Chapter 22

Quality Assurance and Quality Control in Surveys

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The best performing organizations manage quality by incorporating a quality assurance program consisting of good project management, a quality control system to ensure quality at the product and process levels, and a compliance and monitoring system to ensure that the quality assurance program is being followed and is producing the desired results. They also document their methods using current best methods (CBMs) and disseminated these throughout the organization so that good practices will replace poor or inefficient ones. This chapter provides a concise yet comprehensive summary of the current thinking on product, process and organizational quality in the best performing survey organizations. The concepts and systems for ensuring high quality survey products in all organizations, but particularly larger ones, are described and explained.

GLOSSARY OF KEY CONCEPTS

Auditor. A person appointed and authorized to conduct the compliance audit and report the results.

Compliance audit. A collaborative procedure where the auditor (or audit team) meets with the key project staff to review the design and execution of critical components of the survey process, check on the status of project deliverables, identify irregularities in the budget and assess client satisfaction with the progress of the work.

Common cause variation. Arises from phenomena that are constantly active within the system and is expected and predictable. Sometimes referred to as white noise.

Compliance system. A set of guidelines and procedures for conducting compliance audits.
Current best method (CBM). Written documentation of a prefer way of conducting some type of operation such as imputation, nonresponse adjustment, editing or keying that represents the best practices of the field. See also Standard Operating Procedures (SOP).

Control chart. A statistical tool intended to assess the nature of variation in a process and to facilitate forecasting and management. It displays upper and lower control limits (usually three sigma limits) for distinguishing common and special cause variations. Sometimes referred to as a Shewhart chart after its inventor Walter A. Shewhart.

Gantt chart. Named for Henry Laurence Gantt), it consists of a table of project task information and a bar chart that graphically displays project schedule, depicting progress in relation to time and often used in planning and tracking a project.

Management system. A set of guidelines and procedures for managing quality in an organization.

Metadata. Definitional data that provides information about or documentation of other data managed within an application or environment.

Organizational culture. The assumptions, values, norms, and tangible signs (artifacts) of organization members and their behaviors.

Organizational structure. The way in which the interrelated groups of an organization are constructed, their inter-relationships and divisions of authority and responsibility.

Paradata. Data that provides information about how a process was conducted.

Quality assurance. A system of procedures, checks, audits, and corrective actions to ensure that the products produced by an organization are of the highest achievable quality.

Quality control. Part of the quality assurance system and refers to a set of procedures and techniques aimed at verifying the quality of outputs of various processes.

Quality control system. A set of procedures or guidelines for conducting quality control within an organization.

Quality framework. A specification that defines the various dimensions quality for an organization and how these dimensions will be interpreted.

Quality profile. A report that provides a comprehensive picture of the quality of a survey, addressing each potential source of error: specification, nonresponse, frame, measurement, and data processing. The quality profile is characterized by a review and synthesis of all the information that exists for a survey that has accumulated over the years that the survey has been conducted.

Resource allocation. The process of assigning a percentage of the budget and other resources to specific operations that together define a survey project.
**Risk assessment.** A systematic process for quantifying and describing the risk of error arising from the various operations, processes, actions, and events for a survey.

**Special cause variation.** Variation that is inherently unpredictable because it is outside the historical experience base and is evidence of some inherent change in the system or our knowledge of it.

**Standard operating procedures (SOP).** A prescribed procedure to be followed routinely for a given operation or situation.

**Verification system.** A set of guidelines or procedures for checking the accuracy of the output from some process or set of processes.