

Stage 3. Data Collection, Data Entry, and Validation

A. Overview.

1. **Outcomes.** Stage 3 achieves three outcomes.

a. Receives and Validates. Receives, sorts, enters, and validates instrument returns so that credibility of the data and the process is as high as possible.

b Stimulates Returns. Stimulates returns by reporting returns daily by organization demographic so that individual supervisors and managers can take appropriate action to optimize return rates.

c Resolves Irregularities. Resolve irregularities found in the returned instruments that enable appropriate authorities to take corrective action when necessary quickly and effectively.

2. **Scope.** This Stage receives completed instruments and inputs the data to *CapacityWare*TM so that credible information can be used to detect trends and prioritize initiatives with assurance of a strong foundation.

B. Methodology.

1. **Conducting Interviews.** When requested to conduct interviews, *QWLC* consultants will approach this task with a few interviewers as possible and with a unified interview plan so that results are credible and consistent. The purpose of conducting interviews is to detect information that will help validate or invalidate data collected by other means, AND provide a depth of understand the data that cannot be collected through any other means. Interviews are normally conducted at a LMS level in the organization (although not necessarily exclusively). By collecting highly subjective data at this level the change agent team will also be able to identify potential resistance to change among those who will be critical to the effort. See Conducting Interviews, in the Extended Materials, and use Attachment 1.3.1, Interview Notes, as a data collection form so that the interview results can be integrated into the mainstream of data during this and subsequent stages.

2. **Stimulating Instrument Submissions.** Organizations must undertake a variety of initiatives to stimulate workforce members to complete and return instrumentation. In some cases, potential respondents are "registered" by receiving an e-mail prompt in advance and the "system" is not satisfied until a response is received. The system knows who has responded and who has not. The need to stimulate responses has been shortcut in this type of system. Unfortunately, the reliability of the survey results are also brought into question as respondents

can reasonable believe that if such a tracking system is in place to determine response rates, it will certainly able to also identify specific responses to survey items. When anonymity and confidentiality is at question in the respondent's mind, they will likely inflate responses rather than suffer the potential of retribution. There is little value in producing a 100% response rate with only 20% credibility. Every care must be taken to assure that, in the respondent's mind, anonymity and confidentiality are protected. Unfortunately the difficulty them becomes a sufficiently high response rate. Use members of the Data Collection Team or Survey Design Team to stimulate responses.

a. Publish Daily Returns. Each day *QWLC* will report the number of returns received within each organizational demographic. Post this information so that all employees can take notice of the "numbers" and submit accordingly.

b. Run Contests. Offer incentives for the work group to achieve a 100% return rate first, second, and third. Incentives like a pizza party are often an excellent means to achieve high rates of return.

c. Use Regular Meetings as an Opportunity to Remind the Workforce. Do not let a single meeting go by without a reminder to submit instrument responses. Update members of the workforce daily if "change of shift" meetings are held, or put notes in the "shift log" when appropriate to do so.

d. Use flyers, "give-a-ways," and Bulletin Board Notices. Get the word out. This is especially true in organizations where people work rather independently. If the workforce does not come together at reasonable intervals, use other means to inform workers.

e. Use Brief e-mail Reminders. When e-mail is available to everyone, use it as a brief reminder. On occasion only the subject line can be used effectively.

3. Collecting Prior Assessment Data. If the need seems apparent, prior data collection effort results should also be collected and analyzed for the utility it might contribute to the current effort. When this is done, users should also be sure to collect information about what was done as a result of receiving the data on prior efforts. Use this information to cross-check the Pre-engagement Assessment potential weaknesses that might have already emerged as evidence that change may be difficult. Use Attachment 1.2.5, Baseline Source Documents Worksheet, as an inventory cross-check to make sure you have all the documents needed.

4. Collecting ROI Source Documentation. If return-on-investment regimens are to be used, it will be imperative to collect Source Documents described in Attachment 1.2.5, Baseline Source Documents Worksheet. Actual return-on-investment calculations may not be made for some time and it is often prudent to collect copies of historical document before they are retired or destroyed.

5. Receiving Data (Event). Data is received at *QWLC* offices in four ways: bulk deliveries from collection points in the client organization, direct mail from the survey respondents, Business Reply Envelopes, or Internet responses. In some cases, *QWLC* team facilitation representatives (non-supervisory) will collect data in a group setting so that survey responses are received "hand-to-hand." Regardless of the collection method, once the instruments arrive, each instrument is handled with care to assure proper sorting, input, and reporting. Once all processes are completed equal care is taken to assure that source documents of no further value are thoroughly destroyed. Only documents that have a legitimate archival value are retained for extended periods (those requesting individual feedback, for example).

a. Initiating Data Collection. At the date and time designated for the Data Collection period (See Stage 1, Step B.3.b.) pre-positioned survey packages are distributed to members of the workforce and the data collection Stage begins. At this time it is also recommended that at least two individuals complete Attachment 1.3.1, Daily Diary Worksheet, that records organizational "happenings" that may have an influence on the survey results. The narrative report need not exceed one page. One individual may be a member of the Data Collection Team and the other individual may be a member of management closer to the top of the organization chart (the HR Manager is an appropriate individual for this task). The material from these "Daily Diaries" will be used to determine if anything has happened during the data collection Stage that might have a significant impact on survey results. Information from these two documents will be summarized and presented as part of client Diagnostic Report, Tab 1 - Project Documentation.

b. Bulk Receipts from Client-designated Collection Points (Event). In some cases it may be desirable for respondents to send completed surveys directly to an internal point-of-contact for collection. If the individual, to whom completed surveys are sent, is a member of a grass-roots team, one can expect a higher rate of return than if the collection points are at a supervisor or management level. In some cases, the quantity of survey returns may increase, but the "openness" with which respondents provide candid responses is likely to decrease.

c. *QWLC* On-site Collection (Event). Another internal survey collection possibility includes the option for *QWLC* consultants to "administer" the collection process. In this option, respondents hand the completed survey directly to one of the servicing *QWLC* consultants at a designated time and place (cafeteria at lunchtime on Thursday, for example).

d. Business Reply Envelops (Event). One of the most popular methods for the collection of surveys uses pre-printed Business Reply Envelopes so that responses go directly to *QWLC* using the US Postal Service. If members of the workforce have any distrust of the supervisors and management (most organizations do have these conditions to some degree), this is the recommended method to use. Respondents report that the US Postal Service provides an adequate "shield" against unwanted (and often feared) interruption and examination.

e. Internet Responses (Event). More respondents are becoming comfortable with electronic survey submissions. There are many potential respondents, however, who fear that their identity can be easily determined if electronic submissions are used. If a system is used to "track" respondent's submissions to determine if only one submission is made by each employee, this "feature" tends to deepen the cynical outlook of those who tend to be suspicious

in the first place. The "preventative trap" to catch and eliminate the occasional double-submitter is rarely worth the trade-off in potential heightened cynicism.

f. The Cut-off Regimen (Event). During the period from the end of the Data Collection Period and extending to the initiation of the Cut-off Regimen, the *QWLC* Team Lead will request the "Daily Diaries" from designated individuals for use during subsequent Stages. Normally, one week after the final submission date a cut-off regimen is initiated. Beyond this date receipts will not be processed so that a reporting "snapshot" can be formulated. Once the reports have been generated, any late receipts will be processed. As part of the cut-off regimen a final validation routine will be completed, and all corrections will be made before going further.

6. Sorting Instrument Returns (Event). Once initial receipt has been completed, all instrumentation is sorted to expedite both initial Web reporting and data entry. Priorities are frequently established that permit scheduled input consistent with required data feedback timelines. Sorting will also begin to channel surveys to the most effective and efficient person for data entry and validation.

a. Consolidating Receipts (Event). It is likely that receipts for any particular client organization will arrive at the *QWLC* offices simultaneously. Surveys designed in this process are rarely identical making it easier to insure that consolidated receipts are processed into the correct client organization and other sorting criteria is applied.

b. By Client and Instrument (Event). Because Instrumentation may be in use to support both the survey and Team Development efforts during the early stages of data collection, sorts may also be required for both surveys and RGB Instruments at the same time. In most cases, the RGB Inventories will receive preferential treatment, however, priorities may also be determined by the Event dates during which instrumentation results will be used.

c. By Demographic (Event). If particular demographics are of special interest, those demographics may be given a priority to assure results can be obtained for those parts of the organization before the rest of the organization. If there are no demographic priorities, input may be prioritized by other means.

d. By "Individual Feedback" Selection (Event). Some respondents elect to receive Individual Feedback. In this case, processing is done by a single individual to assure that input, output, and packaging is completed sequentially and properly. This package requires confidential feedback that can be completed either in person by a *QWLC* consultant, or through the mail - US Postal Service. Internal distribution is not an option in this case.

e. By Input Specialty (Event). Some individuals on the input team are better suited to input large amounts of respondent narrative than are others who are more adept at inputting numerical scores. Assuring that the right person receives the right instrumentation for input is an integral part of the sorting process.

7. Initial Review, Logging, and Reporting Client Demographic Receipts (Event).

Each instrument received is scanned to determine a number of factors that contribute to processing decisions. Receipts are counted and accurate reports prepared that enable the management of returns for each organizational demographic. To maximize the client return rate, receipts are reported daily to the client organization so that specific supervisors can take appropriate action to stimulate the highest potential rate of return consistent with anonymity and confidentiality. Daily reports titled, Instrument Receipts Log are illustrated at Attachment 1.3.2 and are posted with password protection so that supervisors can acquire daily results (quantity of returns for each organizational demographic) at the beginning of each day (see paragraph d., below).

a. Initial Triage Scan (Event). Any survey that may prove to be of vital interest for safety and security reasons or other high priority purposes is separated from the rest of the receipts and handled with special protocols. If warranted, contact may be made to the client organization to inform appropriate authorities of the conditions that appear to exist based on the survey returns. *QWLC* is not obligated to protect the anonymity or confidentiality of any individual respondent if it appears that illegal or potentially dangerous conditions exist or may result from information obtained on any survey. These irregularities are handled as quickly as possible.

b. Logging the Instrument to a Specific "Account" (Event). Each instrument received is logged to a specific daily client tally sheet so that receipts can be accurately reported to each client organization and so that irregularities can be detected and resolved. *QWLC* has been able to detect the following types of irregularities using this process:

- ? LMS interference.
- ? Multiple and cross-over submissions.
- ? Misinterpreted demographic selections.
- ? Group survey completions.

c. Creation of Instrument Batches (Event). As a result of this routine, survey "batches" are created for input. When "batches" are processed those inputting the data can often detect trends within the survey results that prove useful to the consulting team and are better able to make note of those trends using a "batch" processing approach. Since "batches" are often received in the same sequence that surveys are completed, some trends can be linked to events that may have occurred during the survey completion period (detection may be enhanced by referring to the Daily Diary Worksheets). When detected, trends can be noted for consideration when writing the final report.

d. Preparing the Daily Returns Report (Event). Each day (or other agreed-upon period) a report is prepared and posted on our web site behind a password distributed to supervisors in the client organization. Under ideal conditions the quantities of potential respondents in each demographic will be stable. Our experience is, however, that many organizations do a rush job of initial demographic configuration and spend subsequent effort to clarify demographics when the actual counts received do not match their expectations. Reconciling these irregularities occurs daily as the report is prepared. Attachment 1.3.3, Daily Returns Report, is generated and posted to the Internet with password protection once reconciled.

e. Posting Daily Returns (Event). Under normal conditions, this report is completed at the end of each day and posted "as of" that date by the following morning. Supervisors use this report to "stimulate" the completion of instruments from their demographic. Some organizations use this report to declare the winner of internal "contests" for demographic groups that achieve a 100% return rate, for example.

8. Data Entry (Events). As batches of instruments are assigned to specific individuals, data entry proceeds. As individual forms are completed, they are further grouped for either near-term destruction or retention. Individual instruments are noted with special codes that allow source documents to be easily located for potential use during the validation process so that any irregularities can be resolved quickly and easily. *CapacityWare*TM software is programmed for absolute efficiency during the input phase so that minimum keystrokes are used with maximum throughput at each data entry station.

a. Assignment of Batches (Event). As "batches" are assigned for input, records are annotated to assure all received instruments can be accounted for at all times. "Batches" are assigned to that individual most proficient at completing the type of input contained in the "batch" assigned.

b. Enter Data (Event). Data entry links the respondent record (normally an anonymous record generated with a fabricated number generated by computer), with both numeric "scale" responses for each survey item, as well as narrative data from in-line items comments and end comment options. *CapacityWare*TM tracks input so that source input files can be located easily when needed, and performance summaries for those who input data can be reviewed periodically.

c. Annotate Source Document (Event). Each source instrument is annotated with the computer generated ID so that later matching for validation purposes can be more readily accomplished.

d. Post "Individual Feedback" to "Individual Feedback Log" (Event). Even those respondents who request Individual Feedback will have a computer generated ID for their instrument. In addition, those generated ID's will be further "marked" with the pseudo name or identifier to indicate the need for Individual Feedback. Attachment 1.3.4, Individual Feedback Log, provides cross-referenced information concerning both the computer-generated name and the name or identifier of the respondent. This document is a confidential record and is removed from client records during On-site Configuration (see Paragraph 5.e., below) so that it cannot be compromised.

e. Identify/Sort for Destruction (Event). Instruments that can be destroyed following data feedback can be sorted into groups for "DESTROY" or "ARCHIVE" when data entry is completed. Instruments to be archived will, at a minimum, include:

- ? Special Interest Instruments.
- ? Individual Feedback Instruments.
- ? Sanitized Instruments.

9. Data Acquisition (Event). Acquiring data rather than inputting it from source documents represents an acceptable alternative requiring special attention. First and foremost, data must be in an MS Access database to interact with the *CapacityWare*TM data processing engine. Any media (CD, Flash Drive, Internet, etc) is acceptable for acquisition.

a. Data Item Specification. Upon acquisition, in addition to the data, the Team member must also acquire a document that provides the Data Item Specifications. This information normally includes a description of each field in the database, what constitutes acceptable data to be in each field, which fields are mandatory, and which fields are optional.

b. Data Item Meanings. The specifications may also include, but if not, the Team members must also acquire a documented meaning (explanation for each element) for the data contained in each field.

c. Extractions - Cleaning - Preparation. Acquired data may contain fields that are not going to be used during the analysis phase. These fields may be discarded or ignored at the user discretion. Some data may require "cleaning" to fit the use intended. Cleaning may require individual decisions by a qualified person. If cleaning is necessary, a decision matrix must be made to assure consistency and fully document changes that were made. Preparation may require the translation, usually to a numeric, of data in order to fit the specifications required by *CapacityWare*TM. If preparation/translation is done, it is best to place the "new" data in a separate field and leave the original data undisturbed for potential additional use or validation purposes.

d. Training Regimen for Input Operators or Source Providers. In order to accurately calculate potential error, Team members must also determine the level of training and therefore reliability that those who input the data contained in the acquired database had at the time entry was performed. This may not be possible to acquire.

e. Automated Editing at Input. In many cases, programmers limit the data entry to valid data only at the time of data entry. It will be essential that these programmatic solutions be known if used.

f. Security. If security restrictions are placed on the data acquired by the originator, these measures must be complied with according to those specifications. If possible, ensure greater security than mandated.

10. Data Set Validation and Final Sanitization (Events). As batches are completed, checks are undertaken to determine accuracy of input so that the highest possible levels of confidence are maintained throughout the process. At a predetermined date and time, the input of instruments is terminated and actions are taken that lead to data analysis. Results are also prepared for delivery to those who will receive it in the client organization. In addition and in accordance with client desires established in Stage 1, data is sanitized to reflect appropriate language, and acceptable levels of protection regarding anonymity and confidentiality. Although individual sources are highly protected, the data must also yield sufficient origin information that appropriate corrective actions can be taken when necessary. Typically one individual (normally

a Human Resources representative) is invited to review initial results to assist with some interpretation requirements.

a. Validation. Validation is an on-going daily process that crosschecks data entry accuracy with source documents so that 100% accuracy is achieved. Unless a complete examination is warranted, batches are checked on a random basis so that 100% statistical accuracy is achieved.

b. Sanitize Data. In order to preserve anonymity and confidentiality *QWLC* sanitizes the data by removing (and replacing) inappropriate language or names and positions that would indicate the narrative was ABOUT someone specific or had been provided BY someone specific. The sanitization process allows the results to be fully published to all respondents and the general organization population without fear of reprisal.

c. Close the Data Set. Once all data has been entered, validated, and corrected, the data set is closed to further input or alteration. Even those instruments received beyond the cut-off date may be entered if time permits. Attachment 1.3.5, Data Certification, is completed so that users can place the highest possible confidence in the results they receive. Data Certification documents are included in Tab 1, Diagnostic Report and Follow-through Manual as evidence that this routine has been completed.

d. Initial Client Representative Review. Once the data is "ready" for the client organization, *QWLC* invites a representative from the organization (normally the HR manager or a HR representative) to view the preliminary results. This activity helps validate the trends that are apt to be found in the data upon preliminary review. It also alerts a member of the organization to potential trends so that the "no surprise" scenario will continue.

e. Configure the *CapacityWare*TM On-site Data Set for Client Distribution. When *CapacityWare*TM is to be installed, updated, and/or upgraded in an organization, *QWLC* will prepare a CD with that data ready for installation during Stage 5 - Organization Feedback and Team Recruitment.

C. Technology Resources.

1. Recommended Reading. Recommended Reading(s) allow the user to develop an informed opinion concerning the application of this system of organizational change. These references augment this system with information from a variety of practical as well as academic research having a direct application to this system. The Stage 3 recommended readings are:

a. Organizational Surveys: Tools for Assessment and Change, Allen I. Kraut, editor, copyright 1996, Jossey-Bass, Inc., San Francisco, California

b. Methods: Toward a Science of Behavior and Experience, William J. Ray, copyright 2000, Wadsworth/Thomson Learning, Belmont, California

2. Event Agendas. *QWLC* maintains recommended Agendas on its web site for client use. All Agendas will be tailored to the specific needs of the client organization. Agendas contain specific reference to recommended Presentations and Handouts used for each event. Potential lists of Agendas used during this stage are listed below:

- a. Data Collection Team.
- b. Demographic Creation.
- c. Package Finalization, Printing, and Distribution.

3. Extended Materials. The great advantage of using this Organization Change System is that it provides the user a cohesive package that includes literature, software, processes, and a model structure that fit the most complex and the simplest organizations. The following literature is recommended for reading and dialog among the change management team. The following "Extended Materials" and significant documents that explain features of the system in depth. They are primarily used by members of the change agent team.

- a. Process Evaluation Extracts.
- b. Event Evaluation.

4. CapacityWare™ Organization Change Cycle - Stage Instructions. At each stage of the Organization Change Cycle, *CapacityWare™* Administrators and users must be concerned with software configuration, preparation, and applications for the tasks that will be undertaken. Instructions for this stage of the Organization Change System, instructions can be found in the *CapacityWare™* Administration Manual, at the cover. Stage 3 is characterized by the following emphasis:

a. Schedule Feedback Events. Feedback Events can be scheduled for the entire organization using the automatic e-mail features of *CapacityWare™*. It is important to get as high a rate of attendance as possible, since any change efforts to enhance capacity will require broad interest and participation on teams and other ancillary participation options.

b. Distribute Advance Literature. In addition to scheduling the Events, it will be important to provide some advanced materials to everyone in the organization so that they will understand the change initiative and the part that data will play in moving forward.

5. Attachments. Attachments, when completed, provide users with essential records that reflect the status of tasks that are recommended for all change efforts. Each client organization is different, however. Users are encouraged to modify the content of each Attachment to suit local needs.

- a. 1.3.1 - Interview Notes.
- b. 1.3.2 - Daily Diary Worksheet.
- c. 1.3.3 - Instrument Receipts Log.

- d. 1.3.4 - Daily Returns Report.
- e. 1.3.5 - Individual Feedback Log.
- f. 1.3.6 - Data Certification.

6. Literature for Publication. *QWLC* provides literature for publication by client organization in their internal media (newsletters, flyers, etc.). The following are suggestions for internal publication and are available at www.LTODI.com among the Literature for Publication options.

a. WorkLife and Team Responsibility. Participation on teams is something that not all members of a workforce have experienced, and for some it remains a shock. It is hard work, and often thankless, but teamwork does make the difference between achieving successful change outcomes and marginal results. This article provides the background needed by many to make an informed decision about volunteering for teams that will make things happen in their organization.

b. Five Ways to Inform the Workforce. One of the most difficult parts of making an effective change effort successful is the manner in which the full workforce is informed about what is going on "behind the scenes." This article prepares the organization for recognizing and accepting their responsibility in the change effort even though they everyone may not be taking an active part in the initiative. Even passive roles that simply consume information about the change are critical to improved capacity.