

The Revised Handbook for Analyzing Jobs



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CHAPTER 15

PROCEDURE FOR PREPARING FOR AND CONDUCTING A JOB ANALYSIS STUDY

This chapter contains an explanation of the rationale and the procedures for preparing Industry Study Planning Reports (ISPR's) and for conducting complete establishment studies. As noted in the previous chapter, a JAR is used to record information about a job. Jobs are studied in establishments as part of an establishment study. Establishments which are likely to have jobs targeted for study must be identified through some systematic method. One such method is the ISPR.

INDUSTRY STUDY PLANNING REPORT

The ISPR consists of two forms. The forms are designed to facilitate planning concurrent studies of several DOT Industries and to provide a report that outlines the range and depth of the study of each DOT Industry. The establishments included in the planning report are to be what the analyst considers sufficient to represent the range of processes and products or services within the industry. The listing of specific establishments in no way implies that these particular establishments will be studied. Seventy-five percent of establishments chosen for study should be outside the Field Center's metropolitan area, and fifty percent should be outside the Field Center's State to the extent this is practical and feasible.

DOT Industries group occupations with similar activities; the *Standard Industrial Classification Manual* (SIC) groups establishments with similar primary end products or services. Therefore, DOT Industries have a relationship to jobs that is similar to the relationship the SIC has to establishments.

Many jobs defined in the specific activity of a DOT Industry are found in establishments which have a similar end product or service as defined in the SIC classification. However, some jobs of a specific DOT Industry are found in establishments that have seemingly unrelated end products and services. Therefore, a thorough study of occupations in a specific DOT Industry, as outlined in an ISPR, may need to include establishments which appear to have unrelated primary activities.

Analysts usually study all jobs in an establishment identified with a specific DOT Industry. However, as sufficient data are collected for some jobs, it is possible that in the interest of time, analysts will limit their study to selected departments, sections, or jobs for which there is insufficient data. Further, it is possible that some employers will not allow all establishment jobs to be studied. Therefore, the priority of jobs to be studied within establishments is as follows:

1. Top priority will be given to jobs that have or will probably receive the DOT Industry designation of the current study.
2. Second priority will be given to all other production jobs that convert to (are essentially the same as) production-type, cross-industry DOT Industries, such as woodworking, machine shop, and heat treating.
3. The lowest priority will be given to administrative and support jobs that convert to the cross industry designations of any industry, clerical, and profess. & kin.

Preparing the ISPR

Before studying any job, identifying an establishment as one with jobs in the DOT Industry, or contacting personnel in the establishment to request permission to study jobs, an analyst must become familiar with the technologies of the jobs and characteristics of the industry. With knowledge obtained through advance planning, the analyst will be able to talk with management, supervisors, and workers using language understood by all. Further, background information will provide a basis for objective

observation and evaluation of job tasks and processes without loss of time. Background information may be obtained from:

1. Books and periodicals on technical or related subjects available in libraries.
2. Technical literature on industrial processes, job descriptions, catalogs, flow charts, organization charts, and process descriptions prepared by trade associations, trade unions, professional societies, establishments themselves, and Occupational Analysis Field Centers as part of previous industry studies.
3. Pamphlets, books, and job descriptions prepared by Federal, State, and municipal government departments, such as health, agriculture, labor, or commerce, which have interests in the industry or occupational area.
4. Annual reports and product literature of establishments to be studied.

FACE SHEET

The Face Sheet contains 1) information that defines the DOT Industry covered in the ISPR and 2) an index of the segments of the Industry reported on individual Segment Analysis Sheets. Enter, for each item below, information according to the instructions which follow the item heading.

IDENTIFICATION SECTION

OAFC

Field Center preparing the report (including identification number). Example: NC - 362

Date

Date (MM/DD/YY) report submitted. Example: 11/14/88

Priority

Priority to be given to the study of this DOT Industry in relation to others assigned.

Assigned Analyst

List name of each and identify the lead analyst when there is more than one analyst. Example: J. Smith (Lead Analyst), J. Doe, J. Green

Date to Begin Study

The date DOT Industry research is to begin. Example: 02/01/88

Expected Completion Date

The projected date of completion. Example: 01/31/89

Dot Industry Title (long and abbreviated) and Definition

Name and definition of the DOT Industry.

DOT INDUSTRY SEGMENT ASSIGNMENTS

Segment

Breakdown the DOT Industry into four-digit Standard Industrial Classification codes, using the conversion table in the DOT Industry manual and the 1987 SIC Manual. From these codes, designate segments of the Industry to be studied based on industry processes and products or services. Record the segments on this section of the ISPR. Segment titles can be broader or narrower in scope than those in the SIC Manual or can indicate specific products after a more general title.

SIC Code

Four-digit SIC Manual code of each segment listed.

Sheet No.

Sheet number appearing in upper right corner of each Segment Analysis Sheet attached.

Resources

Names of professional and trade associations, industry consultants, and other resource persons or agencies contacted or available for contact from which information about the DOT Industry or a major portion of it can be obtained. When Segments of the Industry are so varied that industry-wide resources do not exist, record "See Individual Segment Analysis Sheets".

Reference Publications

Bibliographic references to publications, such as books, pamphlets, and articles used (or available for use) in researching the DOT Industry or several segments. Record "See Individual Segment Analysis Sheets" when the DOT Industry is too broad to be covered in specific reference materials.

Continuation

If additional space is required, continue on another copy of the face sheet form with references to the appropriate item.

The following page contains a sample Industry Study Planning Report — Face Sheet.

SEGMENT ANALYSIS SHEET

The analyst uses the Segment Analysis Sheet as the form on which 1) to record the definition of a segment of the DOT Industry, 2) to identify representative establishments identified for potential study, and 3) to comment upon the rationale for including the identified establishments. Establishments need not have been contacted to be listed in the report. Some of those listed may not be studied for various reasons. Other establishments may have to be added to the report at a later date to complete the DOT Industry study. Enter, for each item below, information according to the instructions which follow the item heading.

IDENTIFICATION SECTION

Sheet Number

Consecutive page number assigned to each Segment Analysis Sheet in the report. Must correspond to sheet number listed on Face Sheet.

Abbreviated DOT Industry Title

Abbreviated title of the DOT Industry designation as it appears on the Face Sheet.

SIC Code & Short Title

SIC four-digit title and code. Use SIC Manual short titles as printed on pages 427-443 of the 1987 SIC Manual.

Segment Description

Title of segment, as listed on Face Sheet, followed by a brief description of the types of products or services included in the segment.

PLANNED ESTABLISHMENT CONTACTS

Establishment to be Contacted

Names and addresses of establishments representative of the segment and recommended for study.

Number of Employees

Number of employees in establishment, when employment can be determined.

Products or Services

Names of specific types of products or services of each establishment.

Remarks

For each establishment, comments with rationale for inclusion in report, such as importance of product, change in technology, comprehensiveness of operations, or size in terms of numbers of workers.

RESOURCES AND REFERENCE PUBLICATIONS

Resources

Names of professional and trade associations, industry consultants, and other resource persons or agencies contacted or available for contact, and that you plan to contact to obtain information about the segment reported.

Reference Publications

Bibliographic references to publications, such as books, pamphlets, and articles used, or available for use, in researching the segment reported.

Approved/Date

Name of staff member approving report and date of approval.

Continuation

If more space is needed, continue on another copy of the form.

The following page contains a sample Industry Study Planning Report — Segment Analysis Sheet.

PROCEDURE FOR CONDUCTING A JOB ANALYSIS STUDY

This section describes: 1) the procedures usually followed by an analyst in conducting a job analysis study and 2) the techniques used to secure detailed, accurate, and comprehensive job information.

Arranging for the Analysis

Before beginning a job analysis study, the analyst must contact management to obtain permission for an establishment study. Frequently, approval for a study can be obtained by showing management completed Job Analysis Reports and pointing out possible uses for this information. Appealing to the manager's sense of altruism may also be helpful. If previous job studies have not been conducted in the establishment, contact will have to be made with the head of the establishment, the industrial relations director, the personnel director, or the company official who has jurisdiction over contacts with government agencies. These contacts can be determined locally.

Before the analyst conducts a study, the establishment must be visited to ensure that management understands the aims of the study and authorizes it. Frequently, approval for a study can be obtained by showing management how the results of the job analysis study can be applied directly to any personnel management or industrial relations problems the establishment might have.

The purpose and general plan of procedure for the establishment study should be discussed and agreed upon with management. It is often helpful to provide management with a statement outlining the objectives of the study and the techniques to be used. Upon receiving management's approval to conduct the study, the statement can be distributed to supervisory personnel to acquaint them with the purposes of the analyst's visit or can be placed on a bulletin board for the general information of all personnel. When establishments have organized labor, a complete explanation of the study should be made to the officials of the labor union.

Whenever possible, prior to the actual analysis of jobs, arrangements should be made for the analyst to receive: (1) an orientation tour of the establishment; (2) introductions to department heads and supervisors whose cooperation is needed for a successful study; and (3) a list of establishment job titles, together with an indication of the number of males and females employed in each job.

The orientation tour provides the analyst an overall picture of operations, the general processes, and the flow of work within the establishment. During the tour the analyst should be introduced to the supervisors or heads of the departments where the analyses are to be made. The analyst should take this opportunity to explain briefly the major objective of the study.

The analyst should request information regarding departmentalization, the titles of jobs in the various departments, and the number of workers employed in each job. This information will be used to prepare the Staffing Table and to make initial determinations about the processes and jobs involved within the scope of the study. Reviewing a copy of the company's current organization chart may also be of help.

Obtaining Information by Observation/Interview

The observation/interview method of job analysis involves analyzing jobs by: (1) observing workers performing their jobs and (2) interviewing workers, supervisors, and others who have information pertinent to the job. It is the most desirable method for job analysis purposes because it: (1) involves firsthand observation by the analyst; (2) enables the analyst to evaluate the data obtained and to sift essential from nonessential facts in terms of that observation; and (3) permits the worker to demonstrate various functions of the job rather than describing the job orally or in writing.

The analyst uses the observation/interview method in two ways: (1) The analyst observes the worker perform a complete work cycle before asking any questions. During the observation the analyst takes notes of all the job activities, including those not fully understood. When satisfied that enough information has been accumulated from observation, the analyst talks with the worker or supervisor or both to supplement notes taken while observing the job. (2) The analyst observes and interviews simultaneously by talking with the worker about the observations as well as the conditions under which the job is performed. Here, too, the analyst should take notes in order to record all the data pertinent to the job and its environment.

The interview process is subjective; it is a conversational interaction between individuals. Since communication is a twoway process, the analyst must be more than a recording device. The amount and objectivity of information received depends upon how much the analyst contributes to the situation. The contribution is one of understanding and adjusting to the worker and the worker's job.

A good background preparation will enable the analyst to obtain facts quickly, accurately, and comprehensively. The analyst must be able to establish friendly relations on short notice, extract all the pertinent information, and yet be sufficiently detached to be objective and free of bias.

SUGGESTIONS FOR INTERVIEWING AND NOTE TAKING

Opening the Interview

1. Put the worker at ease by learning the worker's name in advance, introducing yourself, and discussing general and pleasant topics long enough to establish rapport. Be at ease.
2. Make the purpose of the interview clear by explaining why the interview is scheduled, what is expected to be accomplished, and how the worker's cooperation will help in the production of occupational analysis tools to be used for placement and counseling. Assure the worker that the interview is not concerned with timestudy or wages.
3. Encourage the worker to talk by being courteous and showing a sincere interest in what is said.

Steering the Interview

1. Help the worker to think and talk according to the logical sequence of the duties performed. When duties are not performed in a regular order, ask the worker to describe the duties in a functional manner by taking the most important activity first, the second most important next, and so forth. Request the worker to describe the infrequent duties that are not part of the regular activities, such as the occasional setup of a machine, occasional repairs, or infrequent reports. Infrequently performed duties, however, do not include periodic or emergency activities, such as an annual inventory or the emergency unloading of a freight car.
2. Allow the worker sufficient time to answer each question and to formulate an answer. Ask only one question at a time.
3. Phrase questions carefully so that the answers will be more than "yes" or "no".
4. Leading questions should be avoided.
5. Secure specific and complete information pertaining to the two categories of information required for a complete analysis of a job.
6. Conduct the interview in plain, easily understood language.
7. Consider the relationship of the job under analysis to other jobs in the department.
8. Control the interview with respect to the economic use of time and adherence to subject matter. For example, when the interviewee strays from the subject, a good technique for returning to the point is to summarize the data collected up to that point.
9. The interview should be conducted patiently and with consideration for any nervousness or lack of ease on the part of the worker.

Closing the Interview

1. Summarize the information obtained from the worker, indicating the major duties performed and the details concerning each of the duties.
2. Close the interview on a friendly note.

Miscellaneous Do's and Don'ts for Interviews

1. Do not take issue with the worker's statements.
2. Do not show any partiality to grievances or conflicts concerning the employer-employee relations.
3. Do not show any interest in the wage classification of the job.
4. Show politeness and courtesy throughout the interview.
5. Avoid use of any manner or language that might be construed by the worker to be condescending. Be friendly, objective, and natural in your approach when communicating with the worker.
6. Do not be influenced by personal likes and dislikes.
7. Be impersonal. Do not be critical or attempt to suggest any changes or improvements in organization or methods of work.
8. Talk to the worker only with permission of the supervisor.
9. Verify job data, especially technical or trade terminology, with supervisor or department head.

Taking Notes

The analyst must develop a skill of combining note taking with the conversational aspect of the interview. One must be able to write intelligible notes while engaged in conversation or be able to interperse writing with fluent conversation.

Often in deference to the analyst, the worker will stop talking while notes are being made. The analyst should make it clear whether the conversation should or should not be continued in these circumstances.

Some workers object to a record being made of what they say. The analyst must decide how much the interview may be affected by this attitude and must make modifications accordingly. A small loose-leaf book such as a stenographer's notebook is best suited for recording notes while observing and interviewing. Some helpful suggestions for effective note taking are as follows:

1. Notes should be complete, legible, and contain data necessary for the preparation of the JAR.
2. Notes should be organized logically according to job tasks and the categories of information required for a complete analysis.
3. Notes should include only the facts about the job with emphasis on the Work Performed and Worker Characteristics involved. Use only words, phrases, and sentences that impart necessary information.
4. Sketches of machines or equipment, their controls, brand names, model number, and approximate dimensions are useful.

Obtaining Information by Other Methods

In some instances it may be impossible to observe or interview workers. In these cases the analyst should consider: (1) using establishment job descriptions or specifications supplemented by discussions with administrative and technical personnel; (2) obtaining job descriptions, specifications, hiring requirements; and related data for certain jobs from associations, societies, and other similar organizations; or (3) interviewing supervisors or managers.

Conclusion

The analyst's purpose, regardless of the method used, should be to obtain all the information necessary for the job analysis. The principal techniques of interviewing outlined in the observation/interview method can be adapted to fit other interviewing situations. Information gathered during a job analysis study should be verified, if at all possible, with establishment officials. On completion of the study, a letter of appreciation should be sent to the establishment management to thank them for all courtesies and cooperation given to the analyst.