).

- Research with Human Subjects
    o If you or anyone working with the data will be analyzing data that identifies individual respondents, either by name, email address, MIT ID number, or other unique personal information, then those staff members working with the data will need to complete COUHES (Council on the Use of Human Experimental Subjects) training prior to handing sensitive data. This training can be done from any computer with MIT certificates enabled from the URL: http://web.mit.edu/committees/couhes/humansubjects.shtml
    o If the data are to be gathered and used as part of an academic research project, the project will need to be formally cleared with COUHES to ensure that it meets their requirements. If the data are to be used for administrative purposes, it may be exempt from a formal review by COUHES, but the survey must be voluntary and the results kept confidential. Please consult with IR if you have any questions about COUHES requirements.

- Testing the survey
    o It is useful to convene a small group from the population(s) you intend to survey to have them test the survey and survey questions. This can help gauge how the questions you have written will be perceived and answered, and whether the survey is too long or complicated.

- Timing
    o IR maintains a calendar of known surveys, available at http://web.mit.edu/ir/surveys/cal.html Please consult the calendar and IR for the timing of your survey, as concurrent surveys that target the same population can lower response rates and overburden respondents.

- Sample vs. Census
    o When planning a survey, it is important to decide if you will need to administer the survey to an entire population (all MIT seniors, for example), i.e. a census, or to a sample of the population (200 randomly-chosen MIT seniors). This choice can

largely be informed by how you want to analyze the results. If you are interested in broad measures, such as overall satisfaction, a sample may suffice. If, however, you want to answer questions about students in Math versus students in Chemistry, you may need a larger sample or a census in order to net enough respondents for your analysis.

- Small cell size
  o It is important to make sure that you do not report results for very small groups of people. For example, if your intended report would break out responses by department, but only 4 people responded from one department, then reporting those responses could jeopardize the privacy of those respondents' answers. IR only reports summary results and uses the standard practice of only reporting cell sizes of 5 or greater.
- Representative sample size
  o While a sample needs to be large enough to protect the privacy of the respondents (see above), it should also be large enough for your results to be considered representative. If you are interested in the responses of women in Math, and you only receive 5 responses from women in Math, (out of 20 women in Math, for example) you could not report with confidence that their summary responses as representative of all women in Math. To calculate the minimum sample size to be considered representative within a given margin of error, visit: http://www.surveysystem.com/sscalc.htm
- Keep it simple
  o The simpler and shorter a survey, the more likely respondents are to answer all questions and answer them honestly. Longer, more complex surveys can annoy respondents and cause them to abandon the survey part-way or begin to pick arbitrary answers to speed to the end. Also, only ask questions that you need and intend to report.
- Archiving Data
  o Once you have finished gathering your data, please consider archiving the survey instrument, administration details, and record-level responses with IR. IR maintains a secure server for MIT data and repots, and will be glad to archive data collected at MIT. This can be especially helpful, for example, when a student groups changes leadership. If that student group administers a survey and does not archive the data, the results can be lost instead of used to inform future decision making.

Reporting and Analyzing Results

After you have collected the responses to your survey, it will be necessary to analyze the results. Simple analyses can be done using Excel with Pivot Tables, histograms, and graphs, but more advanced statistical analyses will require the use of a statistical software package such as SPSS, SAS, Stata, or R. Stata is available to the MIT community on Athena, and R is open-source free software, but both

systems have a learning curve. IR uses SPSS primarily and may be able to provide analysis of survey results for you, depending upon our schedule and availability. This service may have a fee associated.

Once your results have been analyzed, we urge you to share the results in a way that they are accessible to the community surveyed. We have found that by being transparent with our results, the populations we survey can see the value in answering our surveys. For example, see the IR Surveys page at http://web.mit.edu/ir/surveys/ , where we post overall summaries and results for each question on our surveys.

Conclusion

Our office is happy to provide guidance and assistance with answering your questions using a survey, designing a survey, or how to analyze or present results. Feel free to contact us at ir-surveys@mit.edu with any questions.