

Malaysian Science and Technology Information Centre (MASTIC)
Ministry of Energy, Science, Technology, Environment and Climate Change

Session 2: Survey Planning & Management

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NATIONAL SURVEY OF RESEARCH and DEVELOPMENT (R&D) IN MALAYSIA 2017

PE Research

Planning & Economic Consultants

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Outline - Survey Planning & Management



PROJECT MANAGEMENT & SURVEY PLANNING

- 1. Project Management
- 2. Survey Planning
- 3. Stages of Survey Planning
- 4. Team Structure



SURVEY MANAGEMENT

- . Recruitment
- 2. Training
- 3. Call Centre Setup
- 4. Timeframe Survey Response Target
- 5. Survey Team Management





PROJECT MANAGEMENT & SURVEY PLANNING

- 1. Project Management
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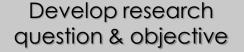


Plan your project & survey...

Project Management

- Establish project
- Define project scope
- Develop timeline
- Develop project tracking tool

Survey Plan



Develop methods and implement survey

Manage and analyse data

Present and publish findings

Project Management

- Obtain approval from required committees and stakeholders
- Allocate resources
- Direct project activities and manage problems
- Ensure quality control



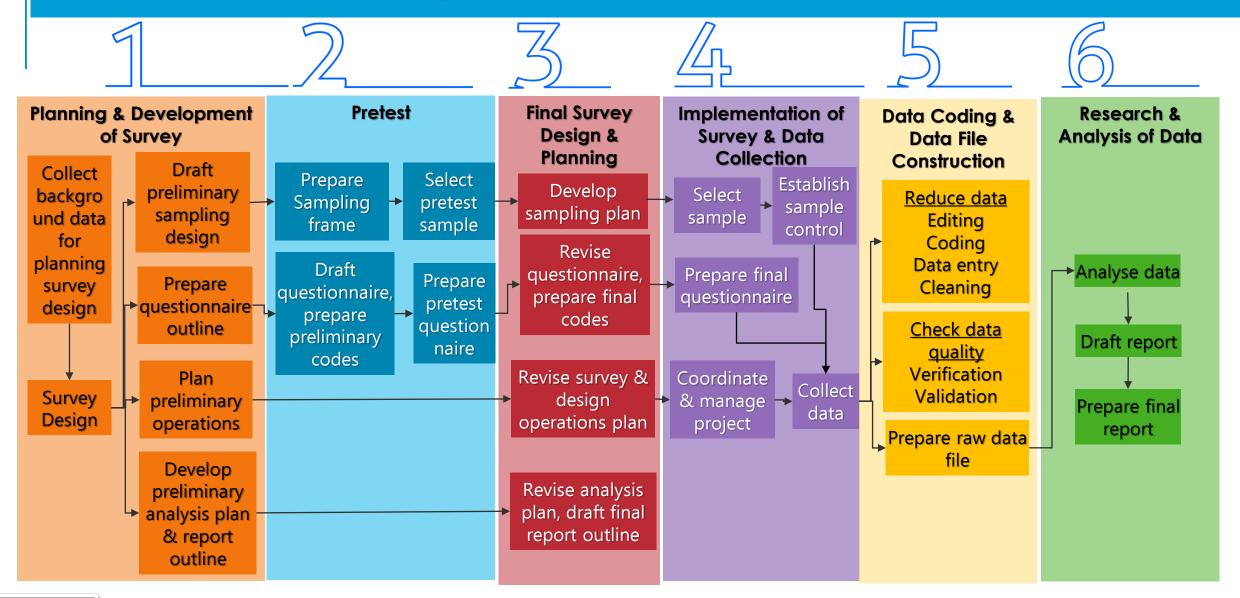


SURVEY PLANNING

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An overview of a Survey Process







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Stages of Survey Planning

	The Survey Proposal		Establishing Feasibility & the Plan for the Survey	Prepare Component Plans	Finalise Plans for Design, Development & Implementation	Adjustments and Supplementary Plans
	Stage 1		Stage 2	Stage 3	Stage 4	Stage 5
i. ii.	Identification of an information gap & prepare a survey proposal Prepared TOR will be reviewed for the management to decide whether to	i. ii. iii. iv.	of objectives, quality targets and time frame; Identify accessibility of existing sources of data; Identify frame for sampling and data collection;	Include sampling design; i. questionnaire; fieldworker recruitment; cost control; logistics, fieldwork management; data and coding activities; quality control ii.	Outstanding planning i. issues should only be at very detailed levels and should be well within the bounds of existing plans Trade-offs may have to	Supplementary plan should include options and consequences in a situation of low response rate, high error rate due to interviewer's work, quality problem etc.
iii.	proceed with further planning & development Survey team is formed —team will develop a survey plan and initiate	v.	Determine the methodology approaches; ii. Preliminary assessment of time frame, feasibility and response burden Prepare feasibility and planning report	and assurance, etc.; Review components, revise schedule, prepare milestones, prepare final testing proposal and plan	be made to meet the agreed upon cost, time and resource constraints	



the preliminaries



SURVEY PLANNING

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A commonly used and effective framework for survey planning and management is a project team structure

- Often, an interdisciplinary survey team is given responsibility for the planning, design, implementation, and evaluation of the survey and of its planned products.
- It is composed of members having different technical skills required to plan and implement the survey.
- All members of the survey team plan, manage and coordinate activities within their scope of expertise and responsibility.
- They also co-ordinate these activities with all other activities within the survey



Example of a team structure

Survey teams are typically composed of a survey manager, an expert in the field of study covered by the survey (a subject matter expert), a survey statistician, a computer systems analyst, and a data collection and operations expert.



Subject matter coordinator

Statistical methodology coordinator

Computer systems coordinator

Data collection and operations manager

Other members (e.g. communications or publicity coordinator)



Role of Survey Manager

- Determining the required resources for the survey
- Developing a preliminary plan
- Co-ordinating the preparation & updating of the plan
- Preparing the budget and monitoring resource utilisation & progress



- Liaises with, and reports progress to, senior management &the client
- Ensures adherence to departmental legal, legislated & regulatory commitments & to departmental policies, standards, guidelines and regulations



 Presides over team meetings and is the representative of the client on the team, regardless of the survey manager's functional or organisational relationship to the client





Role of Subject Matter Co-ordinator

- Responsible for the content of the survey
- When more than one field of study is involved, the coordinator manages the activities and inputs of the subject matter participants who are not members of the survey team



 Through discussions with the client and the team, Subject matter coordinator is responsible for ensuring a clear and appropriate representation of the subject matter and intended uses of the data in the statement of objectives, design and implementation



Conducts or co-ordinates the preparation of definitions and concepts, the collection and analysis of relevant historical data (for planning & development), content development and testing of the questionnaire, preparation of all subject matter reliant data collection and processing specifications, design of statistical outputs, development and implementation of data analysis and preparation of the analytical text

 Co-ordinates the validation or certification of survey results and provides subject matter expertise for the evaluation of data quality and preparation of related subject matter documentation





Role of Statistical Methodology Co-ordinator

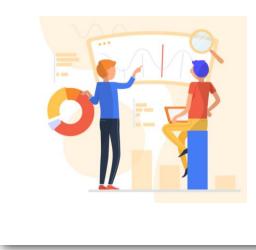
 Conducts and coordinates the design and development of the statistical methodology to be used



Responsible in particular, for the sample design, weighting and estimation, design of quality control methodologies, data quality evaluation designs and measures, the design of edit and imputation mechanisms or strategies, and statistical aspects of data dissemination and analysis



 Acts as a consultant and adviser to all other members of the survey team on matters of statistical methodology, and ensures adherence to the use of sound and efficient statistical methods





Role of Computer Systems Co-ordinator

 Responsible for the design and development of the computer systems and programs, as well as the identification, integration and modification of existing or commercial software that are required to conduct the survey



 Acts as a consultant and adviser to all other members of the survey team on matters of computing, and ensures adherence to the use of sound, compatible, verifiable and efficient methods throughout





Role of Data Collection and Operations Manager

 Responsible for development of data collection, capture and coding specifications and procedures



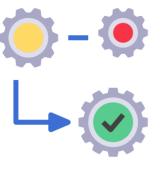
 Responsible for planning and co-ordinating the recruitment, training, monitoring and control of data collection staff such as interviewers and supervisors, as well as data capture and coding staff, if applicable



 Responsibilities includes the development, implementation and management of collection operations and public relations programs, preparation of material (e.g., manuals and maps) and logistical support requirements



Acts as a consultant and adviser to all other members of the survey team on operational matters related to his or her expertise and ensures the specifications and requirements developed by other team members – e.g., interviewer edit and follow-up specifications – are properly built into the procedures

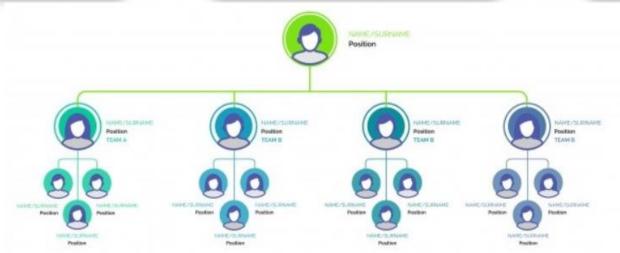




Role of other members

For large projects,
 separate managers may be assigned for communications or publicity, geographic inputs and outputs (associated with the frame, and geographic variables and products), and survey products.

 Large surveys or censuses may also be sub-divided into particular tasks (e.g., questionnaire design and development, data collection, edit and imputation) and sub-tasks (e.g., collection quality control, coding, etc.). Each task and sub-task has its own team. Such teams may differ in the nature of their membership, but each has a manager reporting to a manager in the next level up in the survey team structure





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SURVEY MANAGEMENT

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Recruitment, selection and appointment of survey team members



RECRUITMENT OF CALLERS / ENUMERATORS

Callers / Enumerators play a critical role in surveys, as they implement the survey design

In both telephone & face-to-face surveys, the callers / enumerators has to contact the respondents, explain the purpose of the study, motivate the respondent to participate, ask questions in the required manner, put the respondent at ease, and accurately record the respondent's answers as well as any other required information



- Confident and articulate callers / enumerators and supervisors who are able to negotiate and interact with senior staff of companies, organisations/institutions
- Recruited based on language and numeric skills, as well as logical and critical thinking skills
- Should have at least a diploma or are university graduates





Estimating the number of interviewers needed for a study

Example

The average number of hours worked per week is the same for all interviewers

The expected number of completed interviews is 2000

The estimated
Hours Per
Interview (HPI)
is 1

03

The projected data collection period is **8 weeks**

1 04

Each interviewer is expected to work **40 hours per week**

05

Calculations

Total hours to complete the study = (2000 interviews * 1 HPI) = 2000 hours

Average interviewer hours per week = (2000 total hours / 8 weeks) = 250 hours per week Number of interviewers needed =

(250 hours per week/40 hours per interviewer per week) = 6 interviewers







* No. of headcount needed usually is double up to cater the number of interviewer due to the MC / emergency / unplanned leave taken



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R&D Survey training for all callers / enumerators and supervisors



- Callers / Enumerators and supervisors need to be very familiar with the study's protocols and questionnaire in order to carry out their tasks.
- Both newly hired & experienced interviewers require training specific to the study at hand.

Survey training – conducted in 2 phases

1. Technical training

- Survey background objectives of the study, survey methodology
- Survey sampling sectors involved (BE, HLI, GRI, NGO), sector coverage
- Understanding R&D definition (Frascati), 5 core criteria for R&D, types of R&D, definitions of concepts and terms used, explanation on the flow and logic of Questionnaire, data collection



2. Practical training

- Conduct in classroom type
- Mock interview demonstration on how to conduct the interview



A complete guide of Survey training manual is provided as reference to Supervisors and Enumerators



Survey training manual is used to standardise the training and to ensure all the team members have the same understanding of the survey rationale and the manner for soliciting quality data.





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Call Centre setup at PE Research Sdn Bhd - A helpline & call centre is set up to provide assistance to respondents if they have questions or need guidance to fill the e-form and to conduct phone interviews.













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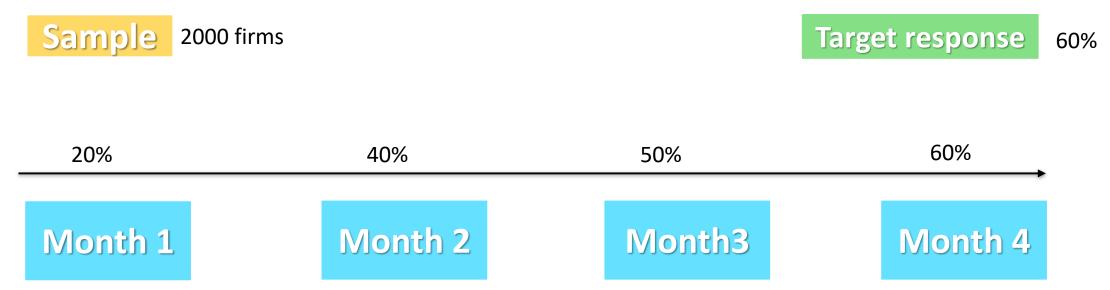


Timeframe — Survey Response Target

is used to ensure that the survey results are representative of the target population

 Survey response target can be planned ahead before the survey started and included as part of survey planning

Example:







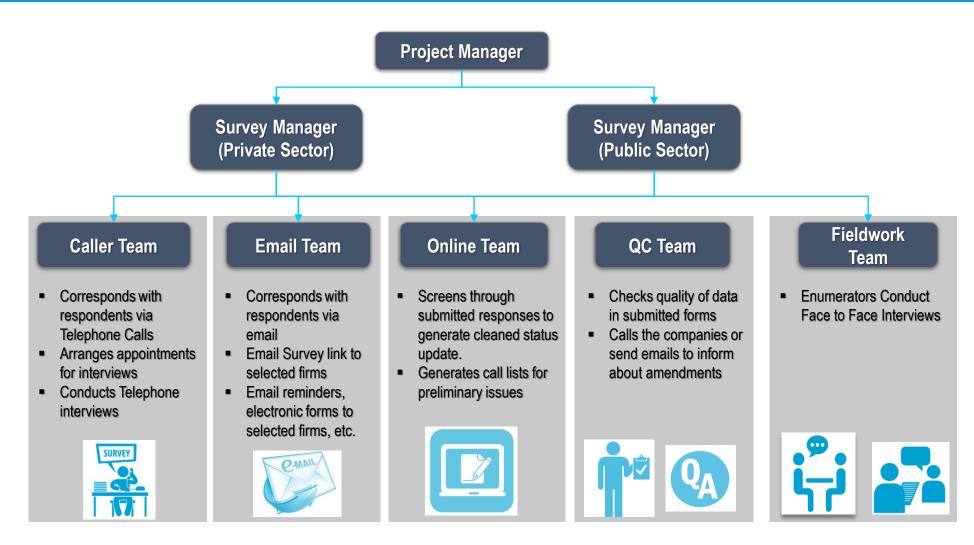
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Set up survey team:

R&D Survey Team is led by a Project Manager and two Survey Managers (Private & Public sector), assisted by five teams. The progress is monitored by the team to ensure quality





Survey Management

Organise

Direct

Monitor and Control

Communicate, coordinate and review

Team is organised based on the task performed in the survey.

- 1. Caller team
- 2. Email team
- 3. Online team
- 4. QC team

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5. Fieldwork team

- Supervisor monitors the survey team progress and performance.
- Supervisor regularly check and update all issues or problems encounter during the survey process

 Supervisor needs to monitor the performance of each team members to ensure the target is achieved (e.g. number of completed forms, response rate)

03

- Survey Manager directs the survey and management teams
- Issues faced by survey team during survey period will be reviewed, discussed and solved
- Any arising issues will be reviewed with management team for solution
- Updates/improvement on SOP from management team will be disseminated to survey team

01

02

Management of Survey Team



- ✓ Check team
 attendance (i.e. MC /
 EL) to ensure daily
 headcount is sufficient
- ✓ Discussion on any arising issues / problems
- ✓ Update team on SOP or any new info related to survey



- ✓ Delegate task according to the team
- ✓ Assign callers to attend to urgent request or email received from respondents



- ✓ Monitoring involves team monitoring as well as survey progress monitoring
- ✓ Team monitoring ensure team is completing the task assigned
- ✓ Survey monitoring ensure the survey target is achieved based on no. of completed forms received, completion of QC work, etc.

Progress update

✓ Update Management on the survey progress



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End of Session 2

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