JOB ANALYSIS IDENTIFYING THE TASKS OF PURCHASING

by Eugene W. Muller, Ed.D.



Center for Advanced Purchasing Studies/ National Association of Purchasing Management



JOB ANALYSIS IDENTIFYING THE TASKS OF PURCHASING

by

Eugene W. Muller, Ed.D.

ACKNOWLEDGMENTS •

The Center for Advanced Purchasing Studies and the author would like to thank the National Association of Purchasing Management for support of this project.

This report would not be possible without the support from the CAPS secretaries Maureen Graff and Julie Waters. The author would also like to thank Richard Boyle, Ph.D., CAPS Assistant Director, and Carol L. Ketchum, CAPS Senior Program Coordinator, for their editorial and administrative support.

Finally, the industry/research/advisory committee for this study reviewed the manuscript and helped strengthen its analysis and presentation. Special thanks are due to:

William A. Bales, C.P.M., Union Pacific Railroad, Retired Earl Hawkes, C.P.M., Clark County, Nevada Ray Howick, C.P.M., Sara Lee Corporation Alan Raedels, Ph.D., C.P.M., Portland State University

Of course, complete responsibility for the final study rests with the author of this report.

ISBN: 0-945968-10-8 LCCN: 92-81840

CONTENTS •

Preface	5
Summary and Implications of the Survey	6
Introduction	8
Perspective	8
Scope of the Study	8
Design of the Study	10
Subjects	10
Development of the Task Survey	10
Procedure	11
Job Analysis Identifying the Tasks of Purchasing	12
Results of the Job Analysis Survey	12
Characteristics of the Respondents	12
Task Analysis Results	13
Cluster Analysis of Groups	16
Notes	17
References	17
Center for Advanced Purchasing Studies	67

APPENDICES •

APPENDIX	A:	Preliminary Job Analysis Questionnaire	18
APPENDIX	B:	Job Analysis Interview and Preliminary Survey Participants	2
APPENDIX	C:	Job Analysis Survey	2
APPENDIX	D:	Characteristics of Respondents to Survey	29
APPENDIX	E:	Results of Task Analysis	30
APPENDIX	F:	Results of Cluster Analysis	5
APPENDIX	G:	Final List of Tasks and Associated Knowledge Areas	52
APPENDIX	H:	Purchasing Manager Job Description	66

PREFACE •

This report analyzes the similarities and differences in the tasks performed by the purchasing function across eight sectors.

The report is meant to encourage further understanding of the tasks that purchasers from each of the sectors have in common, emphasizing the common abilities that underpin the purchasing profession. However, the results of this study should not be interpreted as an all-inclusive statement about purchasing tasks or the purchasing function.

SUMMARY AND IMPLICATIONS OF THE STUDY

This study identifies the tasks that purchasers perform in eight sectors: Manufacturing (United States); U.S. Government/Prime Contractor; State and Local Government; Institutional; Service; Retail; Food; and Manufacturing (Europe) and assesses commonality across the sectors. Conclusions that can be drawn from the research are:

- 1. In general, the task analysis showed marked agreement across the various sectors. For 50 out of the 69 tasks, half or more of the respondents in each sector performed the task. For another 13 tasks, in a majority of sectors (i.e., five or more) half or more performed them.
- 2. With one exception, the seven tasks that were categorized under the heading of Procurement Requests were performed in each sector by 75 percent or more of the respondents. These included the review of purchase requisitions to determine their appropriateness with regard to organization requirements (Task#1); review of purchasing requisitions to determine their conformance with established laws, policies, and procedures (Task#3); and identification and/or selection of potential sources of services or supplies (Task#6). In some cases, these tasks were done by 90 percent of the respondents.
- 3. Within most sectors, the six tasks not performed by a majority of the respondents include: organize and control the storage/disposal of hazardous/regulated materials; establish/maintain records of real estate owned by the organization; direct/conduct the purchase, sale, and/or leasing of real estate; form/issue real property agreements; monitor the maintenance activities of organization-owned real estate; and implement a Manufacturing Resource Plan (MRPII).
- 4. If the position of purchasing manager differs little in terms of general tasks from sector to sector, as the results of the task analysis strongly suggest, then the development of a universal certification instrument that is valid for the entire profession, or most of the profession, is an attainable goal.

- 5. Due to the small size of the European Manufacturing sample, more persons from this group should be sampled, and the results analyzed against the data presented here for the other seven groups. A larger and more representative sample will permit more accurate conclusions regarding the nature of this sector.
- 6. To maintain the validity of the Certified Purchasing Manager (C.P.M.) examination as a universal certification instrument in purchasing, those who write and review the exam, as well as those who develop and review study materials, should include representatives from all eight sectors. It may be necessary also to have a committee of such representatives review all the items in the current C.P.M. item bank, and revise or delete questions that are too specific to particular sectors for an examination geared to a diverse audience.
- 7. Some purchasing concepts are specific to only certain of the eight sectors; there are major differences across the sectors. These differences should not be ignored. "Site-specific" content can remain in the C.P.M. exam and study materials, although it should be accompanied, whenever possible, by qualifications as to the limited applicability of the topic. For example, if an item is designed to test for a topic applicable only to the manufacturing purchaser, the item should be prefaced with "in the manufacturing sector."
- 8. While the focus of the C.P.M. examination should be on the common areas of the profession, it should not ignore the important topics peculiar to the various sectors, much as a general textbook would cover all the common but also some unique aspects of the field. Under this scenario, the "ideal" purchasing professional would be one who is well-versed in the fundamental concepts as well as the differences in the profession in the various settings. The C.P.M. designation should mean that the individual possesses ample knowledge of the common, fundamental concepts required to adequately perform work of a purchasing manager, and that he or she also can meet the special purchasing needs of an employer in any one of the eight sectors.

- 9. The National Association of Purchasing Management (NAPM) should proceed with the new version of the test outlined in this study, and then conduct a follow-up study, including surveys to C.P.M.s and their employers, to determine how the program is being perceived and how it enhances the careers and professional skills of those who successfully complete it. Such a study should be geared toward all eight sectors discussed in this job analysis, to determine where the exam is favorably received. If marked differences persist among the sectors after five years. it may be necessary to consider the development of separate (perhaps elective) modules for the various sectors. The results of the cluster analysis of the sectors could be used as guidelines as to the number and structure of these modules.
- 10. NAPM should attempt first to maintain a single exam based on the results of this study for at least several years, before embarking on the development of sector modules. In light of the great overlap of tasks performed by the different sectors, it seems unlikely that individual sector modules will contain a great deal of unique material. Differences across the sectors do exist, but the results of the task analysis of this study seem to suggest that the differences are not that significant.

INTRODUCTION •

This report describes the methods and results of a job analysis undertaken by the National Association of Purchasing Management (NAPM) from 1989 to 1990, for the purpose of updating the Certified Purchasing Manager (C.P.M.) examination.

PERSPECTIVE

In 1974, the National Association of Purchasing Management established the Certified Purchasing Manager Program. The purpose of the program is to maintain recognized professional standards in the field of purchasing, to enhance individual professional competence, and to assist employers by providing them with a means for identifying qualified individuals in the field. One of the requirements for obtaining the designation of C.P.M. is the successful completion of the C.P.M. examination, a criterion-referenced written test of purchasing and related areas. Candidates for the C.P.M. must pass the various modules of the exam in order to qualify for receiving the C.P.M. designation from NAPM.

Like most other certification tests, the C.P.M. exam is constructed to be content-valid, meaning that the content domain covered by the test is defined in terms of its importance for competent performance in the occupation. The content validity of the C.P.M. was determined through a job analysis, last conducted in 1984, of the purchasing manager position, which identified the critical tasks conducted by the purchasing manager and the knowledge, skills, and abilities needed for performing those tasks. The test specifications for the C.P.M. were written to reflect the results of the 1984 job analysis.

In 1989, NAPM authorized the undertaking of a new job analysis study of the purchasing manager position. This research was undertaken as a comparative study of the purchasing manager's role in the various public and private sectors. One of the most frequently voiced concerns about the C.P.M. program over the years has been the question of whether the test is valid for all sectors of the profession, due to

differences in the role of purchasing in various settings. Accordingly, NAPM sought to address the concerns by conducting a task analysis to answer the following questions:

- (a) Is there a substantial difference in the duties of the purchasing manager from setting to setting? Certainly, there are differences in the commodities that are purchased by procurement personnel in different sectors. But are the duties that purchasers perform, along with their required procurement knowledge and skills, reasonably the same for purchasing managers across the various sectors (e.g., manufacturing, government, retail, education)?
- (b) If there is little or no difference in the tasks of a purchasing manager across sectors, can an examination be developed that will be valid for all the areas? Can the C.P.M. designation be constructed so that it will be universally applicable across settings, thereby expanding the role of the examination and the profession?

This study sought to answer these issues and investigate other questions about the duties of the purchasing manager's position. It was conducted according to the methodology outlined in Gael for the comparison of job functions and tasks by various jobs. The general job analysis plan was as follows:

- (1) Identify the major sectors of purchasing;
- Develop a comprehensive list of tasks, valid for all the sectors;
- (3) Distribute the list of tasks to purchasers in each of the sectors, compare the results, and drop those tasks that are performed by a minority of purchasers.

SCOPE OF THE STUDY

In April 1989, the NAPM Certification Board identified seven major purchasing sectors for a comparative study of job functions—an eighth sector was added by NAPM at a later date. These eight sectors

that became the focus of study for this job analysis were:

- (1) Manufacturing (United States) The personnel included under this heading work for organizations whose prime activity is the manufacture of electronic equipment, automobiles and other transportation equipment, appliances, machinery, metals, mining, paper, plastics/rubber, textiles, furniture/fixtures, chemicals, petroleum, and other products. The construction industry also was included with this group.
- (2) U.S. Government/Prime Contractor This category is comprised of all purchasing personnel who work for the federal government, including military procurement. In addition, this category includes employees of private organizations that are prime government contractors.
- (3) State and Local Government This category includes purchasers who work in state, county, and municipal governments.
- (4) Institutional Under this category are persons engaged in procurement for hospitals, educational institutions, and other nonprofit organizations.
- (5) Services This heading covers a variety of service-oriented organizations, including the communications industry, utilities, transportation companies, banking, insurance, finance, real estate, hotels and lodging, and other services.
- (6) Retail This category is comprised of persons who buy for retail organizations. It includes purchasers who buy nonresale items such as displays and "wrap-and-pack" items, as well as purchasers of resale items such as apparel, furniture, and appliances. Also under this category are persons working in wholesale and distribution.
- (7) Food The persons included in this category are food manufacturers, food distributors, food retailers, the tobacco industry, other food and agricultural industries, and those buying food for restaurants.
- (8) Manufacturing (Europe) This category includes personnel working in all of the areas described in item #1 above, only in Europe rather than in the United States.

DESIGN OF THE STUDY •

SUBJECTS

The participants in this survey were purchasing professionals from the eight previously described purchasing sectors. The participants' names were selected at random from NAPM mailing lists and from mailing lists obtained from other purchasing organizations.

DEVELOPMENT OF THE TASK SURVEY

To effectively compare the purchasing manager's function in the various settings, a comprehensive list of tasks was developed. The final questionnnaire was designed to be as valid and as comprehensive for as many of the purchasing sectors as possible, thereby avoiding the assessment of the various sectors on a "biased" instrument. To do this, the researcher employed a three-step strategy:

Step 1: Task data were obtained through a preliminary questionnaire sent to various purchasers selected from the eight settings. The survey asked the respondents to list the major tasks of their positions, plus the percentage of time spent performing each task. The respondents also were asked to provide company job descriptions for their own positions and for related positions. In all, surveys and job descriptions were obtained from 18 candidates sampled from the eight major areas. A copy of the preliminary questionnaire appears in Appendix A. A list of the respondents appears in Appendix B.

Step 2: Task data were also obtained through oneon-one interviews with purchasers from the eight major areas. A preliminary list of tasks was formed by combining task information from the current C.P.M. specifications and from the list of tasks used in the job analysis for NAPM's PHRASE (Purchasing Human Resource Audit System Evaluation, a training needs assessment tool). Each interviewee was given a copy of this preliminary list, and asked to read each statement carefully and to report whether or not the task as stated was part of his/her present job responsibilities. The interviewees were encouraged to modify each task as they deemed appropriate, and were also asked to indicate any other important tasks they performed that were not included on the list. In all, 43 purchasers sampled from the eight major areas were interviewed. A list of the interview participants is included in Appendix B.

Step 3: Task statements obtained from the preliminary questionnaires, job descriptions, and interviews were combined into a comprehensive list of 69 tasks covering 13 major headings. The headings were:

- · Procurement Requests
- Solicitation/Evaluation of Proposals (RFQ, RFI, RFP)
- · Supplier Analysis
- · Negotiation Process
- Contract Execution, Implementation, and Administration
- · Forecasting and Strategies
- · Material Flow
- Inventory Management
- Real Estate Function
- Special Considerations for Enhancing Purchasing Performance
- External/Internal Relationships
- Administrative Aspects of the Purchasing Department
- · Personnel Issues

Respondents were asked to read each task and indicate its importance to their positions using the following eight-point scale:

- 7 Very High Importance
- 6 High Importance
- 5 Slightly Above Average Importance
- 4 Average Importance
- 3 Slightly Below Average Importance
- 2 Low Importance
- 1 Very Low Importance
- 0 Not Part of My Job/ I Never Do It

Respondents were told to answer each question in terms of their *present* employers, and not in terms of any previous employers.

The questionnaire also included background questions on the type of organization for which the respondent works, the respondent's job title, years in his/her position, years with his/her employer, and years in purchasing; the total number of purchasing personnel in the respondent's organization, and the number of persons under the respondent's supervision; the organizational unit (e.g., top management, finance, manufacturing) to which the purchasing department reports; the ratio of domestic (U.S.) versus international procurement that the respondent performs; plus the respondent's education, membership status with NAPM, certification status (including the C.P.M. and certifications from allied purchasing associations), gender, and ethnicity. The questionnaire was given to a pilot group of four C.P.M.s, who were asked to comment on the survey in terms of wording, clarity, misspellings, etc. A copy of the final job analysis survey appears in Appendix C.

PROCEDURE

Copies of the final job analysis survey were mailed in April 1990 to approximately 4,300 purchasers, evenly distributed among the eight sectors. To increase coverage in the European sector, three surveys instead of one were sent to each participant, along with a letter asking the addressee to have one or two colleagues complete the survey. In May 1990, a postcard was sent to all candidates as a follow-up, asking them to complete and send in the questionnaire if they had not already done so.

JOB ANALYSIS IDENTIFYING THE TASKS OF PURCHASING •

RESULTS OF THE JOB ANALYSIS SURVEY

Surveys were mailed back to NAPM and keypunched. Data from respondents who were retired were removed from the sample as well as data from academic instructors in purchasing (and who therefore did not perform any of the tasks). The final sample was comprised of responses from 1,541 participants.

Characteristics of the Respondents

The results of Part A of the job analysis survey are described below. Results for Questions 1, 2, 5, 6, 7, 8, 9, 10, and 11 are summarized in frequency distributions appearing in Figures 1 through 9, and in Figures 15 through 24 in Appendix D. Each distribution lists the different response categories for each question, followed by the number of persons selecting the category ("Frequency"), the percentage of persons from the entire group (including missing data) selecting the category ("Percent"), and the percentage of nonmissing responses in the category ("Valid Percent").

Questions 3A, 3B, 3C, 4A, and 4B are summarized in Figures 10 through 14, which include the descriptive statistics — and, in some cases, histograms for each variable.

Of the persons responding to the questionnaire, 74.7 percent were male and 25.3 percent were female. (See Figure 1.) Whites comprised 94.1 percent of the sample; Blacks comprised 2.3 percent; Hispanics comprised 2.0 percent; Asians comprised 1.0 percent; and all others .6 percent. (See Figure 2.)

The majority of respondents (63.5%) held a fouryear college degree or higher, and 93.9 percent had at least some college education. (See Figure 3.) Most of the respondents (83.5%) were NAPM members. (See Figure 4.)

While drawing conclusions about job titles is difficult, because the responsibilities assigned to the title will vary from organization to organization, the majority of respondents (58.8%) reported that their

title was that of "Manager" or "Director," and 4 percent said they were in an "Executive" or "Vice President" position. Another 23.3 percent claimed they were in the position of "Senior Buyer," while 12 percent said they were "Intermediate Buyers." Only 1.9 percent said they were "Junior Buyers." (See Figure 5.)

Part A, Question 1 of the survey asked respondents to indicate the type of organization in which they were employed. The responses to this question were collapsed into the eight sectors under study. All questionnaires were coded with a four-digit ID number. Questionnaires sent to U.S. respondents were coded from 0001 to 4000. Questionnaires sent to European respondents were coded from 5000 to 6600. The European Manufacturing respondents were therefore identified as being all respondents with an ID code of 5000 to 6600. Of the 1,539 respondents whose organization type could be classified (two persons failed to provide this information), the largest number was in Manufacturing (N=555, or 36.1%). The samples for the State/Local Government (N=178), Institutional (N=170), Services (N=177), Retail (N=160), and Food (N=172) sectors ranged between 10.4 percent and 11.6 percent of the total sample, and were of sufficient size for determining stable means, standard deviations, and other descriptive statistics. The sample for the U.S. Government/Prime Contractor was somewhat smaller (N=84, or 5.5%), though still of adequate size. The sample for the European Manufacturing group was relatively small (N=43, or 2.8%), making conclusions with this group tenuous. The frequency distribution for the type of organization appears in Figure 6, while the frequency distributions for the eight sectors appear in Figure 7.

Following is a detailed description of the composition of each sector sample:

Manufacturing (United States)— The largest group of respondents was in the area of electronic equipment manufacturing (69/555, or 12.4%). Other areas that comprised relatively large sections of this sample included chemicals (56/555, or 10.1%), machinery (38/555, or 6.9%), metals (37/555, or 6.7%), and nonautomotive transportation equipment (38/

555, or 6.9%). It should be noted that a large portion (207/555, or 37.3%) selected the "Other Manufacturing" category on this survey, making it difficult to draw conclusions regarding the composition of this subsample.

U.S. Government/Prime Contractor— Most of the respondents in this category worked for a private defense contractor (61/84, or 72.6%). The second largest group was that of private nondefense contractors (13/84, or 15.5%).

State and Local Government —The majority of persons in this group worked for a municipal government (115/178, or 64.6%), while the second largest group was comprised of county government purchasers (49/178, or 27.5%).

Institutional — Most of the respondents in this category were from the education sector (120/170, or 70.6%). Hospital personnel accounted for 24.1 percent of this sample (41/170).

Service — Just more than half (89/177, or 50.3%) of the respondents in this category said they worked for a utility company. The second largest percentage of persons in this group (26/177, or 14.7%) worked in transportation.

Retail—Most of the respondents in this category (100/160, or 62.5%) worked in the wholesale/distribution category; the second largest group was comprised of retail personnel buying resale merchandise (52/160, or 32.5%). The remainder of persons in this subsample (8/160, or 5%) were retail personnel buying nonresale (e.g., "wrap and pack") items.

Food —The majority of respondents in this category worked for a food manufacturer (121/172, or 70.4%). Restaurant-chain personnel accounted for 7 percent (12/172) of the subsample, while food distributors accounted for 5.8 percent (10/172).

Manufacturing (Europe) — The largest portion of the respondents in this group indicated that they worked in "Other Manufacturing" (10/43, or 23.3%). Electronic equipment personnel accounted for 16.3 percent (7/43) of this group. Another 16.3 percent indicated that they were actually from nonmanufacturing settings (e.g., banking, insurance, retail) making the heading of "Manufacturing" for this group somewhat of a misnomer.

Figure 8 displays the results for Part A, Question 5, which asked the respondents to indicate where in the organization their department reports. For 39 percent of all persons responding, the purchasing department in their organization reported to top management. The next largest group (14.7%) reported to the finance department. Just under 13 percent of those responding reported to the materials management department, 12.6 percent reported to administration, and 12.1 percent

reported to manufacturing/production/operations.

Slightly more than half (51.8%) of those responding engaged exclusively in U.S. domestic purchasing. About one-third (32.7%) of those responding said that 1 percent to 10 percent of their purchasing was done with international sources, while 6.9 percent said that between 10 percent and 20 percent of their purchasing was done internationally. (See Figure 9.)

The median number of puchasing personnel in the respondents' departments was six, while the median number of personnel under the respondents' supervision was two. (See Figures 10 and 11.) The median—the point below which 50 percent of the distribution falls—is typically reported for variables with highly skewed distributions.

The median number of years that the respondents reportedly spent in their positions was three. (See Figure 12.) The median number of years that the respondents worked for their present employer was eight. (See Figure 13.) The median number of years in purchasing for all respondents was twelve. (See Figure 14.)

C.P.M.s accounted for 28.4 percent of the respondents to this survey, while another 38.6 percent said they planned to complete it. For the other purchasing certification programs, the percentages of respondents holding or planning to complete certification were 2.6 percent for the Certified Public Purchasing Officer (CPPO), .7 percent for the Professional Public Buyer (PPB), .6 percent for the Certified Associate Contracts Manager (CACM), 1.8 percent for Certified Professional Contract Manager (CPCM), 4.5 percent for the Certificate in Production and Inventory Management (CPIM), and .2 percent or less for the Professional Purchaser (P.P.), Certified Purchasing Professional (C.P.P.), Institute of Purchasing and Supply Certification (MInstPS), and Association of Supervisors in Purchasing and Supply (A.S.P.S) programs. These data are summarized in Figures 15 through 24.

Task Analysis Results

The task analysis results for the eight sectors were compared in two ways:

- (1) By percentage of persons within each sector that performed the given task;
- (2) Through a cluster analysis of task results based on the mean scores for each task.

Percentages for each sector were based on the proportions of nonzero responses in the category.

That is, each percentage was computed by adding the number of persons responding from 1 (Very Low) to 7 (Very High) on the importance scale, and by dividing this number by the total number of persons within the category. The percentages for each task appear in Appendix E, Figure 25. For example, the percentages of respondents that performed Task #1 were 85.5 percent for U.S. Manufacturing and 85.2 percent for the total sample.

Figure 25 also includes the sector means and standard deviations, based on all nonmissing responses (i.e., on a 0-to-7 scale) for each task. For example, the mean scores on Task #1 were 3.8 for U.S. Manufacturing and 3.9 for the total sample. The Task #1 standard deviations for these respective areas were both 2.3.

In Appendix E, Figure 26, percentage data have been expressed symbolically, with one asterisk (*) indicating 50 percent to just under 75 percent of the persons in the category performed the task, and two asterisks (**) indicating that 75 percent or more persons in the category performed the task. For instance, Task #30 was performed by 75 percent or more of the respondents in the U.S. Manufacturing, Food, and European Manufacturing sectors; by 50 percent to 75 percent of the respondents in the State and Local Government, Institutional, Service, and Retail sectors; and by less than 50 percent of the participants in the U.S. Government/Prime Contractor sector.

In general, the percentage results of the task analysis showed marked agreement between the various sectors. For 50 out of the 69 tasks, 50 percent or more of the respondents in each sector said they performed the task. Another 13 tasks had a majority of sectors (i.e., five or more) indicating that 50 percent or more of the respondents reported that they performed them. The only tasks that clearly were *not* performed by the majority of respondents in the majority of sectors were Tasks 38, 42 to 45, and 53.

The results of the task analysis are further summarized by task heading below:

Procurement Requests—With one exception, the tasks for this section were performed by a majority of respondents in all sectors. The review of purchase requisitions to determine their appropriateness with regard to organizational requirements (Task #1), and to determine their conformance with established laws, policies, and procedures (Task #3), and the identification and/or selection of potential sources of services or supplies (Task #6), were performed by 75 percent or more of the persons in each category. In many cases, these figures exceeded 90 percent.

The review of purchase requisitions for proper authorization (Task #2) was performed by 75 percent

or more of the candidates in all of the areas except Retail, in which 73 percent of the candidates said they performed the task. Participation in decisions to lease or buy equipment (Task #7) was performed by 75 percent or more of the candidates in all sectors, except U.S. Government/Prime Contractor (72.6%) and Retail (69.2%).

Participate in product "make-or-buy" analyses (Task #5) was performed by 75 percent or more of the candidates in the U.S. Manufacturing, European Manufacturing, and Food sectors, and by 50 percent to 75 percent of the candidates in all other areas. It should be noted here that some of the respondents may have broadened the interpretation of this task to include in-house services.

The only task in this section that was *not* performed by the majority of respondents in all areas was the review of purchase requisitions against the requisitioner's or organization's budget (Task #4). This task was performed by the majority of respondents in the State and Local Government, Institutional, Retail, Food, and European Manufacturing sectors only.

Solicitation/Evaluation of Proposals —All five tasks in this section were performed by more than 80 percent of the respondents in all eight areas, demonstrating a high degree of concordance across the sectors.

Supplier Analysis —Both tasks in this section were performed by more than 75 percent of the respondents in all eight categories, indicating the high applicability of these tasks to all areas of the profession.

Negotiation Process—This section was also deemed of prime importance to the profession, with both tasks in this section performed by more than 85 percent of the respondents in all eight areas.

Contract Execution, Implementation, and Administration — The tasks in this section were performed by a majority of respondents in all areas, also demonstrating a high degree of concordance across the sectors. All of these tasks but one were performed by 75 percent or more of the candidates in all eight sectors. The one exception was obtaining legal review and approval of a contract when required (Task # 18), which was performed by 66.7 percent of the Retail area.

Forecasting and Strategies—All of the tasks mentioned were also performed by a majority of persons in each sector. The planning of purchasing strategies based on forecasted data (Task #26), and the formulation of strategic plans and objectives (Task #27) were performed by 75 percent or more of the persons in all eight sectors. Developing forecasts in the light of economic conditions that affect procure-

ment (Task #25), and providing forecasted data of future market conditions to management and/or requisitioning departments (Task #28) were performed by 75 percent or more of the respondents in all sectors except the U.S. Government/Prime Contractor, in which 73.5 percent said they performed Task #25 and 70.2 percent said they performed Task #28.

Providing forecasted data of future organization commodities requirements to suppliers (Task #29) was performed by 75 percent or more of the persons in the U.S. Manufacturing, Service, Retail, Food, and European Manufacturing sectors, and by 64.3 percent, 69.3 percent, and 73.7 percent of the persons in the U.S. Government/Prime Contractor, State/Local Government, and Institutional sectors respectively.

Material Flow — This section revealed a considerable degree of disparity in the functions of the various sectors, in that it seemed to have considerably less relevance to the U.S. Government/Prime Contractor area. Two tasks in this group were performed by a majority of respondents in all areas: resolving delivery/receiving problems (Task #36) and defining incoming material transportation requirements (Task #31). Routing inbound/outbound freight (Task #32) was performed by the majority of persons in all sectors except State and Local Government.

However, the defining of incoming material packaging requirements (Task #30), the tracing of inbound freight (Task #33), and the supervising/monitoring of activities of the receiving department (Task #34) were all tasks that were performed by the majority of persons in most of the areas, with the exception of the U.S. Government/Prime Contractor. Ensuring that materials are distributed to user departments (Task #35) was performed by a majority of respondents in the State and Local Government, Institutional, Retail, Food, and European Manufacturing sectors only.

Inventory Management — This section also revealed substantial differences across the various sectors. None of the five tasks in this category was performed by the majority of persons in the U.S. Government/Prime Contractor, indicating that inventory management tasks were of little relevance to purchasers in that sector. Similarly, only the handling of obsolete equipment/materials, surplus equipment/materials, and scrap (Task #41) was performed by a majority of persons in the Service sector, while the remaining tasks were not, suggesting little applicability of this section to the Service sector as well.

Organizing and controlling the storage of materials (Task #37) was performed by a majority of persons in the State/Local Government, Institutional,

Food, and European Manufacturing sectors, and by 78.6 percent of those in the Retail sector. Organizing and controlling the storage/disposal of hazardous/regulated materials (Task #38) was performed by a majority of respondents in the Institutional, Service, and European Manufacturing sectors only.

Determine sources of and reconcile inventory discrepancies (Task #39) and review inventory to verify that materials are rotating/turning (Task #40) were performed by the majority of persons in the U.S. Manufacturing, State and Local Government, Institutional, Retail, Food, and European Manufacturing areas, and by 75 percent or more persons in the Retail sector.

Besides being performed by the majority of those in the Service sector, Task #41 was performed by 74 percent of the U.S. Manufacturing respondents and more than 75 percent of the respondents in the State/Local Government, Institutional, Retail, Food, and European Manufacturing sectors.

Real Estate Function — This section was the only area that was not performed by the majority of respondents for any of the eight sectors. The sectors for which these tasks seemed most applicable were the Institutional sector (with 24.4%, 28.6%, 24.4%, and 23.2% of the respondents performing Tasks 42, 43, 44, and 45 respectively) and the European Manufacturing sector (with 36.6%, 43.9%, 39.0%, and 43.9% of the respondents performing Tasks 42, 43, 44, and 45 respectively).

Special Considerations for Enhancing Purchasing Performance — This section was comprised of a diverse group of tasks frequently cited as being of prime importance to the purchasers participating in the interview process and preliminary questionnaire. Recommending/implementing changes to the organization's purchasing and materials management policies as needed (Task #46); developing new/alternate materials, equipment, and sources of supply (Task #47); a standardization program (Task #48); a cost-reduction/cost-avoidance program (Task #49); and a computerized purchasing system (Task #50) were reportedly performed by more than 75 percent of the respondents in all eight categories.

The development/implementation of a minority/ women/small business/disadvantaged supplier development program was performed with somewhat greater frequency in the U.S. Government/Prime Contractor and State/Local Government sectors, with 86.6 percent and 79.6 percent of their respective respondents reporting that they performed this task; while more than 50 percent of the respondents in the U.S. Manufacturing, Institutional, Service, Food and European Manufacturing sectors claimed they performed

this task. Less than a majority (44.9%) of persons in the Retail sector claimed they performed Task #51.

The implementation of a material requirements plan (Task #52) was performed by a majority of respondents in the U.S. Manufacturing, U.S. Government/Prime Contractor, Retail, Food, and European Manufacturing sectors, while the implementation of a manufacturing resource plan (Task #53) was generally performed in the U.S. Manufacturing, Food, and European Manufacturing sectors only. (The relatively high importance of this task to the Food sector probably reflects the high percentage of food manufacturers in this sample.)

External/Internal Relationships — All of the tasks in this area were performed by more than 91 percent of the respondents in all eight sectors.

Administrative Aspects of the Purchasing Department-Almost all of the tasks in this section were performed by a majority of persons in all of the sectors. The development of goals and objectives of a purchasing department (Task #57); the planning and development of operating policies, guidelines, and procedures for the control of department work flow (Task #58); the development/utilization of criteria for evaluating purchasing department performance (Task #59); and the ensuring of the maintenance of files of contracts, bids, agreements, and leases (Task #60) were performed by more than 75 percent of the respondents in all eight areas. Ensuring the maintenance of files on product/service specifications, descriptions, prices, lead times, etc. (Task #62) was performed by 75 percent or more of the respondents in all sectors except the U.S. Government/Prime Contractor (72.3%).

Designing operational forms (Task #64) was performed by 75 percent or more of the U.S. Manufacturing, U.S. Government/Prime Contractor, State/Local Government, Institutional, and European Manufacturing sectors, and by the majority of persons in the other sectors. The preparation of the purchasing department budget (Task #63) was performed by 75 percent or more of the persons in the State/Local Government, Institutional, and European Manufacturing sectors, and by a majority of persons in the remaining sectors.

Ensuring the maintenance of records of capital equipment, vehicles, tools, etc. (Task #61) was performed by more than 75 percent of the respondents in the Institutional sector, and by a majority of respondents in all other sectors except Retail (48.0%).

Personnel Issues — All of the tasks in this section were performed by a majority of respondents in all areas. For all eight sectors, 75 percent or more of the respondents reported that they supervised and del-

egated work to purchasing department staff (Task #65), which was expected in light of the managerial capacity of most of the sample. The evaluation of purchasing staff performance (Task #67) was performed by 75 percent of the respondents in all of the categories except the U.S. Government/Prime Contractor (69.9%). Conducting/authorizing formal job training for the development of the professional competence of the staff (Task #68) was performed by 75 percent or more persons in all categories except U.S. Government/Prime Contractor (66.3%) and State/Local Government (73.8%). Resolving employee performance problems (Task #69) was performed by 75 percent or more persons in the U.S. Manufacturing, Institutional, Service, Food, and European Manufacturing sectors, and by a majority of respondents in the remaining sectors. This percentage could reflect that some respondents did not have managerial responsibilities.

Seventy-five percent or more of the respondents in the Institutional and European Manufacturing sectors reported that they hired/promoted/dismissed purchasing department personnel (Task #66), while 59.0 percent to 73.1 percent of the persons in the other sectors said they performed this task.

Cluster Analysis of Groups

Though there is overlap in the performance of tasks between the various sectors, the overlap is obviously not complete. Given this fact, how do the various sectors combine or "cluster"? Which sectors demonstrate relative similarity to each other, and which are dissimilar?

To address these questions, a hierarchical cluster analysis was computed, based on the mean importance scores for each task for all eight sectors. The term cluster analysis refers to a variety of statistical procedures that are used to search for relatively homogeneous groups of objects. The particular cluster analysis procedure used in this study was the Average Linkage Within Groups method, which combines cases so that the average distance between the sectors within the resulting cluster is as small as possible. The distances between cases was computed using the squared Euclidean distances, which is the sum of the squared differences in values for each variable. In this study, the variables were the mean importance ratings for each sector on the 69 tasks. The mean importance ratings that appear in Figure 26 in Appendix E were computed on the entire 0-to-7 point scale, so that if certain sectors did not perform various tasks, this information would be considered in the determination of clusters.

The cluster analysis was performed on all variables with the exception of European Manufacturing, due to the inadequacy of the sample for that group.

The results for the analysis appear in Appendix F. Figure 27 displays the agglomeration schedule for the analysis, which describes how the clusters are constructed at each stage. The information in Figure 27 is also displayed in the dendrogram presented in Figure 28, which is read from left to right. The vertical lines denote the formation of the clusters.

These results show the first cluster of sectors to be created at Stage 1 by joining U.S. Manufacturing (1) with Food (7), meaning that the two sectors that showed the greatest degree of similarity in terms of task importance are the Manufacturing and Food sectors. The cluster formed at Stage 2 was created by combining the State/Local Government (3) and Institutional (4) sectors, meaning that these two groups demonstrated the second greatest amount of similarity. At Stage 3, the U.S. Manufacturing (1) and Food (7) cluster is combined with the Service (5) sector. Stage 4 combines the cluster created in Stage 3 with the U.S. Government/Prime Contractor (2). Stage 5 combines the U.S. Manufacturing/Food/Service/U.S. Government/Prime Contractor cluster with the State and Local Government/Institutional cluster. At Stage 6, the Retail (6) sector is merged with the others to form a single cluster.

Several important aspects of these results are highlighted below:

- (1) Due to the large percentage of food manufacturers in the Food category, its tendency to cluster with the U.S. Manufacturing sector is to be expected.
- (2) The State/Government and Institutional sectors appear to have more in common than do the U.S. Government/Prime Contractor and State/Local Government sectors, as indicated by the fact that the U.S. Government/Prime Contractor sector combines with the Manufacturing/Food/Service cluster before it combines with the State/Local sector. However, this result could reflect, at least to some degree, the large percentage of prime government contractors in the U.S. Government/Prime Contractor sample.
- (3) The Retail sector appears to have the least in common with all other areas and therefore "stands alone" when compared with the others in terms of task importance.

When performing a hierarchical cluster analysis, it is often desirable to stop an analysis before all variables have been combined into a single cluster. Such information could provide clues as to the formation of individual sector modules. While no definitive method exists for halting the formation of clusters—and thereby determining multiple clusters—one ap-

proach has been to stop as soon as the increase in the coefficient of squared Euclidian differences becomes large. For these results, the largest increase in the coefficient lies between Stage 3 and 4, suggesting that the four-cluster solution at Stage 3 becomes the ideal for determining multiple clusters. The clusters at this stage are:

Cluster 1: U.S. Manufacturing/Food/Service

Cluster 2: U.S. Government/Prime Contractor

Cluster 3: State and Local Government/

Institutional

Cluster 4: Retail

These four clusters therefore appear to be the most suitable format for combining the sectors, in terms of task importance.

Based on the results of this job analysis, a job description of the purchasing manager position was developed by the researcher. This job description appears in Appendix H.

NOTES

- ¹S. Gael. Job Analysis A Guide to Assessing Work Activities (San Francisco: Jossey Bass, Inc., 1983) 122.
- ² S. E. Bemis, A. H. Belenky, and D. A. Soder. *Job Analysis An Effective Management Tool* (Washington, D.C.: Bureau of National Affairs, Inc., 1983).

REFERENCES

- Bemis, S. E., Belenky, A. H., and Soder, D. A. Job Analysis An Effective Management Tool. Washington, D.C.: The Bureau of National Affairs, Inc. 1983.
- Gael, S. Job Analysis A Guide to Assessing Work Activities. San Francisco: Jossey Bass, Inc. 1983.

APPENDIX A: PRELIMINARY JOB ANALYSIS QUESTIONNAIRE •

NATIONAL ASSOCIATION OF PURCHASING MANAGEMENT, INC. PRELIMINARY JOB ANALYSIS QUESTIONNAIRE

Name
Title
Organization
I. Briefly describe the purpose or focus of the Purchasing Manager's position within your organization:
II. List, by position title and level, those staff members who report directly to the Purchasing Manager. Indicate whether these individuals are supervisory or nonsupervisory. Position Title and Level How Many Supervisory? (Yes/No)
Indicate, by position title and level, the Purchasing Manager's immediate supervisor(s).

III. On the attached form, please describe the tasks or duties performed by the Purchasing Manager in your organization. For example, the tasks may include such areas as:

- Soliciting bids and quotations
- Evaluating competitive offerings
- Analyzing potential vendors
- Assessing market conditions
- Determining standard costs of purchases
- Preparing contracts

In describing these tasks, please consider the following:

- 1) What does the Purchasing Manager do; what $\underline{\text{actions}}$ does he/she perform?
- 2) What resources are used; what does he/she consider?
- 3) What are the <u>results</u> the decisions, products, services of his/her actions?

For example, under "Analyzing potential vendors", the Purchasing Manager may perform a task such as:

Analyzes labor status of suppliers for contract expiration dates and previous labor problems to prevent disruptions in the continuity of supply.

1) What actions are performed?

Analyzes labor status of suppliers

2) What resources are used, what is considered?

for contract expiration dates and previous labor problems

3) What are the results of these actions?

to prevent disruptions in the continuity of supply.

Next to each task, please indicate the approximate percentage of time spent in performing the task in the column on the right. Use additional sheets if necessary.

Task No.	DESCRIPTION OF TASK	% OF TIME

APPENDIX B: JOB ANALYSIS INTERVIEW AND PRELIMINARY SURVEY PARTICIPANTS •

Sector 1. Manufacturing - U.S. John Burke Mary Lu Harding Robert Keenan Art McVeety Linda Wolin	V.P., Purchasing Procurement Mgr. Corp. Supply Mgr. Training Purchasing Mgr.	OSCO Industries Digital Equip. Caterpillar, Inc. Mobil Oil Searle and Co.	(1)	(2) * * *
Sector 2, U.S. Government R.C. Barrieault Bill Beers Ed Chew, Staten Corbett Michael Dunleavy Rex Johnsrud Don McFall Harold Murrell Cindi Rawski Marvin Sanders	Asst. Hd. M.M. Sr. Contr. Admin. Jr. Supervisor Contr. Specialist Manager Supervisor Buyer Purchasing Mgr. Buyer Principal Buyer	Naval Hosp., Phil. Ford Aerospace Ford Aerospace U.S. Navy Allied Signal Ford Aerospace Ford Aerospace Gen. Serv. Admin. Ford Aerospace Lawrence Livermore	(1) * * * * * *	*
Sector 3. State and Local Government Robert Ashby James Barber Allen Bogan Arthur Croissant Jane Furr Earl Hawkes R. Vernon Jones Ken Laverty Donald Woods	Contr. Admin. Ch. of Procurement General Mgr Dir., Purchaisng Sr. Contr. Off. Dir. General Serv. Purch. Agent Purch./Mat. Off. Purch. Admin.	Clark County, NV Clark County, NV State of City of Pueblo, Co City of Pueblo, Co State of Arizona Clark County, NV Galveston Cnty, TX Cent. Contra Costa Clark County, NV	(1) * O* *	(2) * * *
Sector 4. Institutional Frank Lopez Kevin Kynch Phyllis McCready R. Perry Triplett Marian Yacko (1) Interview (2) Preliminary Questionnaire	Dir. of Purch. Asst. Dir. Purch. Dir. of Purch. Purch. Mgr. Dir. Purch.	Fairleigh Dickinson Farliegh Dickinson Presbyterian Hosp. Washington State U. Univ. of Colorado	(1) * * *	(2) * *

		(1)	(0)
Corp. Off. Sr. Tech. Buyer Purch. Manager Sr. Buyer Purch. Manager Purch. Manager Purchasing Agent Dir. Corp. Purch. Staff Mgr. Assoc. Mgr. Supervisor Purch. Staff Mgr. Buyer Purch./Trans. Dir. Sr. Maint. Analyst	Valley Natl. Bank Austral Airlines Austral Airlines U.S. Air Colonial Penn Group Valley Natl. Bank Union Pacific RR Colonial Penn Group Bellcore Bellcore U.S. Air Bellcore Colonial Penn Group AT & T U.S. Air	(1) * * * * * * * * * *	*
Dir. Corp. Purch. Buyer Dir. of Purch. Mgr. Purchasing Purch. Agent Purch. Agent	Carter Hawley Hale Macy's Playtex Apparel Levi Strauss & Co. Macy's Macy's	(1) * * *	(2) * *
Dir. Corp. Purch. V.P., Procurement Purchasing Mgr. Manager	Dean Foods Burger King Oscar Mayer Foods Burger King	(1) * *	(2) *
Purchasing Mgr. Purchasing Spec.	Digital (SwitzInd) Pfizer (Ireland) Digital (U.K.) Digital (France) Digital (Belgium) Digital (Sweden) Digital (Holland)	(1) * * * * *	(2)
	Sr. Tech. Buyer Purch. Manager Sr. Buyer Purch. Manager Purch. Manager Purchasing Agent Dir. Corp. Purch. Staff Mgr. Assoc. Mgr. Supervisor Purch. Staff Mgr. Buyer Purch./Trans. Dir. Sr. Maint. Analyst Dir. Corp. Purch. Mgr. Purchasing Purch. Agent Purch. Agent Purch. Agent Purchasing Mgr. Manager Purchasing Mgr. Manager Purchasing Mgr.	Sr. Tech. Buyer Purch. Manager Sr. Buyer Purch. Manager Purchasing Agent Dir. Corp. Purch. Staff Mgr. Assoc. Mgr. Supervisor Purch. Staff Mgr. Buyer Buyer Purch./Trans. Dir. Sr. Maint. Analyst Dir. Corp. Purch. Mgr. Purchasing Purch. Agent Purch. Agent Purch. Agent Purchasing Mgr. Purchasin	Sr. Tech. Buyer Purch. Manager Sr. Buyer Purch. Manager Purch. Staff Mgr. Assoc. Mgr. Supervisor Purch. Staff Mgr. Bellcore Supervisor Purch. Staff Mgr. Bellcore Supervisor Purch. Staff Mgr. Bellcore Colonial Penn Group Purch. Farager Macy S * Dir. Corp. Purch Dir. Corp. Purch. Purchasing Purch. Agent Purch. Agent Purch. Agent Purch. Agent Purch. Agent Purch. Agent Purchasing Mgr. Pigital (Switzlnd) Purchasing Mgr. Pigital (Sweden) * * * * * * * * * * * * *

⁽¹⁾ Interview(2) Preliminary Questionnaire



APPENDIX C: JOB ANALYSIS SURVEY

A Word About The Survey

The purpose of this survey is to compare up-to-date information about the purchasing function in a variety of settings. You can help us by responding to the following questions about your current position. We need this information to obtain meaningful data about the work you and other purchasing professionals are currently performing.

The information you provide in this survey will be seen only by those who are involved with processing and analyzing the data. No one in your organization or at NAPM who is not associated with computerizing the survey data will have access to your responses. This survey is being conducted solely to understand the purchasing professional's job, not to analyze individual performance.

There are two parts to this survey. The parts are:

Part A – General Information Part B – Task Analysis

Please answer each item in each part. Do not omit items.

What To Do With Your Completed Booklet:

When you have answered every item in the survey, seal the survey in the envelope provided and mail it to NAPM, P.O. Box 22160, Tempe, Arizona 85285-2160.

THANK YOU FOR YOUR COOPERATION.

PART A: GENERAL INFORMATION

YOUR NAME										
YOUR JOB TITLE										
COMPANY/ORGANIZATION NAME										
CITY	STATE									
Please review the following list carefully and c organization for whom you currently work. (Ch										
MANUFACTURING*	STATE/LOCAL GOVERNMENT									
01 Electronic Equipment	23 State Government									
02 Automobiles	24 County Government									
03 Other Transportation Equip.	25 Municipal Government									
04 Appliances										
05 Machinery	INSTITUTIONAL									
06 Metals	26 Education									
07 Mining	27 Hospitals									
08 Paper	28 Other Non-profit									
09 Plastics/Rubber										
10 Textiles	SERVICES									
11 Furniture/Fixtures	29 Communications									
12 Chemicals	30 Utilities									
13 Petroleum	31 Transportation									
14 Construction	32 Banking									
15 Other Manufacturing	33 Insurance									
	34 Finance									
RETAIL**	35 Real Estate									
16 Retail (Re-sale)	36 Hotels/Lodging									
17 Retail (Non re-sale)	37 Other Service									
18 Wholesale/Distribution	FOOD A ODIONI TUDE									
	FOOD/AGRICULTURE									
	38 Agriculture									
FEDERAL GOVERNMENT (including Military)	39 Restaurants									
19 U.S. Government (Non-Military)	40 Food Manufacturer									
20 Dept. of Defense/Armed Forces	41 Food Distributor									
21 Private Defense Contractor	42 Food Retail									
22 Private Non-defense Contractor	43 Tobacco 44 Other Food									
Online	44 Other 1 000									

^{*}For prime government contractor, see items 21 and 22 under the heading FEDERAL GOVERNMENT on this page. For food manufacturer, see item 40 under FOOD/AGRICULTURE on this page.

^{**}For food retail and distribution, see section headed FOOD/AGRICULTURE on this page.

2)	Which of the follo A. Executive/Vic		escribes your cu	rrent position? (Check	one only)	
			sing or Materials N	Management		
	C. Senior Level		C			
	D. Intermediate					
	E. Junior/Entry L	_evel Purchase	r			
	For how many ye					
	A) Your present po	sition?	_years			
	B) Your present en	nployer?	years			
	C) The field of pure	chasing?	years			
4)	A) What is the totaB) How many of th	I number of pur e above descri	rchasing personne bed employees ar	el in your organization?_ re under <u>your</u> supervisio	n?	_
5)	To whom does th	e purchasing	department repo	rt in your organization	? (Check on	e only)
	A. Top manage	ement		E. Engineering		
	B. Finance	(D	Onevetiene	F. Administration		
	C. Manufacturi D. Materials M		Operations	G. Other		
	Please indicate the contract for supp United States:	ne ratio which lies or service	BEST describes es from suppliers	the percentage of time in the United States v	e you spend ersus suppli	to procure, buy, or iers outside the
	A. 100% U.S. S	Suppliers		G. 40% U.S. Sup	opliers/ 60% C	Outside U.S.
	B. 90% U.S. S	uppliers/10% C	Outside U.S.	H. 30% U.S. Sup	pliers/70% O	utside U.S
	C. 80% U.S. S	uppliers/20% C	Outside U.S.	I. 20% U.S. Supp	oliers/80 Outs	ide U.S.
	D. 70% U.S. S	uppliers/30% C	Outside U.S.	J. 10% U.S. Sup		utside U.S.
	E. 60% U.S. S	uppliers/40% C	Outside U.S.	_ K. 100% Outside	e U.S.	
	F. 50% U.S. St	uppliers/50% O	outside U.S.			
7)	Please indicate	the highest lev	vel of education	you have completed:		
		a high school d	iploma	E. Masters degree	e (e.g., M.A., I	M.S., M.B.A.)
	B. High school	ol graduate		F. Law degree (e.g		• •
	C. Some colle		A DC DDA)	G. Doctorate (e.g.	, Ph.D., D.B.	A.)
	D. Bachelors	degree (e.g., B	B.A., B.S., B.B.A.)			
8)	Are you a memb	er of the Natio	onal Association	of Purchasing Manage	ement (NAPI	A)?
9)				tificates you currently	hold and wh	ich you plan to
	complete. (Chec		y) an to complete		Hold	Pian to complete
	A) C.P.M.	11010 11	an to complete	F) C.P.I.M.	. ,	
	B) C.P.P.O.			G) P.P.		
	C) P.P.B.		Administration of the Control of the	H) C.P.P.		-
	D) C.A.C.M.			I) M. Inst. P.S.		
	E) C.P.C.M.			J) A.S.P.S	-	
10)	Gender A. Male	B. Fen	nale			
11)	Ethnicity					
		of Hispanic ori		D. Asian/Pacific		
		of Hispanic ori	gin)	E. American Indi		
	C. Hispanic			F. Other		

PART B: TASK ANALYSIS

Below is a list of tasks performed by purchasing personnel. Read each task statement carefully and decide whether or not the task is part of your job responsibilities. It is important that you think only of your present employer, and not any previous employers.

Some tasks you perform are more important to your job than others. Use the guide below to indicate your estimation of the importance of each task:

IMPORTANCE GUIDE

7 = Very high 3 = Slightly Below Average

6 = High 5 = Slightly Above Average 2 = Low 1 = Very Low

4 = Average 0 = Not part of my job/I never do it

Select your response to each statement from the numbers to the right of the statement and circle your answer.

SAMPLE

Review purchase requisitions to determine their appropriateness with regard to
 organizational requirements.
 1 2 3 4 5 6 7

2. Review purchase requisitions for proper authorization.

(0) 1 2 3 4 5 6 7

For Task 1 in the sample, a "5" was circle, indicating that the task is SLIGHTLY ABOVE AVERAGE in importance.

For Task 2, "0" was circled, indicating that the task is NOT PART OF THE PERSON'S JOB.

TASK STATEMENTS

PROCUREMENT REQUESTS

1.	Review purchase requisitions to determine their appropriateness with regard to organizational requirements.	0	1	2	3	4	5	6	7
2.	Review purchase requisitions for proper authorization.	0	1	2	3	4	5	6	7
3.	Review purchase requisitions to determine their conformance with established laws, policies, and procedures.	0	1	2	3	4	5	6	7
4.	Review purchase requisitions against the requisitioner's or organization's budget.	0	1	2	3	4	5	6	7
5.	Participate in product "make-or-buy" analyses.	0	1	2	3	4	5	6	7
6.	Identify and/or select potential sources of services or supplies.	0	1	2	3	4	5	6	7
7.	Participate in decisions to lease or buy equipment.	0	1	2	3	4	5	6	7
	LICITATION/EVALUATION OF PROPOSALS (RFQ, RFI, RFP) Develop/review product specifications, performance terms and/or acceptance criteria.	0	1	2	3	4	5	6	7
9.	Issue requests for bids/quotations.					4		_	
3.	issue requests for bids/quotations.								
10.	Determine appropriate methods of procurement (e.g., blanket order, systems contracting.)	0	1	2	3	4	5	6	7
11.	Solicit competitive bids with pertinent specifications, terms and conditions.	0	1	2	3	4	5	6	7
12.								6	_

	PPLIER ANALYSIS Conduct supplier visits/evaluations to determine suitability.	0	1	2	3	4	5	6	7
14.	Analyze supplier performance using rating systems (e.g., weighted-point plan. categorical method).	0	1	2	3	4	5	6	7
	GOTIATION PROCESS Prepare for and develop strategies and tactics for negotiations.	0	1	2	3	4	5	6	7
16.	Conduct negotiations with potential suppliers to obtain agreement on pricing, delivery, and other terms.	0	1	2	3	4	5	6	7
	NTRACT EXECUTION, IMPLEMENTATION, AND ADMINISTRATION Prepare and/or issue purchase orders or contracts.	0	1	2	3	4	5	6	7
	Obtain legal review and approval of a contract when required.					4			
	Administer contracts/purchase orders from award to completion.					4			
20.						4			
	Resolve purchase order/contract differences with suppliers.					4			
	Resolve quality problems with suppliers.					4			
	Resolve payment problems with suppliers.					4			
24.	Verify that purchasing practices comply with established laws, policies and ethical principles.	0	1	2	3	4	5	6	-
FOI	RECASTING AND STRATEGIES								_
25.	Develop forecasts in the light of economic trends and conditions that affect	0	1	2	3	4	5	6	-
26.	procurement. Plan purchasing strategies based on forecasted data.	0	1	2	3	4	5	6	
	Formulate strategic plans and objectives.					4			
28.	Provide forecasted data of future market conditions to management and/or requisitioning departments.	0	1	2	3	4	5	6	7
29.	Provide forecasted data of future organization commodities requirements to suppliers.	0	1	2	3	4	5	6	7
	TERIAL FLOW	^		_	^		_	_	
	Define incoming material packaging requirements. Define incoming material transportation requirements.					4			
	Route inbound/outbound freight.					4			
	Trace inbound freight.					4			
	Supervise/monitor the activities of the receiving department.					4			
	Ensure that materials are distributed to user departments.					4			
	Resolve delivery/receiving problems.					4			
	ENTORY MANAGEMENT								-
	Organize and control the storage of materials					4			
	Organize and control the storage/disposal of hazardous/regulated materials					4			
	Determine sources of and reconcile inventory discrepancies.					4			
	Review inventory to verify that materials are rotating/turning. Handle obsolete equipment/materials, surplus equipment/materials, and scrap.					4 4			
)F	AL ESTATE FUNCTION								_
	Establish/maintain records of real estate owned by the organization.	0	1	2	3	4	5	6	-
	Direct/conduct the purchase, sale, and/or leasing of real estate.					4			
	Form/issue real property agreements.					4			
	Monitor the maintenance activities of organization-owned real estate.					4			

	Recommend/implement changes to the organization's purchasing and materials management policies as needed.	0	1	2	3	4	5 (6	7
47.	Develop new/alternate materials, equipment, and sources of supply.	0	1	2	3	4	5	6	7
48.	Develop a standardization program.	0	1	2	3	4	5	6	7
49.	Develop a cost-reduction/cost avoidance program (e.g., value analysis, consolidation of orders).	0	1	2	3	4	5	6	7
50.	Develop/utilize a computerized purchasing system.	0	1	2	3	4	5	6	7
51.	Develop/implement a minority/women/small business/disadvantaged supplier development program.	0	1	2	3	4	5	6	7
52.	Implement a material requirements plan (MRP).	0	1	2	3	4	5	6	7
53.	Implement a manufacturing resource plan (MRP II).	0	1	2	3	4	5	6	7
EX	TERNAL/INTERNAL RELATIONSHIPS								
	Develop/manage effective relationships with suppliers.	0	1	2	3	4	5	6	7
	Develop/manage effective relationships with other internal departments.	0	1	2	3	4	5	6	7
56.	Represent the buying organization in meetings with corporations, government agencies, professional associations, and other organizations.	0	1	2	3	4	5	6	7
	agencies, professional associations, and other organizations.					_		_	
	MINISTRATIVE ASPECTS OF THE PURCHASING DEPARTMENT	0	4	0	2	4	_	_	-,
	Develop goals and objectives of a purchasing department.	-			_	4	-		
58.	Plan and develop operating policies, guidelines, and procedures for the control of department work flow.	0	1	2	3	4	5	6	1
59.	Develop/utilize criteria for evaluating purchasing department performance.	0	1	2	3	4	5	6	7
60.	Ensure the maintenance of files of contracts, bids, agreements, and leases.	0	1	2	3	4	5	6	7
61.	Ensure the maintenance of records of capital equipment, vehicles, tools, etc.	0	1	2	3	4	5	6	7
62.	Ensure the maintenance of files on product/service specifications, descriptions, prices, lead times, etc.	0	1	2	3	4	5	6	7
63.	Prepare a purchasing department budget.	0	1	2	3	4	5	6	7
64.	Design operational forms.	0	1	2	3	4	5	6	7
PE	RSONNEL ISSUES								
	Supervise and delegate work to purchasing department staff.	0	1	2	3	4	5	6	7
66.	Hire/promote/dismiss purchasing department personnel.	0	1	2	3	4	5	6	7
67.	Evaluate purchasing staff performance.	0	1	2	3	4	5	6	7
68.	Conduct/authorize formal job training for the development of the professional competence of the staff.	0	1	2	3	4	5	6	7
69.	Resolve employee performance problems.	0	1	2	3	4	5	6	7

Please use the space below to write in any comments about this survey or add any additional tasks you believe are important to your position.

APPENDIX D: CHARACTERISTICS OF RESPONDENTS TO SURVEY

FIGURE 1: GENDER BREAKDOWN OF RESPONDENTS

	Frequency	Percent	Valid Percent
MALE	1,150	74.6	74.7
FEMALE	389	25.2	25.3
(Missing)	2	.1	
	2 11 -1-		
TOTAL	1,541	100.0	100.0

FIGURE 4: NAPM MEMBERSHIP STATUS OF RESPONDENTS

Fr	equency	Percent	Valid Percent
MEMBERS	1,278	82.9	83.5
NON-MEMBERS	252	16.4	16.5
(Missing)	11	.7	
TOTAL	1,541	100.0	100.0

FIGURE 2: ETHNICITY BREAKDOWN OF RESPONDENTS

Free	quency	Percent	Valid Percent
WHITE	1,445	93.8	94.1
BLACK	36	2.3	2.3
HISPANIC	30	1.9	2.0
ASIAN	15	1.0	1.0
NATIVE AMERICAN	5	.3	.3
OTHER	4	.3	.3
(Missing)	6	.4	
TOTAL	1,541	100.0	100.0

FIGURE 5: JOB TITLE OF RESPONDENTS

Frequency	Percent	Valid Percent
61	4.0	4.0
904	58.7	58.8
358	23.2	23.3
R 185	12.0	12.0
29	1.9	1.9
4	.3	
1,541	100.0	100.0
	61 904 358 185 29 4	61 4.0 904 58.7 358 23.2 R 185 12.0 29 1.9 4 .3

FIGURE 3: EDUCATION LEVEL OF RESPONDENTS

F	requency	Percent	Valid Percent
SOME H.S.	4	.3	.3
H.S. GRAD	91	5.9	5.9
SOME COLLEGE	468	30.4	30.4
BACHELOR'S	735	47.7	47.8
MASTER'S	222	14.4	14.4
LAW DEGREE	12	.8	.8
DOCTORATE	7	.5	.5
(Missing)	2	.1	
TOTAL	1,541	100.0	100.0

FIGURE 6: INDUSTRY AFFILIATION OF RESPONDENTS

		Frequency	Valid Percent
1) MANUFACTURING (U.S)	ELECTRONIC EQUIPMENT	69	4.5
	AUTOMOBILES	13	.8
	OTHER TRANS, EQUIPMENT	38	2.5
	APPLIANCES	8	.5
	MACHINERY	38	2.5
	METALS	37	2.4
	MINING	9	.6
	PAPER	11	.7
	PLASTICS/RUBBER TEXTILES	20	1.3
	FURNITURE/FIXTURES	7 10	.5 .6
	CHEMICALS	56	3.6
	PETROLEUM	11	.7
	CONSTRUCTION	21	1.4
	OTHER MANUFACTURING	207	13.4
		207	13.1
2) U.S. GOVERNMENT/	U.S. GOVT (NONMILITARY)	3	.2
PRIME CONTRACTOR	DEPT. OF DEFENSE	7	.5
	PRIV DEFENSE CONTRACTOR	61	4.0
	PRIV NONDEFENSE CONTRACT.	13	.8
3) STATE/LOCAL GOVMT	STATE GOVERMENT	14	.9
	COUNTY GOVERNMENT	49	3.2
	MUNICIPAL GOVT	115	7.5
4) INSTITUTIONAL	EDUCATION	120	7.8
	HOSPITALS	41	2.7
	OTHER NONPROFIT	9	.6
5) SERVICE	COMMUNICATIONS	15	1.0
-,	UTILITIES	89	5.8
	TRANSPORTATION	26	1.7
	BANKING	10	.6
	INSURANCE	13	.8
	FINANCE	1	.1
	REAL ESTATE	1	.1
	HOTELS/LODGING	2	.1
	OTHER SERVICE	20	1.3
6) RETAIL	RETAIL (RESALE)	52	3.4
,	RETAIL (NON-RESALE)	8	.5
	WHOLESALE	100	6.5
7) FOOD	AGRICULTURE	8	.5
,	RESTAURANTS	12	.8
	FOOD MFG	121	7.9
	FOOD DISTRIB	10	.6
	TOBACCO	6	.4
	OTHER FOOD	15	1.0

FIGURE 6, continued

ridekt v, continucu		
		Valid
	Frequency	Percent
ELECTRONIC EQUIPMENT	7	.5
AUTOMOBILES	3	.2
OTHER TRANS. EQUIPMENT	1	.1
APPLIANCES	1	.1
MACHINERY	1	.1
METALS	2	.1
PAPER	1	.1
PLASTICS/RUBBER	4	.3
CHEMICALS	4	.3
CONSTRUCTION	2	.1
OTHER MANUFACTURING	10	.6
OTHER	7	.5
(Missing)	2	.1
TOTAL	1,541	100.0
	AUTOMOBILES OTHER TRANS. EQUIPMENT APPLIANCES MACHINERY METALS PAPER PLASTICS/RUBBER CHEMICALS CONSTRUCTION OTHER MANUFACTURING OTHER (Missing)	ELECTRONIC EQUIPMENT 7 AUTOMOBILES 3 OTHER TRANS. EQUIPMENT 1 APPLIANCES 1 MACHINERY 1 METALS 2 PAPER 1 PLASTICS/RUBBER 4 CHEMICALS 4 CONSTRUCTION 2 OTHER MANUFACTURING 10 OTHER 7 (Missing) 2

FIGURE 7: SECTOR AFFILIATION OF RESPONDENTS

Freque	ency	Percent	Valid Percent				
MFG. (U.S.)	555	36.0	36.1				
U.S. GOVT./	84	5.5	5.5				
PRIME CONTRACTOR							
STATE/LOCAL GOVT.	178	11.6	11.6				
INSTITUTIONAL	170	11.0	11.0	FIGURE 9: PERO	ENTA	GE OF L	NITED
	177	11.5	11.5	STATES VS. INTI			
RETAIL	160	10.4	10.4	BY RES			BOTING
FOOD	172	11.2	11.2		0.00		
MFG. (EUROPE)	43	2.8	2.8	Fre	quency	Percent V	alid Percent
(Missing)	2	.1			quency	i crecint v	and refeem
				100% U.S.	791	51.3	51.8
TOTAL 1	,541	100.0	100.0	90% U.S./10% INTL.	499	32.4	32.7
				80% U.S./20% INTL.	106	6.9	6.9
				70% U.S./30% INTL.	39	2.5	2.6
				60% U.S./40% INTL.	20	1.3	1.3
FIGURE 8: ORGAN				50% U.S./50% INTL.	50% U.S./50% INTL. 14 .9	.9	
WHICH PURCHA				40% U.S./60% INTL. 8 .5		.5	
RESPONDEN	TS' F	EMPLOY	YER	30% U.S./70% INTL.	4	.3	.3
-				20% U.S./80% INTL.	8	.5	.5
			t Valid Percent	10% U.S./90% INTL.	21	1.4	1.4
TOP MANAGEMENT	598		39.0	100% INTL.	17	1.1	1.1
FINANCE	225		14.7	(Missing)	14	.9	
MFG/PROD/OPER	185		12.1	-			
MATRLS, MGMT.	198		12.9	TOTAL	1,541	100.0	100.0
ENGINEERING	17		1.1				
ADMINISTRATION OTHER	194		12.6				
	117		7.6				
(Missing)	7	.5					
TOTAL	1,541	100.0	100.0				

FIGURE 10: TOTAL NUMBER OF PURCHASING PERSONNEL IN THE RESPONDENT'S ORGANIZATION

Mean	28.023	Median	6.000	Mode	2.000
Std Dev	131.965	Variance	17,414.830		
Kurtosis	252.200	Skewness	14.212		
Range	2,999.000	Minimum	1.000	Maximum	3,000.000
Valid Case	es 1,504	Missing Case	es 37		

FIGURE 11: NUMBER OF PERSONNEL SUPERVISED BY THE RESPONDENT

Mean Std Dev	6.107 19.758	Median Variance	2.000 390.388	Mode	.000
Kurtosis	139.498	Skewness	10.630		
Range	326.000	Minimum	.000	Maximum	326.000
Valid Case	s 1,502	Missing Cases	39		

FIGURE 12: RESPONDENTS' YEARS IN PRESENT POSITION

Count	Midpoint					
538	2.00	***	******	******	*******	*
377	4.00	**	******	******	*****	
227	6.00	***	*******	***		
109	8.00	***	*****			
112	10.00	***	*****			
51	12.00	***	**			
23	14.00	**				
29	16.00	**				
9	18.00	*				
20	20.00	**				
10	22.00	*				
6	24.00	1				
4	26.00	1				
3	28.00	1				
3	30.00	1				
1	32.00	1				
0	34.00	1				
3	36.00	1				
0	38.00	i				
1	40.00	1				
		Ι	. + I +	I +	I + I	. + I
		0	8	16	24 32	40
				Perc	ent	
Mean	5.175		Median	3.000	Mode	2.000
Std Dev Kurtosis			Variance Skewness	24.876 2.356		
Range	39.000		Minimum	1.000	Maximum	40.000
					THE AMERICAN	70.000
valid Ca	ases 1,526		Missing Cases	15		

FIGURE 13: RESPONDENTS' YEARS WITH PRESENT EMPLOYER

Count	Midpoi	nt				
228	2.00	1	*******	******	*****	
243	4.00	1	*******	******	*****	
181	6.00	1	*********	*******	*	
106	8.00	1	*******	*		
113	10.00	1	***********	**		
103	12.00	1	******			
77	14.00	1	******			
78	16.00	1	******			
51	18.00	1	*****			
80	20.00	1	******			
37	22.00	1	*****			
38	24.00	j	*****			
34	26.00	1	*****			
21	28.00	1	***			
30	30.00	1	****			
14	32.00	1	**			
12	34.00	1	**			
10	36.00		**			
3	38.00	1	*			
7	40.00	1	*			
3	42.00	1	*			
2	44.00	1				
0	46.00	1				
0	48.00	1				
0	50.00	1				
0	52.00	1				
0	54.00	1				
0	56.00	1				
0	58.00	1				
0	60.00	1				
0	62.00	1				
1	64.00	İ				
		1.	+ I +	I + I .	+I	+ I
		0	4	8 12	16	20
				Percent		
Mean	10.744		Median	8.000	Mode	3.000
Std Dev	9.000		Variance	81.005		
Kurtosis	1.351		Skewness	1.193		
Range	64.000		Minimum	1.000	Maximum	65.000
Valid Cases	1,472		Missing Cases	69		

FIGURE 14: RESPONDENTS' YEARS IN PURCHASING

Cot	int	Midpoi	nt				
74		2.00	1	******			
122		4.00	I	******	******	**	
153		6.00	1	******	******	*****	
133		8.00	l	******	******	****	
178		10.00	1	*******	******	******	
128		12.00	1	********	******	***	
94		14.00	1	******	****		
166		16.00	1	*******	******	*****	
75	i	18.00	1	*******			
106		20.00	1	******	****		
45		22.00	1	******			
48		24.00	1	*******			
47		26.00	1	********			
15		28.00	1	***			
32		30.00	1	*****			
18		32.00	1	****			
8		34.00	1	**			
13		36.00	1	***			
4		38.00	1	*			
10		40.00	1	**			
2		42.00	1				
4		44.00	1	*			
			1	+ I +	I+.	I + I	+ I
			0	3	6	9 12	15
					Percen	nt	
	Mean	13.252		Median	12.000	Mode	10.000
	Std Dev	8.285		Variance	68.638		
	Kurtosis	.668		Skewness	.902		
	Range	43.000		Minimum	1.000	Maximum	44.000
	Valid Cases	1,475		Missing Cases	66		

FIGURE 15: RESPONDENTS' CERTIFIED PURCHASING MANAGER (C.P.M.) STATUS

FIGURE 16: RESPONDENTS' CERTIFIED PUBLIC PURCHASING OFFICER (CPPO) STATUS

DOES NOT HAVE PLANS TO COMPLETE HOLDS	509 595 437	Percent 33.0 38.6 28.4	DOES NOT HAVE PLANS TO COMPLETE HOLDS	1,502 27 12	Percent 97.5 1.8 .8
TOTAL	1.541	100.0	TOTAL	1,541	100.0

FIGURE 17: RESPONDENTS' PROFESSIONAL PUBLIC BUYER (PPB) STATUS

FIGURE 21: RESPONDENTS' PROFESSIONAL PURCHASER (P.P.) STATUS

	Frequency	Percent
DOES NOT HAVE	1,531	99.4
PLANS TO COMPLETE	6	.4
HOLDS	4	.3
TOTAL	1,541	100.0

	Frequency	Percent
DOES NOT HAVE	1,540	99.9
PLANS TO COMPLETE	1	.1
TOTAL	1,541	100.0

FIGURE 18: RESPONDENTS' CERTIFIED ASSOCIATE CONTRACTS MANAGER (CACM) STATUS

FIGURE 22: RESPONDENTS' CERTIFIED PURCHASING PROFESSIONAL (C.P.P.) STATUS

DOES NOT HAVE	Frequency 1,531	Percent 99.4
PLANS TO COMPLETE HOLDS	8 2	.5 .1
TOTAL	1,541	100.0

	Frequency	Percent
DOES NOT HAVE	1,537	99.7
PLANS TO COMPLETE	2	.1
HOLDS	2	.1
TOTAL	1,541	100.0

FIGURE 19: RESPONDENTS' CERTIFIED PROFESSIONAL CONTRACT MANAGER (CPCM) STATUS

FIGURE 23: RESPONDENTS' INSTITUTE OF PURCHASING AND SUPPLY CERTIFICATION (MInstPS) STATUS

	Frequency	Percent	
DOES NOT HAVE	1,514	98.2	DOE:
PLANS TO COMPLETE	18	1.2	PLAN
HOLDS	9	.6	HOLI
TOTAL	1,541	100.0	TOTA

	Frequency	Percent
DOES NOT HAVE	1,538	99.8
PLANS TO COMPLETE	1	.1
HOLDS	2	.1
TOTAL	1,541	100.0

FIGURE 20: RESPONDENTS' CERTIFIED IN PRODUCTION AND INVENTORY MANAGEMENT (CPIM) STATUS

FIGURE 24: RESPONDENTS' ASSOCIATION OF SUPERVISORS IN PURCHASING AND SUPPLY (ASPS) STATUS

	Frequency	Percent
DOES NOT HAVE	1,472	95.5
PLANS TO COMPLETE	46	3.0
HOLDS	23	1.5
TOTAL	1,541	100.0

	Frequency	Percent
DOES NOT HAVE	1,540	99.9
PLANS TO COMPLETE	1	.1
TOTAL	1,541	100.0

APPENDIX E: RESULTS OF TASK ANALYSIS

FIGURE 25: PERCENTS, MEANS, AND STANDARD DEVIATIONS FOR TASK STATEMENTS BY SECTOR AND FOR TOTAL SAMPLE

			MFG	CNTR	S/L GOVT	FSSI	SFRV	RETI	FOOD	EURP	TOT
PR	PROCUREMENT REQUESTS										
-:	Review purchase requisitions to determine	%	85.5	77.4	6.68	93.5	81.3	84.3	79.5	85.4	85.2
	their appropriateness with regard to	Σ	3.8	3.4	4.2	4.5	3.7	4.0	3.5	3.3	3.9
	organizational requirements.	S	2.3	2.6	2.2	2.1	2.4	2.4	2.4	2.1	2.3
7	Review purchase requisitions for proper	%	82.5	77.4	6.68	0.06	77.8	73.0	81.3	85.4	82.3
	authorization.	Σ	3.7	3.7	4.3	4.7	3.7	3.2	3.8	3.4	3.8
		S	2.5	2.6	2.4	2.3	2.6	2.5	2.5	2.4	2.5
3	3. Review purchase requisitions to determine	%	86.0	89.3	95.5	95.3	82.3	77.2	79.5	90.2	86.4
	their conformance with established laws,	Σ	3.8	4.7	5.4	5.5	4.2	3.2	3.6	3.6	4.2
	policies, and procedures.	S	2.3	2.4	1.9	1.9	2.5	2.4	2.4	2.2	2.4
4.	4. Review purchase requisitions against the	%	49.3	47.6	71.8	61.2	46.6	63.3	52.0	6.43	55.0
	requisitioner's or organization's budget.	Z	1.6		3.1	2.5	1.4	2.8	1.8	5.6	2.1
		S	2.1	2.3	2.5	2.5	2.0	2.5	2.2	2.4	2.4
S	5. Participate in product "make-or-buy"	%	84.6	73.5	59.3	0.09	63.6	54.1	80.0	92.9	72.5
	analyses.	Σ	3.8	2.7	2.2	2.4	2.3	2.5	3.3	4.3	3.0
		S	2.3	ői	2.3	2.4	2.3	2.7	2.4	2.2	2.4
9	6. Identify and/or select potential sources	%	98.4	91.7	6.86	99.4	0.96	97.5	98.2	0.001	8.76
	of services or supplies.	Σ	5.9	5.2	5.6	5.5	5.3	5.7	5.9	5.7	5.7
		S	1.5	2.1	1.6	1.6	1.9	1.6	1.5	1.3	1.6
(~	7. Participate in decisions to lease or buy	%	80.3	72.6	89.3	95.3	77.8	69.2	78.4	85.7	81.0
	equipment.	Σ	3.5	3.5	4.4	4.8	3.3	2.9	3.5	4.1	3.7
		S	2.4	2.6	2.3	2.0	2.4	2.5	2.5	2.3	2.4

TOTL 92.1 4.5 2.1 95.7 5.3 1.8 91.3 5.0 2.2 92.6 5.2 2.1 5.7 94.6 4.4 3.5 EURP MFG 4.3 97.6 97.6 5.9 1.5 0.001 97.6 4.2 1.9 0.001 3. 90.5 4.7 5.8 5.3 = FOOD 5.9 5.9 3.7 94.7 5.1 2.0 94.2 4.3 96.5 5.5 5.4 5.4 RETL 98.1 5.6 1.6 2.9 80.4 3.6 2.3 86.8 88.0 84.9 4.1 2.3 2.3 86.2 2.3 8 ci SERV 93.2 5.1 2.0 85.2 4.6 9.88 4.3 81.8 4.5 2.6 2.5 93.8 6.46 4. <u>..</u> ... 88.6 3.6 2.0 GOVT INST 3.0 96.4 5.4 1.8 8.86 8.86 5.2 99.4 5.6 1.5 95.3 6.1 5.9 3.7 5.7 96.6 5.8 1.9 0.96 5.9 97.2 5.9 1.7 94.4 3.8 1.8 81.9 2.7 1.9 9.1 S/L GOVT/ CNTR PRME 91.7 5.0 2.2 89.3 5.2 2.5 92.9 5.7 2.0 3.4 5.1 88.1 MFG 92.4 5.1 2.1 6.96 5. T 4 Ci 5.5 5.3 89.1 3.8 2.2 1.7 2.0 5.8 7.1 St Z ss N K TO S Z IS NES SZS NES S Z S SOLICITATION/EVALUATION OF PROPOSALS (RFQ, RFI, RFP) Analyze supplier performance using rating Develop/review product specifications, Solicit competitive bids with pertinent performance terms, and/or acceptance 13. Conduct supplier visits/evaluations to determine the overall best offer for a specifications, terms and conditions. 10. Determine appropriate methods of Evaluate competitive offerings to Issue requests for bids/quotations. procurement (e.g., blanket order, systems (e.g., weighted point, systems contracting). determine suitability. categorical method). SUPPLIER ANALYSIS FIGURE 25, continued product/service. criteria. 4. 11. 12. 6 ∞

FIGURE 25, continued	2	MFG	U.S. GOVT/ PRME CNTR	S/L GOVT	INST	SERV	RETL	FOOD	EURP	TOTL	
NEGOTIATION PROCESS											
 Prepare for and develop strategies and tactics for negotiations. 	% W S	97.5 5.2 1.8	97.6 5.1 1.8	87.5 3.6 2.3	91.8 4.2 2.1	92.0 4.5 2.0	87.4 3.9 2.2	94.8 5.1 2.0	97.7 5.7 1.4	93.7 4.7 2.1	
 Conduct negotiations with potential suppliers to obtain agreement on pricing, delivery, and other terms. 	5 W S	98.2 5.7 1.6	96.4 5.4 1.9	87.6 3.9 2.3	93.5 4.7 2.1	92.7 5.0 1.9	95.6 5.0 2.1	97.1 5.9 1.7	93.0 5.6 1.8	95.2 5.2 2.0	
CONTRACT EXECUTION, IMPLEMENTATION, & ADMINISTRATION	ATION										
 Prepare and/or issue purchase orders/contracts. 	% W S	94.1 5.3 2.1	84.5 5.2 2.6	95.5 5.7 1.9	95.3 5.7 1.9	85.1 4.6 2.6	96.8 5.8 1.8	93.0 5.5 2.1	93.0 4.4 2.2	93.0 5.3 2.1	
18. Obtain legal review and approval of a contract when required.	% W S	89.9 4.3 2.2	88.0 4.6 2.4	92.0 4.9 2.1	92.9 4.7 2.1	86.9 4.4 2.4	66.7 2.5 2.3	90.1 4.4 2.2	93.0 4.1 2.0	87.7 4.3 2.3	
 Administer contracts/purchase orders from award to completion. 	6 W N S	93.3 4.8 2.1	88.1 5.1 2.4	93.7 4.9 2.0	93.5 5.1 2.0	85.1 4.2 2.5	89.9 4.4 2.3	94.2 4.9 2.0	88.4 3.7 2.3	91.8 4.7 2.2	
20. Expedite deliveries and conduct follow-up procedures when necessary.	6 W S	90.3 4.2 2.3	89.3 4.5 2.3	94.9 4.3 2.0	91.8 4.1 2.1	83.0 3.5 2.4	97.5 4.7 1.9	91.2 4.4 2.2	86.0 3.1 2.1	90.8 4.2 2.2	
 Resolve purchase order/contract differences with suppliers. 	9 W S	97.7 5.4 1.7	97.6 1 5.7 1.7	100.0 5.5 1.4	98.8 5.3 1.5	92.0 4.7 2.2	99.4 5.4 1.4	98.2 5.6 1.6	100.0 4.6 1.4	97.7 5.3 1.7	
22. Resolve quality problems with suppliers.	9 W S	97.8 5.4 1.6	94.0 4.6 2.1	99.4 5.1 1.6	98.2 5.1 1.6	94.3 4.7 2.0	96.8 5.3 1.8	98.2 5.6 1.5	93.0 4.4 1.7	97.3 5.2 1.7	
23. Resolve payment problems with suppliers.	9 W S	92.8 4.3 2.1	91.7 4.2 2.1	93.8 4.0 2.0	95.3 4.2 1.9	89.2 4.1 2.2	85.4 3.9 2.4	94.7 4.6 2.0	95.3 4.2 1.7	92.2 4.2 2.1	

FIGURE 25, continued			U.S. GOVT/ PRME	S/L					EURP	
		MFG	CNTR		INST	SERV	RETL	FOOD	MFG	TOTL
24. Verify that purchasing practices comply with established laws, policies, and ethical principles.	S X %	96.2 5.1 1.9	95.2 5.6 2.0	99.4 6.0 1.5	99.4 5.8 1.5	95.5 5.3 1.9	87.8 3.9 2.2	97.1 5.1 1.8	97.7 5.0 1.8	96.1 5.2 1.9
FORECASTING AND STRATEGIES										
25. Develop forecasts in the light of economic trends and conditions that affect procurement.	S M S	87.5 4.0 2.3	73.5 2.4 2.1	76.1 2.8 2.2	78.8 3.1 2.3	83.0 3.5 2.2	84.9 3.7 2.3	86.6 4.4 2.3	100.0 5.0 1.6	84.0 3.7 2.3
26. Plan purchasing strategies based on forecasted data.	S X %	91.2 4.4 2.1	75.0 2.6 2.1	76.3 2.9 2.2	82.4 3.3 2.2	87.6 3.9 2.2	91.8 4.3 2.1	91.8 4.8 2.2	100.0 5.2 1.7	87.6 4.0 2.3
27. Formulate strategic plans and objectives.	% X S	91.0	81.0 3.1 2.3	81.9 3.2 2.2	84.7 3.7 2.2	88.1 4.2 2.3	89.9 4.1 2.1	91.8 4.7 2.2	100.0 5.4 1.6	88.6 4.1 2.3
28. Provide forecasted data of future market conditions to management and/or requisitioning departments.	% X S	88.4 3.9 2.2	70.2 2.4 2.2	75.6 2.7 2.2	79.4 3.1 2.2	84.1 3.5 2.3	77.8 3.3 2.3	88.3 4.4 2.3	97.7 4.4 1.9	83.6 3.6 2.3
 Provide forecasted data of future organization commodities requirements to suppliers. 	% W S	86.4 3.8 2.2	64.3 2.1 2.1	69.3 2.3 2.0	73.7 2.6 2.1	81.3 3.1 2.1	76.7 3.0 2.2	86.5 4.2 2.3	95.3 4.1 1.9	80.5 3.3 2.3
MATERIAL FLOW										
30. Define incoming material packaging requirements.	% W S	75.3 2.9 2.2	47.6 1.6 2.1	56.7 1.7 1.9	66.3 2.0 1.9	63.1 1.8 1.9	70.7 2.6 2.2	77.3 3.3 2.4	81.4 2.8 2.0	69.2 2.5 2.2
31. Define incoming material transportation requirements.	% X S	8. 4. 6. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	64.3 2.4 2.3	64.0 2.0 2.0	69.2 2.4 2.0	70.9 2.7 2.3	82.9 3.4 2.2	79.1 3.1 2.3	86.0 3.2 2.0	75.9 2.9 2.3

FIGURE 25, continued		MEG	U.S. GOVT/ PRME	S/L Govt	TSNI	SERV	RETL	FOOD	EURP	TOTL
32. Route inbound/outbound freight.	S M %	68.5 2.6 2.4	50.0 1.8 2.2		55.0 1.7 2.0	61.9 2.1 2.4	73.7 2.9 2.4	59.9 2.2 2.3	67.4 2.3 2.1	61.7 2.2 2.3
33. Trace inbound freight.	S X %	62.5 2.1 2.1	47.6 1.6 2.1	49.7 1.3 1.8	60.4	56.8 1.8 2.1	72.8 2.7 2.3	61.6 2.1 2.2	55.8 1.7 1.8	60.1 2.0 2.1
34. Supervise/monitor the activities of the receiving department.	% M S	52.6 2.0 2.4	39.3 1.6 2.4	63.3 2.9 2.7	68.0 3.4 2.8	51.1 2.0 2.5	75.3 3.2 2.4	55.2 2.0 2.4	60.5 1.8 2.1	57.5 2.4 2.6
35. Ensure that materials are distributed to user departments.	% Z %	49.4 1.7 2.2	38.1 1.3 2.0	70.1 3.0 2.6	72.8 3.4 2.6	46.0 1.7 2.3	66.5 2.7 2.5	53.5 2.0 2.3	51.2 1.7 2.1	55.6 2.2 2.4
36. Resolve delivery/receiving problems.	% X &	8.2.1 3.4.2.2	78.6 3.2 2.3	8. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	87.5 4.0 2.3	76.3 2.9 2.4	88.6 4.2 2.3	80.6 3.4 2.3	81.4 3.1 2.0	82.6 3.5 2.3
INVENTORY MANAGEMENT										
37. Organize and control the storage of materials.	% X %	85 0.1 1.0	31.0 1.0 2.0	65.0 3.0 2.7	68.0 3.2 2.7	42.0 1.8 2.5	78.6 3.7 2.6	52.9 2.3 2.6	54.8 2.1 2.4	54.6 2.3 2.6
38. Organize and control the storage/disposal of hazardous/regulated materials.	% X &	55 C	32.1 1.0 1.9	58.4 2.4 2.5	57.4 2.5 2.5	41.5 1.6 2.3	41.5	45.9 1.8 2.5	53.7 2.0 2.5	47.1 1.8 2.4
39. Determine sources of and reconcile inventory discrepancies.	% Z %	477	36.9 1.1 2.0	62.9 2.8 2.7	65.9 3.0 2.7	48.3 1.9 2.5	85.4 4.3 2.4	64.1 2.7 2.5	57.1 2.1 2.4	62.3 2.6 2.6

FIGURE 25, continued	MFG	U.S. GOVT/ PRME CNTR	S/L GOVT	INST	SERV	RETL	FOOD	EURP	TOTL
41. Handle obsolete equipment/materials, surplus equipment/materials, and scrap.	% 74.0 M 3.0 S 2.3	39.3 1.4 2.2	76.4 3.7 2.6	82.9 3.8 2.4	62.5 2.6 2.5	87.9 4.4 2.3	80.7 3.4 2.4	76.2 2.8 2.2	74.3 3.2 2.5
REAL ESTATE FUNCTION									
42. Establish/maintain records of real estate owned by the organization.	% 13.0 M .4 S I.1	14.3 .5 1.5	18.5 .8 1.9	24.4 .9 1.9	10.2	14.6 .5 1.5	11.6	36.6 1.0 1.6	15.3
43. Direct/conduct the purchase, sale, and/or leasing of real estate.	% 17.4 M .6 S .1.4	17.9 .6 1.6	20.2 .8 .1.9	28.6	12.0 .5 1.6	13.9	15.1 .6	43.9 1.2 1.8	18.5 7.
44. Form/issue real property agreements.	% 14.3 M .4 S 1.2	15.5	16.9 .7 1.8	24.4 .9 1.9	9.7	12.7	11.6	39.0 .9 1.5	15.5
45. Monitor the maintenance activities of organization-owned real estate.	% 16.5 M .5 S 1.4	22.6	19.7 .8 1.8	23.2 .8 11.7	13.7 .5 1.4	17.1 7. 7.1	.6 .1.7	43.9 1.2 1.8	18.1
SPECIAL CONSIDERATIONS FOR ENHANCING PURCH, PERF.	71.								
46. Recommend/implement changes to the organization's purchasing and materials management policies as needed.	% 97.0 M 5.2 S 1.7	92.7	98.2 5.2 1.7	99.4 5.6 1.5	97.0 5.2 1.8	95.9 5.1 1.8	93.4 5.0 2.0	95.2 5.2 1.8	96.6 5.2 1.8
47. Develop new/alternate materials, equipment, and sources of supply.	% 97.0 M 5.3 S 1.7	90.4 4.6 2.3	98.2 5.2 1.4	98.8 5.3 1.5	91.7 4.8 2.0	96.6 5.1 1.8	96.4 5.3 1.8	97.7 5.4 1.5	96.3 5.2 1.7
48. Develop a standardization program.	% 91,4 M 4,3 S 2,0	79.5 3.4 2.4	96.4 4.5 1.9	95.3 4.7 1.9	94.0 4.4 1.9	89.7 4.2 2.1	91.6 4.4 2.1	93.0 4.3 1.8	91.9 4.3 2.0

FIGURE 25, continued		U.S.							
	MFG	PRME	S/L GOVT	INST	SERV	RETL	FOOD	EURP MFG	TOTL
49. Develop a cost-reduction/cost-avoidance program (e.g., value analysis, consolidation of orders/suppliers).	% 96.2 M 5.1 S 1.8	90.4 4.2 2.2	92.2 4.4 1.9	95.8 4.8 1.8	94.6 4.8 1.9	91.2 4.4 2.1	96.4 5.2 1.8	95.3 5.1 1.7	94.7 4.9 1.9
50. Develop/utilize a computerized purchasing system.	% 92.8 M 5.2 S 2.0	88.0 5.1 2.3	92.2 5.0 2.2	92.3 5.2 2.1	89.9 4.8 2.3	92.6 5.3 2.0	93.4 5.2 2.1	100.0 5.7 1.4	92.3 5.2 2.1
51. Develop/implement a minority/women /small business/disadvantaged supplier development program.		86.6 4.7 2.4	79.6 3.4 2.4	74.4 3.3 2.6	72.5 3.3 2.6	44.9 1.4 1.9	72.5 2.9 2.4	57.1 2.0 2.1	71.8 3.0 2.5
52. Implement a material requirements plan (MRP).		54.9 2.2 2.5	45.8 1.5 2.0	44.0 1.5 2.0	48.8 1.7 2.1	51.0 1.9 2.3	70.1 3.0 2.5	69.0 2.9 2.4	58.2 2.3 2.4
53. Implement a manufacturing resource plan (MRP II).	% 61.6 M 2.5 S 2.5	47.6 1.8 2.4	27.7 .8 1.5	23.0 .7 1.5	31.9	35.4 1.1 1.9	59.3 2.3 2.4	60.5 2.2 2.2	46.3 1.7 2.3
EXTERNAL/INTERNAL RELATIONSHIPS									
54. Develop/manage effective relationships with suppliers.		97.6 5.8 1.6	99.4 5.6 1.4	100.0 5.8 1.1	97.6 5.7 1.4	99.3 5.8 1.2	98.8 6.3 1.1	100.0 6.0 1.0	99.0 6.0 1.3
55. Develop/manage effective relationships with other internal departments.	% 99.4 M 6.0 S 1.2	98.8 5.9 1.5	99.4 6.2 1.1	100.0 6.3 .9	98.8 6.0 1.1	96.6 5.3 1.7	99.4 6.1 1.2	100.0 6.0 1.0	99.1 6.0 1.2
56. Represent the buying organization in meetings with corporations, government Nagencies, professional associations, and other organizations.	% 95.8 M 5.1 S 2.0	91.6 5.0 2.2	95.8 5.3 1.9	95.8 5.5 1.9	95.2 5.4 2.0	92.6 4.7 2.2	92.8 5.0 2.1	97.6 4.4 2.0	94.9 5.1 2.0

FIGURE 25, continued	MFG	U.C GOVT, PRME G CNTR	, S/L GOVT	INST	SERV	RETL	FOOD	EURP MFG	TOTL
ADMINISTRATIVE ASPECTS OF THE PURCHASING DEPT	SING DEPT.								
 Develop goals and objectives of a purchasing department. 	% 93.2 M 5.2 S 2.1	84.3 4.5 1 2.6	91.6 5.1 2.2	5.8 5.8 1.7	91.7 5.4 2.1	92.6 5.0 2.1	94.6 5.4 2.0	100.0 5.4 1.8	93.0 5.2 2.1
58. Plan and develop operating policies, guidelines, and procedures for the control of department work flow.	م ده M 4.9 S	93.1	91.6 5.0 2.2	96.4 5.7 1.8	91.7 5.1 2.1	94.6 4.9 1.9	90.4 5.0 2.1	97.7 5.1 1.5	92.2 5.0 2.1
 Develop/utilize criteria for evaluating purchasing department performance. 	% 87.1 M 4.5 S 2.3	78.3 5 3.9 3 2.6	87.3 4.4 2.3	92.3 5.2 2.1	89.9 4.8 2.2	87.8 4.2 2.2	86.2 4.3 2.3	100.0 4.8 1.6	87.9 4.5 2.3
60. Ensure the maintenance of files of contracts, bids, agreements, and leases.	% 90.5 M 4.3 S 2.1	88.0 8 4.7 1 2.4	91.5 4.8 2.1	96.4 5.4 1.7	82.1 4.0 2.4	86.5 4.1 2.2	92.8 4.6 2.2	95.3 4.1 1.8	90.2 4.5 2.2
61. Ensure the maintenance of records of capital equipment, vehicles, tools, etc.	% 04.4 M 2.6 S 2.4	54.2 5 2.4 4 2.7	71.3	81.1 4.1 2.5	57.1 2.2 2.4	48.0 1.8 2.2	51.5 2.0 2.4	62.8 2.4 2.3	62.5 2.6 2.5
62. Ensure the maintenance of files on product/service specifications, descriptions, prices, lead times, etc.	% 86.7 M 4.0 S 2.2	72.3	87.2 3.9 2.1	94.6 4.4 1.9	79.2 3.3 2.3	89.2 4.3 2.1	86.8 4.2 2.2	88.4 4.1 2.1	86.3 4.0 2.2
63. Prepare a purchasing department budget.	% 68.4 M 3.5 S 2.8	54.2 5 2.7 8 2.9	77.2 4.3 2.8	83.9 4.8 2.6	73.1 4.0 2.8	58.8 2.7 2.7	72.3 3.8 2.8	90.7 4.6 2.4	71.0 3.7 2.8
64. Design operational forms.	% 76.6 M 3.2 S 2.4	5 74.7 2 3.3 4 2.6	89.2 4.2 2.2	89.8 4.5 2.2	70.2 2.8 2.4	72.1 3.0 2.4	73.3 3.0 2.4	93.0 3.7 1.8	78.4 3.4 2.4
PERSONNEL ISSUES									
65. Supervise and delegate work to purchasing department staff.	% 82.5 M 4.6 S 2.6	5 74.7 5 4.2 5 2.9	82.1 4.8 2.7	89.9 5.5 2.3	84.0 4.9 2.6	83.2 4.7 2.6	81.4 4.8 2.7	97.7 5.5 1.7	83.4 4.8 2.6

FIGURE 25, continued		2	MFG	U.S. GOVT/ PRME CNTR	S/L GOVT	INST	SERV	RETL	FOOD	EURP	TOTL
66. Hire/promote/dismiss purchasing department personnel.		7 % W S	70.7 4.0 2.9	59.0 3.3 3.1	67.9 4.1 3.0	81.7 5.0 2.6	72.6 4.2 2.9	67.8 3.7 3.0	73.1 4.2 2.9	90.5 4.9 2.2	71.7 4.1 2.9
67. Evaluate purchasing staff performance.		7 % 7 W S	75.9 4.4 2.9	69.9 3.8 3.0	75.6 4.4 2.9	85.2 5.2 2.5	79.8 4.7 2.7	75.7 4.2 2.8	79.0 4.5 2.8	97.6 5.3 1.8	78.0 4.5 2.8
68. Conduct/authorize formal job training for the development of the professional competence of the staff.		7 % M S	77.8 4.1 2.7	69.5 3.7 2.9	70.8 3.9 2.9	82.7 4.7 2.6	80.2 4.4 2.6	77.0 3.8 2.7	76.0 4.0 2.7	97.6 4.9 1.9	4.1 2.7
'69. Resolve employee performance problems.		7 % W S	75.4 4.2 2.8	66.3 3.6 3.0	73.8 4.3 2.9	84.0 5.0 2.5	78.6 4.6 2.7	73.0 4.0 2.8	78.4 4.3 2.7	97.6 5.0 1.8	76.8 4.3 2.8
	E .	FIGURE 26: PERCENTAGES OF RESPONDENTS PERFORMING EACH TASK BY SECTOR	6: PER ORMIN	CENTA	GES OI H TASK	URE 26: PERCENTAGES OF RESPONDE! PERFORMING EACH TASK BY SECTOR	ONDEN' CTOR	S			
** 75% or more * 50% to less than 75%		2	MFG	U.S. GOVT/ PRME CNTR	S/L GOVT	INST	SERV	RETL	FOOD	EURP	TOTL
PROCUREMENT REQUESTS											
 Review purchase requisitions to determine their appropriateness with regard to organizational requirements. 	o determine d to	*	*	* *	* *	*	*	* *	* *	* *	* *
Review purchase requisitions for proper authorization.	or proper	*	*	* *	* *	X- *-	* *	*	*	* *	* *
3. Review purchase requisitions to determine their conformance with established laws, policies, and procedures.	determine hed laws,	*		*	* *	* *	* *	* *	* *	* *	* *

FIGURE 26, continued		U.S.							
** Over 75% * Over 50%	MFG	GOVI/ PRME CNTR	S/L GOVT	INST	SERV	RETL	FOOD	EURP MFG	TOTIL
4. Review purchase requisitions against the requisitioner's or organization's budget.			*	*		*	*	*	*
Participate in product "make-or-buy" analyses.	* *	¥	*	*	*	*	*	* *	*
 Identify and/or select potential sources of services or supplies. 	*	* *	* *	* *	* *	*	*	*	* *
7. Participate in decisions to lease or buy equipment.	* *	*	* *	* *	* *	*	* *	* *	* *
SOLICITATION/EVALUATION OF PROPOSALS (RFQ, RFI, RFP)	RFI, RFI	-							
 Develop/review product specifications, performance terms, and/or acceptance criteria. 	X- X-	* *	* *	* *	* *	*	* *	*	* *
9. Issue requests for bids/quotations.	* *	* *	*· *	* X-	*	* *	* *	* *	*
 Determine appropriate methods of procurement (e.g., blanket order, systems contracting). 	* *	* *	* *	* *	* *	*	*	* *	* *
11. Solicit competitive bids with pertinent specifications, terms and conditions.	x. *	* *	*	-X -X	*	* *	*	* *	*
 Evaluate competitive offerings to determine the overall best offer for a product/service. 	* *	* *	* *	* *	* *	* *	* *	*	*
SUPPLIER ANALYSIS									
13. Conduct supplier visits/evaluations to determine suitability.	*· *	* *	*- *	*	* *	* *	* *	*	* *
14. Analyze supplier performance using rating systems (e.g., weighted point, categorical method).	*	*	*	* *	*	* *	* *	* *	*

-	FIGURE 26, continued		U.S.							
* *	** Over 75% * Over 50%	MFG	PRME CNTR	S/L GOVT	INST	SERV	RETL	FOOD	EURP	TOTL
	NEGOTIATION PROCESS									
	 Prepare for and develop strategies and tactics for negotiations. 	* *	* *	*	*	*	* *	* *	*	* *
	 Conduct negotiations with potential suppliers to obtain agreement on pricing, delivery, and other terms. 	*	* *	* *	* *	* *	* *	*	* *	*
Ū	CONTRACT EXECUTION, IMPLEMENTATION, & ADMINISTRATION	IINISTR	ATION							
	17. Prepare and/or issue purchase orders/contracts.	* *	X X	*	*	*	*	*	* *	*
	18. Obtain legal review and approval of a contract when required.	* *	* *	*	*	*	*	* *	*	* *
	 Administer contracts/purchase orders from award to completion. 	* *	*	* *	* *	*	*	* *	*	* *
	20. Expedite deliveries and conduct follow-up procedures when necessary.	*	*	* *	*	*	*	*	*	* *
	21. Resolve purchase order/contract differences with suppliers.	*	* *	* *	* *	*	*	* *	*	*
	22. Resolve quality problems with suppliers.	* *	* *	*	* *	* *	*	*	* *	* *
	23. Resolve payment problems with suppliers.	* *	*	*	*	* *	*	* *	* *	*
	24. Verify that purchasing practices comply with established laws, policies, and ethical principles.	* *	* *	* *	*	* *	* *	*	* *	*
_	FORECASTING AND STRATEGIES									
	25. Develop forecasts in the light of economic trends and conditions that affect procurement.	*	*	* *	*	*	*	* *	* *	* *

щ	FIGURE 26, continued		U.S.							
* *	** Over 75% * Over 50%	MFG		S/L GOVT	INST	SERV	RETL	FOOD	EURP MFG	TOTL
2	26. Plan purchasing strategies based on forecasted data.	* *	* *	* *	* *	* *	* *	* *	* *	* *
2	27. Formulate strategic plans and objectives.	X- *	* *	* *	*	*	* *	* *	* *	*
6	28. Provide forecasted data of future market conditions to management and/or requisitioning departments.	X- *-	*	* *	*	* *	*	* *	* *	* *
2	29. Provide forecasted data of future organization commodities requirements to suppliers.	* *	*	*	*	* *	*	* *	*	* *
2	MATERIAL FLOW									
33	30. Define incoming material packaging requirements.	* *		*	*	*	*	*	*	*
8	31. Define incoming material transportation requirements.	* *	*	*	*	*	* *	* *	* *	* *
8	32. Route inbound/outbound freight.	¥	*		*	*	*	*	*	*
ω	33. Trace inbound freight.	*		*	*	*	*	*	*	*
ε.	34. Supervise/monitor the activities of the receiving department.	*		*	*	*	* *	*	*	*
ω	35. Ensure that materials are distributed to user departments.			*	*		*	*	*	*
w	36. Resolve delivery/receiving problems.	X- *	* *	X- X-	* *	X · X ·	* *	* *	-X- -X-	* *
_	INVENTORY MANAGEMENT									
41	37. Organize and control the storage of materials.			· X ·	*		*	*	¥·	*

FIGURE 26, continued		U.S. GOVT/							
** Over 75% * Over 50%	MFG	PRME	S/L GOVT INST	INST	SERV	RETL	FOOD	EURP MFG	TOTL
38. Organize and control the storage/disposal of hazardous/regulated materials.			*	*				*	
39. Determine sources of and reconcile inventory discrepancies.	*		*	*		* *	*	*	*
40. Review inventory to verify that materials are rotating/turning.	*		*	*		* *	*	*	*
41. Handle obsolete equipment/materials, surplus equipment/materials, and scrap.	*		* *	*	*	* *	*	* *	*
REAL ESTATE FUNCTION									
42. Establish/maintain records of real estate owned by the organization.									
43. Direct/conduct the purchase, sale, and/or leasing of real estate.									
44. Form/issue real property agreements.									
45. Monitor the maintenance activities of organization-owned real estate.									
SPECIAL CONSIDERATIONS FOR ENHANCING PURCH. PERF	ιι.								
46. Recommend/implement changes to the organization's purchasing and materials management policies as needed.	* *	* *	* *	* *	* *	* *	* *	* *	* *
47. Develop new/alternate materials, equipment, and sources of supply.	* *	х *	*	* *	* *	*	* *	* *	* *
48. Develop a standardization program.	* *	Х *	*	*	* *	* *	* *	* *	* *

FIGURE 26, continued ** Over 75% * Over 50%	MFG	U.S. GOVT/ PRME CNTR	S/L GOVT	INST	SERV	RETL	FOOD	EURP MFG	TOTL
49. Develop a cost-reduction/cost-avoidance program (e.g., value analysis, consolidation of orders/suppliers).	* *	* *	* *	* *	* *	*	* *	*	*
50. Develop/utilize a computerized purchasing system.	* *	* *	* *	* *	*	*	*	* *	*
 Develop/implement a minority/women /small business/disadvantaged supplier development program. 	*	* *	* *	*	*		*	*	*
 Implement a material requirements plan (MRP). 	*	*				*	*	*	*
53. Implement a manufacturing resource plan (MRP II).	*						*	*	
EXTERNAL/INTERNAL RELATIONSHIPS									
54. Develop/manage effective relationships with suppliers.	* *	* *	* *	*	* *	* *	* *	* *	* *
55. Develop/manage effective relationships with other internal departments.	* *	* *	*	* *	*	* *	* *	* *	* *
 Represent the buying organization in meetings with corporations, government agencies, professional associations, and other organizations. 	* *	* *	* *	* *	* *	* *	* *	* *	* *
ADMINISTRATIVE ASPECTS OF THE PURCHASING DEPT	DEPT.								
 Develop goals and objectives of a purchasing department. 	*	* *	* *	* *	*	* *	*	*	*
58. Plan and develop operating policies, guidelines, and procedures for the control of department work flow.	*	* *	* *	* *	* *	*	* *	* *	* *

FIGURE 26, continued		U.S.							
** Over 75% * Over 50%	MFG	PRME	S/L GOVT INST	INST	SERV	RETL	FOOD	EURP MFG	TOTL
59. Develop/utilize criteria for evaluating purchasing department performance.	*	* *	* *	*	* *	*	* *	* *	* *
60. Ensure the maintenance of files of contracts, bids, agreements, and leases.	*	* *	*	*	* *	*	* *	* *	*
61. Ensure the maintenance of records of capital equipment, vehicles, tools, etc.	*	*	*	*	*		*	*	*
 Ensure the maintenance of files on product/service specifications, descriptions, prices, lead times, etc. 	* *	*	* *	*	* *	* *	* *	* *	*
63. Prepare a purchasing department budget.	*	*	* *	* *	*	*	*	* *	*
64. Design operational forms.	* *	* *	* *	* *	*	*	*	* *	*
PERSONNEL ISSUES									
65. Supervise and delegate work to purchasing department staff.	*	* *	*	*	*	*	* *	* *	* *
66. Hire/promote/dismiss purchasing department personnel.	*	*	*	* *	*	*	*	* *	*
67. Evaluate purchasing staff performance.	* *	*	*	* *	* *	*	*	* *	* *
68. Conduct/authorize formal job training for the development of the professional competence of the staff.	*	*	*	*	* *	*	* *	* *	* *
69. Resolve employee performance problems.	* *	*	*	* *	* *	*	* *	*	*

APPENDIX F: RESULTS OF CLUSTER ANALYSIS

FIGURE 27: AGGLOMERATION SCHEDULE USING AVERAGE LINKAGE (WITHIN GROUP)

				Stage Clust	er	
	Clusters	Combined		1st Appears	S	Next
Stage	Clst. 1	Clst. 2	Coefficient	Clst. 1	Clst. 2	Stage
1	1	7	3.413745	0	0	3
2	3	4	11.545241	0	0	5
3	1	5	15.840841	1	0	4
4	1	2	28.580715	3	0	5
5	1	3	39.141811	4	2	6
6	1	6	46.472973	5	0	0

FIGURE 28: DENDROGRAM USING AVERAGE LINKAGE (WITHIN GROUP)

Rescaled Distance Cluster Combine

CASE		0	5	10	15	20	25
Label	Seq	+	-+	+	+	-+	+
MFG.	1	+	+				
FOOD	7	+	+ -		+		
SERVICES	5		+		+	+	
US GOVT/	2				- +	+	+
PRME CNTI	R						
S/L GOVT	3		-+			+	1
INSTIT	4		- +				1
RETAIL	6						+

APPENDIX G: FINAL LIST OF TASKS AND ASSOCIATED KNOWLEDGE AREAS

PROCUREMENT REQUESTS

TASK 1. Review purchase requisitions to determine their appropriateness with regard to organizational requirements.

Knowledge of:

- Internal organization conditions leading to decisions to buy
 - A) Operational strategies
 - B) Financial strategies
 - C) Marketing strategies
- 2) Market conditions leading to decisions to buy
- Supplier/contractor marketing strategies and how they relate to buy decisions
- 4) Use of a short- and long-range materials/service plan
- Typical kinds of technical requirements for products or services
- Internal organizational opportunities for standardization, consolidation, and others

TASK 2. Review purchase requisitions for proper authorization. Knowledge of:

- Common organizational policies and procedures to assure that necessary approvals have been obtained
- Signing limits/Approval levels and thresholds

TASK 3. Review purchase requisitions to determine their conformance with established laws, policies, and procedures.

Knowledge of:

- 1) Laws and regulations affecting procurement
 - A) Safety laws
 - B) Health laws
 - C) Environmental laws
 - D) Confidentiality
- 2) Types of purchase requisitions
 - A) Standard requisitions
 - B) Traveling requisitions
 - C) Bills of material
 - D) Systems generated requisitions
- 3) Common organizational requirements for requisitions
 - A) Specifications and statements of work format and content
 - B) Justification to limit competition
 - C) Format and content of in-house estimates
 - D) Unauthorized ("back door") buying outside the purchasing department
- Socioeconomic goals and objectives as they relate to requisitions

TASK 4. Review purchase requisitions against the requisitioner's or organization's budget.

Knowledge of:

- 1) Budgetary review procedures
 - A) Procedures for budgeted vs. nonbudgeted acquisitions
 - B) Availability of funds
 - C) Funding cost reimbursables
- 2) Cost accounting structure and relevant codes
- Types and sources of funds and their relationship to required goods and services

TASK 5. Participate in product "make-or-buy" analyses.

Knowledge of:

- 1) Procedures for conducting "make-or-buy" analyses
 - A) Determining feasibility
 - B) Determining need
 - C) Methods/processes
 - 1.0 Analysis of components
 - 2.0 Break-even analysis
 - 3.0 Cost estimation processes
- 2) Factors influencing "make-or-buy" decisions
 - A) Long-term material supply implications
 - B) Strategic factors
 - C) Labor and other organizational constraints
 - D) Quality considerations
 - E) Risk
 - F) Supplier technical support capability
- 3) Cost issues
 - A) Definition of "total cost"
 - B) Relevant vs. irrelevant costs
 - C) Fixed vs. variable costs
 - D) Overhead
 - E) Buying costs
 - F) Making costs
 - G) Life-cycle costing
 - H) Opportunity costs
- 4) Post-audit evaluation of "make-or-buy" decision

TASK 6. Identify and/or select potential sources of services or supplies.

- 1) Degrees of competition and their effects on procurement
 - A) Full and open competition
 - B) Limited competition
 - C) Technical competition
 - D) Single Source
 - E) Sole Source
- 2) Nature of sources and their effects on procurement
 - A) Manufacturers vs. distributors
 - B) Large vs. small suppliers
 - C) National vs. local suppliers
 - D) International vs. domestic suppliers
 - 1.0 Exchange rates
 - 2.0 Payment processes
 - 3.0 Duties
 - 4.0 Transportation costs and timing
 - 5.0 Applicable laws
 - E) Mandatory sources of supply
 - F) Emergency sources
 - G) Small/small disadvantaged/labor surplus area suppliers
 - II) Cooperative/leveraged buying
- 3) Locating sources of supply
 - A) Buyers' guides
 - B) Business directories
 - C) Telephone directories
 - D) Chambers of commerce
 - E) Associations
 - F) Shows/Exhibits
 - G) Trade publications
 - H) Colleagues
 - I) Suppliers/salespersons

- J) Government sources
 - 1.0 International Trade Administration
 - 2.0 U.S. Trade Representatives
 - 3.0 Customs Department
 - 4.0 International Trade Commission
- K) International sources
- L) Minority supplier sources
- M) Mail
- N) Markets/Merchandise markets
- ()) Group purchasing organizations
- P) User departments
- O) Barter organizations
- 4) Factors related to the use of existing vs. new sources
 - A) Market conditions
 - B) Product complexity/technology changes
 - C) Urgency of need
 - D) Quality expectations
 - E) Supplier processes
 - F) Adequacy of competition
 - G) Cost versus value of sources
 - H) Long-term needs
 - I) Long-term relationships
 - J) Need for modification of supplier base
 - L) Change in supplier's organization
- Development and use of approved supplier lists, or "bid lists"
 - A) Preferred suppliers
 - B) Partnered suppliers
 - C) Certified suppliers
 - D) Prequalified suppliers
- TASK 7. Participate in decisions to lease or buy equipment

Knowledge of.

- 1) Types of leasing arrangements
 - A) Operating lease
 - B) Financial lease
 - 1.0 Full payout
 - 2.0 Partial payout
 - 3.0 Lease/purchase
 - C) Leveraged lease
 - D) Master lease
 - E) Dry lease
 - F) Sale and leaseback
 - G) Other types of leases
- 2) Types of lessors
 - A) Third-party lessors
 - B) Manufacturers
 - C) Banks
 - D) Other
- 3) Factors in a lease/buy decision
 - A) Inflation
 - B) Obsolescence
 - C) Maintenance services
 - D) Capital/budget considerations
 - E) Administrative overhead
 - F) Reimbursement from third parties
 - G) Interest
 - H) Ownership benefits
 - I) Limitation of sources of supply
 - J) Balance sheet considerations
 - K) Cash-flow analysis
 - L) Depreciation
 - M Tax considerations
 - N) Operating costs
 - O) Life of the asset
 - P) Residual value
 - Q) Customization of asset
 - R) "Bail-out" opportunities

- S) Payment schedules
- T) Insurance
- 4) Legal/accounting considerations
 - A) Uniform Commercial Code 2A Leasing
 - B) FASB-13
 - C) Other

SOLICITATION/EVALUATION OF PROPOSALS (RFQ, RFI, RFP)

TASK 8. Develop/review product specifications, performance terms, and/or acceptance criteria.

Knowledge of:

- Procedures for developing and/or reviewing specifications
 - A) Internal inputs
 - 1.0 Formal committee
 - 2.0 Informal
 - 3.0 Coordinator
 - B) External inputs
 - 1.0 Suppliers
 - 2.0 Consultants
 - 3.0 Industry standards, handbooks, and guides
- Methods of communicating physical and quality attributes of a product or service
 - A) Performance and design specifications
 - B) Functional versus technical specifications
 - C) Internal versus external specifications
 - D) Building quality into the manufacturing process
- 3) Specification problems/abuses
 - A) Gverspecification
 - B) Slanting specifications
 - C) Nonuse of generic specifications
- 4) Quality assurance
 - A) Definition of quality
 - B) Acceptance testing
 - C) Certification requirements
 - D) Levels of inspection

TASK 9. Issue requests for bids/quotations.

- 1) Types of solicitations
 - A) Sealed bidding/formal advertising
 - B) Competitive proposals
 - C) Restricted competition
 - D) Two-step bidding
 - E) Informal bids/quotations
 - F) Offers to buy versus offers to sell
 - G) Alternate/innovative proposals
 - H) FAX
- 2) Presolicitation conferences
 - A) When to use
 - B) How to arrange and conduct
 - C) Benefits
- D) Potential problems
- 3) Prebid or pre-proposal conferences
 - A) When to use
 - B) How to arrange and conduct
 - C) Benefits
 - D) Potential problems
- 4) Procedures for establishing bid dates
 - A) Issues dates
 - B) Opening/closing dates
- 5) Procedures for cancellation of solicitations

TASK 10. Determine appropriate methods of procurement. Knowledge of:

- 1) Factors in the decision to use competitive bidding and/or negotiations
 - A) Degree of competition/Market situation
 - B) Industry norms and standards
 - C) Urgency
 - D) Dollar value
 - E) Nature of product/service specifications
 - F) Type of contract desired
 - G) Procedure for selection of successful offer
- 2) Methods of procurement
 - A) Consignment methods
 - B) Blanket order
 - C) Systems contracting
 - D) Telephone order
 - E) Electronic order systems
 - F) Stockless buying/inventory systems
 - G) Purchase order draft/check with order
 - H) Petty cash/Credit card/Local small purchase
 - I) Standing orders
 - J) Other methods

TASK 11. Solicit competitive bids with pertinent specifications, terms and conditions.

Knowledge of:

- 1) General solicitation procedures and concepts
 - A) Comparability
 - B) Fairness/Business ethics
 - C) General format/content of bid requests
- 2) Regulations affecting the bidding process
 - A) Verbal versus written quotes
 - B) Existing product compatibility
 - C) FAX
- 3) Regulations influencing prices and contracts
 - A) Sherman Anti-Trust Act
 - B) Clayton Act
 - C) Robinson-Patman Act
 - D) Federal Trade Commission
 - E) Davis-Bacon and related Acts
 - F) Uniform Commercial Code
 - G) Prompt Payment Act
 - H) Service Contract Act
 - I) Walsh-Healey Public Contracts Act
 - J) Miller Act
 - K) Small Business Act
 - L) Buy America Act
 - M) Foreign Trade Agreements Act
 - N) Foreign Corrupt Practices Act
 - O) Federal Acquisition Act
 - P) False Claims Act
 - Q) Other federal/state/local regulations
- 4) Terms and conditions of solicitations and offers
 - A) Types of terms and conditions, and when to use them
 - B) Examples
- 5) Bonds and other types of surety
 - A) Bid Bonds
 - B) Performance Bonds
 - C) Payment Bonds
 - D) Others
- 6) Problems related to the solicitation and receipt of offers
 - A) Time extensions and amendments to solicitation
 - B) Late bids (w/o time extensions)
 - C) Offers with errors, irregularities, or omissions
 - D) Conflicts of interest
 - E) Protests
 - F) Confidentiality/Security

TASK 12. Evaluate competitive offerings to determine the overall best offer for a product/service.

Knowledge of:

- 1) Receiving, controlling, and abstracting offers
- 2) Offer responsiveness
 - A) Specifications/statements of work
 - B) Quality requirements
 - C) Terms and conditions
 - D) Product/service substitutions E) Nonresponsive/late bids and offers
- F) Use of technical proposals (unpriced)
- 3) Technical analysis
- 4) Operational analysis
- 5) Cost/price analysis
 - A) Price analysis methods
 - B) Profit analysis
 - C) Total cost versus unit cost
 - D) Learning curve
 - E) Life-cycle costing
- 6) Offeror responsibility
 - A) Past performance
 - B) Capacity
 - C) Skills
 - D) Integrity
- 7) Other factors

SUPPLIER ANALYSIS

TASK 13. Conduct supplier visits/evaluations to determine suitability.

- 1) Factors used to analyze offeror's ability to perform
 - A) Frequency and/or volume of orders
 - B) Length of time to process orders
 - C) Delivery
 - D) Quality
 - E) Product/service expenise
 - F) Order backlog
 - G) Contractor's "make-or-buy" program
 - II) Cycle/lead time
- 2) Factors used to analyze offeror's financial status
 - A) Balance sheets
 - B) Earnings statements
 - C) Cost-control history
 - D) Credit ratings
 - E) Annual reports
 - F) 10K reports
 - G) Financial Advisory Reports
 - H) Dun and Bradstreet Reports
 - I) Other factors
- 3) Factors used to analyze offeror's accounting system
 - A) Capability of segregating costs by task
 - B) Consistent treatment of cost
 - C) Compliance with cost accounting standards
- Factors used to analyze offeror's quality assurance, quality control, and related systems
 - A) Acceptance/rejection history
 - B) Testing capability
 - 1.0 Workers
 - 2.0 Machines
 - C) Process control
 - 1.0 SPC/SQC
 - 2.0 Six-Sigma/CpK Process Bonds
 - D) Organization and management of quality systems
 - E) System certification/validation

- Factors used to analyze offeror's organization and management
 - A) Top management commitment
 - B) Stability
 - C) Training of personnel
 - D) Technical competence/Service support
 - E) Equipment capabilities
 - F) General reputation
 - G) Industry status
 - H) Customer commitment
 - I) EEO program commitment
 - J) Subcontractor management
- 6) Factors used to analyze an offeror's labor status
 - A) Employee skills
 - B) Unionization
 - C) Contract expiration date
- 7) Issues in conducting plant visits/site inspections
 - A) Reasons for conducting visits
 - B) Costs vs. benefits of visits
 - C) Site inspection team
 - D) Factors appraised at site visits
 - 1.0 Housekeeping
 - 2.0 Process/material flow
- TASK 14. Analyze supplier performance using rating systems. Knowledge of:
 - Items typically analyzed using supplier performance ratings
 - A) Supplier capabilities
 - B) National vs. local capabilities
 - C) Pricing methods
 - D) Financial strength
 - E) Inventory locations
 - F) Delivery capabilities
 - 2) Supplier performance rating methods
 - A) Benchmarking
 - B) Weighted-point
 - C) Categorical
 - D) Cost-ratio
 - E) Total acquisition cost
 - 3) Factors that can distort ratings
 - 4) Issues in the dissemination of ratings

NEGOTIATION PROCESS

- TASK 15. Prepare for and develop strategies and tactics for negotiations.
 - Knowledge of:
 - 1) Conditions favoring the use of negotiations
 - A) Lack of competition
 - B) Price, quality, and service needs
 - C) Buying production/service capabilities
 - D) High buyer/seller uncertainty
 - E) Urgency
 - F) Long supplier lead times
 - G) Necessity for flexible contract type(s)
 - II) Lack of firm product specifications
 - I) Single source strategies
 - 2) Preparations for negotiations
 - A) Negotiation objectives
 - 1.0 Fair and reasonable price
 - 2.0 Timely performance
 - 3.0 Meeting the minimum essential needs of the organization
 - 4.0 Control over how the contract is performed
 - 5.0 Maximum contractor cooperation
 - 6.0 Sound relations with contractors

- B) Negotiation site
- C) Team selection
- D) Relevant information (e.g., proposals, learning curves)
- E) Analysis of seller's and purchaser's positions
 - 1.0 Seller's desire for a contract
 - 2.0 Seller's certainty of getting a contract
 - 3.0 Amount of time for negotiation
 - 4.0 Adequacy of cost/price analysis
 - 5.0 Purchaser's availability of other options
 - 6.0 Seller's competitive position (sole source or otherwise)
 - 7.0 Skill of the negotiator/negotiation team
 - 8.0 Extent of planning for the negotiation
- F) Market and product conditions
- G) Development of strategies and tactics
- TASK 16. Conduct negotiations with potential suppliers to obtain agreement on pricing, delivery, and other terms.

Knowledge of:

- 1) Negotiation tactics
- 2) Special considerations in conducting negotiations
 - A) Fact-finding sessions
 - B) Best and final offers
 - C) Negotiating with sole offer or vs. entire competitive range
 - D) Negotiating small business and small-disadvantaged business subcontracting plans
 - E) Documentation of negotiations

CONTRACT EXECUTION, IMPLEMENTATION, AND ADMINISTRATION

TASK 17. Prepare and/or issue purchase orders/contracts.

- 1) Elements of a contract
 - A) Offer and acceptance
 - 1.0 Counter offers
 - 2.0 Acknowledgment
 - 3.0 U.C.C. Section 2-207 (Acceptance)
 - B) Consideration
 - C) Competent parties
 - D) Legality of purpose
- 2) Types of obligation documents
 - A) Written versus oral contracts
 - Reasons for written contracts
 Circumstances where oral contracts are acceptable.
 - 3.0 Statute of Frauds
 - B) Purchase orders
 - C) Letters of intent
 - 1.0 Purpose
 - 2.0 Types
 - 2.1 Binding
 - 2.2 Nonbinding
 - D) Types of contracts
 - 1.0 Fixed price
 - 2.0 Cost reimbursable
- 3) Purchase order confirmations and acknowledgments
 - A) When to use
 - B) Unilateral vs. bilateral instruments
 - C) Exceptions to terms and conditions
 - 1.0 Seller's exceptions to purchaser's items
 - 2.0 Purchaser's exceptions to seller's items

 D) "Battle of the forms"

- 4) Considerations in preparing obligation documents
 - A) Advance notification and consent to subcontract
 - B) Notice of awards
 - Notification/debriefing of unsuccessful bidders
 1.0 Resolution of protests

TASK 18. Obtain legal review and approval of a contract when required.

Knowledge of:

- 1) Law of Agency
 - A) Definition of Agent
 - B) Fiduciary Duty
 - C) Limits of Authority
 - D) Actual vs. Apparent Authority
 - E) Ratifications
- 2) Role of legal counsel
- 3) Examples of issues requiring legal advice
 - A) Force-majeure
 - B) Comity
 - C) Patents
 - D) Copyrights
 - E) Restraint of trade issues
 - F) Assignability provisions
 - G) Source code escrow accounts
 - H) Domestic vs. international legal relationships
 - I) Protests
 - J) Claims
 - K) Insurance and indemnification
 - L) Limitation of liability
 - M) Waiver of consequential damages
 - N) Collusive offers
 - O) Suspension
 - P) Exceptions to approved terms and conditions
 - Q) Special contractual circumstances
 - 1.0 Large Contracts
 - 2.0 Single/sole source contracts
 - R) Reservation of Rights
 - S) Estoppel
 - T) Parolc Evidence Rule
 - U) Hazardous/regulated materials

TASK 19. Administer contracts/purchase orders from award to completion.

Knowledge of:

- 1) Contract administration concepts
 - A) Work control
 - B) Compliance
 - C) Financial responsibility
 - D) Approving systems
 - E) Administrative responsibilities
 - 1.0 Price adjustment clauses
 - 2.0 Negotiation of change orders
- 2) Supplier management concepts
 - A) Standards of performance
 - B) Supplier feedback
 - C) Supervision of supplier
 - 1.0 On-site
 - 2.0 Remote
 - D) Management by exception
 - E) Progress reports

TASK 20. Expedite deliveries and conduct follow-up procedures when necessary.

Knowledge of:

- 1) Circumstances requiring follow-up and expediting
 - A) Adequacy of delivery schedules
 - B) Open orders
 - C) Back orders

- D) Late orders
- E) Short-cycled requests
- 2) Expediting procedures
- 3) Follow-up procedures
 - A) Late deliveries
 - B) Future deliveries
 - C) Short lead requisition
- 4) Expediting and follow-up personnel
 - A) By buyers
 - B) By separate staff
- 5) Types of data used for expediting and follow-up

TASK 21. Resolve purchase order/contract differences with suppliers.

Knowledge of:

- 1) Typical purchase order/ contract problems
 - A) Description errors
 - B) Pricing errors/omissions
 - C) Failure or refusal to perform
 - 1.0 Anticipatory breach
 - 2.0 Anticipatory repudiation
 - D) Liability issues
 - 1.0 Customary limitations to supplier liability
 - 2.0 Consequential damages
 - 3.0 Hold harmless/indemnification
 - 4.0 Insurance
 - 5.0 Risk of loss/liability
 - E) Financially troubled suppliers
 - 1.0 Milestone payments
 - 2.0 Early possession of materials
 - 3.0 Bankruptcy
 - 4.0 Bond issues
 - F) Delivery/Transportation problems
 - G) The "Law of Mistake"
 - H) Acceptance/rejection/revocation
 - I) Modification, Recision, and Waiver
 - J) Breach of Contract/Default/Remedies
 - 1.0 Cure
 - 2.0 Cover
 - 3.0 Incidental damages
 - 4.0 Liquidated damages
 - 5.0 General damages
 - 6.0 Consequential and actual damages
 - K) Termination of contract
 - 1.0 For cause/default
 - 2.0 For convenience
 - 3.0 Frustration of purpose
 - 4.0 Excusable delays
- 2) Settling disputes
 - A) Arbitration
 - B) Mediation
 - C) Renegotiation
 - D) Reformation
 - E) Litigation
- 3) Warranties
 - A) Express
 - B) Implied
 - 1.0 Title and authority to sell
 - 2.0 Merchantability
 - 3.0 Fitness for intended purpose
 - C) Effective date

TASK 22. Resolve quality problems with suppliers. Knowledge of:

- 1) Product inspection/rejection rights
 - A) Right to inspect
 - B) Right to return goods
 - C) Right to withhold payment

- D) Disposition of nonconforming goods
 - 1.0 Accept
 - 2.0 Reject
 - 3.0 Rework
- E) Obligation to give timely written notice
- 2) Certification procedures
 - A) Elimination of inspections
 - B) Audit routines
- 3) Revocation of acceptance
- TASK 23. Resolve payment problems with suppliers.

Knowledge of:

- 1) Progress/milestone payments
 - A) How to implement
 - B) How to protect against loss
- 2) Partial payments not directly linked to performance
 - A) Potential problems
 - B) How to protect against loss
- 3) Cost/price overruns
 - A) Implications in fixed price/cost-type contracting
 - B) Purchaser's obligations
 - C) Supplier's obligations
- 4) Issues pertaining to the funding and control of cost reimbursable-type contracts
- 5) Invoice problems
 - A) Supplies not delivered/services not performed
 - B) Supplies/services delivered but not accepted
 - C) Errors
 - D) Debit/credit memos
 - E) Open orders
- 6) Accounts payable problems
 - A) Discrepancies between original P.O. and invoice
 - B) Delinquent payments
 - C) No receiving report
 - D) Credit holds
 - E) Tax considerations
- 7) Implications of the time-value of money
- TASK 24. Verify that purchasing practices comply with established laws, policies, and ethical principles.

Knowledge of:

- 1) Laws governing issues in ethics
 - A) Libel
 - B) Slander
 - C) Disparagement
 - D) Bribery
- 2) Issues in ethical purchasing practices
 - A) Loyalty to employer
 - B) Conflict of interest
 - C) Fairness
 - D) Gifts and gratuities
 - E) "Sharp" practice
 - F) Handling of information/confidentiality
 - G) Misrepresentation of authority
 - H) Other
- 3) NAPM Principles and Standards of Purchasing Practice

FORECASTING AND STRATEGIES

- TASK 25. Develop forecasts in the light of economic trends and conditions that affect procurement.
 - Knowledge of:
 - 1) Purpose of forecasting
 - A) Quantity
 - B) Availability
 - C) Price
 - 2) Economic concepts and terms used in forecasting

- A) Price Indices
 - 1.0 P.P.I.
 - 2.0 C.P.I.
 - 3.0 Implicit price deflator
- B) Interest Rates
- C) Economic Indicators
 - 1.0 Leading
 - 2.0 Lagging
 - 3.0 Coincident
- D) Inflation/Deflation
- E) Capacity Utilization
- F) Economic Indexing
- 3) Sources of data used in forecasting
 - A) Government publications (International and U.S. Domestic)
 - 1. Survey of current business
 - 2. Federal Reserve Bulletin
 - B) Private publications
 - 1. NAPM Report on Business
 - C) Commercial forecasts
 - D) Regional surveys
 - E) Internal historical data
- 4) Forecasting methodologies/techniques
 - A) Short-term vs. long-term forecasting
 - B) Macro vs. micro forecasting
 - C) Delphi concept
 - D) Correlation/regression analysis
 - E) Time series
 - F) Central tendency
 - G) Variability
 - II) Analysis of cyclical data
 - I) Trend analysis
 - J) Graphs and charts
 - K) Tabular data
- 5) Factors that can affect forecasts
 - A) Fluctuating lead times
 - B) Changing labor conditions
 - C) Changes in money markets
 - D) Political factors
- Supply markets relative to short- and long-term buying needs
- TASK 26. Plan purchasing strategies based on forecasted data. Knowledge of:
 - 1) Forecasts of volume
 - A) Determining annual requirements
 - B) Part (or product) life
 - 2) Buying strategies
 - A) Hand-to-mouth buying
 - B) Buying to requirements
 - C) Forward buying
 - D) Speculative buying/Volume Purchase Agreements
 - E) Life-of-product supply
 - F) Just-in-Time
 - G) Consignment
 - 3) Implementation techniques
 - A) Hedging
 - B) Spot buying
 - C) Dollar averaging
 - D) Contracting
 - 1.0 Long term contracting
 - 1.1 Escalation clauses
 - 1.2 Life-of-product contracts
 - 1.3 Multiyear contracting
 - 2.0 Future delivery contracting
 - 3.0 Use of options
 - 4.0 Buying capacity reserves
 - E) Decision tree process

TASK 27. Formulate strategic plans and objectives.

Knowledge of:

- 1) Issues in Strategic Planning
 - A) Purchasing support for organizational strategy
 - B) Planning process and objectives
 - C) Planning time frames
 - D) Developing commodity plans
 - E) Developing contingency plans
 - F) Decision making
 - G) Profit planning
 - H) Periodic review
 - I) Advanced acquisition planning

TASK 28. Provide forecasted data of future market conditions to management and/or requisitioning departments.

Knowledge of:

- 1) General issues in economics
 - A) Industries, firms, and markets
 - B) International markets
 - C) Business cycles and trends
 - D) Transportation trends
 - E) Economic indicators
 - 1.0 Money supply
 - 2.0 Interest rates
 - 3.0 Inflation
 - 4.0 Level of employment
 - 5.0 Trade and exchange rates
 - 6.0 Balance of trade and payments
 - F) Governmental budgeting
 - G) Political stability/instability
 - H) World industrial migration
 - 1) Import/Export issues
 - 1.0 Free trade vs. protectionism
 - 2.0 Countertrade
 - 3.0 Other
 - J) Environmental

TASK 29. Provide forecasted data of future organization commodities requirements to suppliers.

Knowledge of:

- 1) Effects of early supplier involvement
 - A) Manufacturing process
 - B) Capital acquisitions budget
 - C) Product or service development/implementation
 - D) Cost
 - E) Quality
 - F) Availability
 - G) Technology
 - II) Design
 - I) Product codevelopment
 - J) Cycle time

MATERIAL FLOW

TASK 30. Define incoming material packaging requirements.

Knowledge of:

- 1) Typical packaging needs and methods
- 2) Factors of good package design
 - A) Standard quantities
 - B) Pricing
 - C) Product/package adaptability
 - D) Protective level
 - E) Handling ability
 - F) Liability
 - G) Conformance to regulations
- 3) General issues related to packaging

- A) Industrial packaging requirements
- B) Product protection vs. cost factors
- C) Bulk versus packaging by application
- D) Environmental considerations
 - 1.0 Packaging reduction
 - 2.0 Recyclability
 - 3.0 Use of recycled materials
- E) Kanban Concepts
 - 1.0 Reusable containers
 - 2.0 Containers as a replenishment signal
- F) Interactions with other areas of the organization
 - 1.0 Production
 - 2.0 Logistics/ Supply management
- G) Hazardous material packaging
- H) Marking and labeling
 - 1.0 Bar coding
 - 2.0 Shelf life

TASK 31.Define incoming material transportation requirements. Knowledge of:

- 1) Carrier modes
 - A) Air
 - B) Rail
 - C) Truck
 - D) Water
 - E) Pipeline
 - F) Intermodal
- 2) Carrier types
 - A) Supplier delivered goods
 - B) Common carriers
 - C) Contract
 - D) Private
 - E) Exempt
 - F) SpecialG) Third party
 - 1) Initia party
 - 1.0 Freight forwarder
 - 2.0 Shipping associations
 - 3.0 Freight brokers
- 3) Carrier evaluation and selection
 - A) Defining quality attributes
 - B) Special services
 - C) Carrier delivery reliability and measurement
- 4) Freight bill auditing (pre and post)
 - A) Use of outside firms
 - B) Internal auditing
- 5) Regulation
 - A) Laws governing carriage
 - 1.0 Time limit on payment
 - 2.0 Time limit on settling claims
 - 3.0 Recovery of damages
 - B) Regulatory reforms
 - 1.0 Air
 - 2.0 Water
 - 3.0 Truck
 - 4.0 Rail
 - 5.0 Pipeline
 C) Ship America Laws
 - D) Fly America Laws
 - E) Regulations in countries outside the U.S.A.
 - 1.0 Cabotage laws
 - 2.0 Other
 - F) Interstate Commerce Commission
- 6) Carrier obligations and liabilities
- 7) Carrier insurance levels
- 8) Carrier documentation and licenses

TASK 32. Route inbound/outbound freight.

Knowledge of:

- 1) Categories of rates
 - A) Contract
 - B) Exception
 - C) Commodity
 - D) Class
 - E) Published
 - F) Negotiated rates and discounts
- 2) Factors in the establishment of freight rates
 - A) Class
 - B) Commodity
 - C) Geography
 - D) Terminals and handling
 - E) Size and weight
- 3) Time value
- 4) General customs clearance procedures
 - A) Customs brokers
 - B) Time delay
 - C) Documentation
- 5) Transportation terms
- 6) Service charges
 - A) Demurrage and detention
 - B) Split delivery
 - C) Diversion and reconsignment
 - D) Redelivery charges
- 7) Buying effective transportation
 - A) Traffic management
 - B) Coordinating with suppliers
 - C) Private fleets
 - D) Scheduling

LASK 33. Trace inbound freight.

Knowledge of:

- 1) Tracing systems
 - A) Manual
 - B) Electronic

TASK 34. Supervise/monitor the activities of the receiving department.

Knowledge of:

- 1) Procedures for classifying incoming materials for qual
 - ity control purposes
 - A) Awaiting inspection
 - B) Acceptance upon certification
 - C) Rework
 - D) Return
 - E) Materials to be tested
- 2) Receiving process
 - A) Unloading and checking the shipment
 - 1.0 Incomplete shipments
 - 2.0 Miscounts
 - B) Unpacking and inspecting
 - 1.0 Obvious damage
 - 2.0 Concealed damage
 - 2.1 Notification
 - 2.2 Right of inspection
 - 2.3 "Do not disturb"
 - 2.4 Proof/photographs
 - C) Receiving reports/documentation
 - D) Delivery of material
- 3) Receiving systems
 - A) Bar coding
 - B) Key ReQ
- Issues regarding the separation/integration of purchasing and receiving
 - A) Impact on supplier performance

- B) Internal security
- 5) "Right-to-Know" laws and procedures
- Procedures for receipt, inspection, and acceptance of service.
- 7) Procedures for return of goods to suppliers

TASK 35. Ensure that materials are distributed to user departments. Knowledge of:

- 1) "Dock-to-stock" processes
- 2) Concepts of "customer certification"
 - A) Requisitioners as customers
 - B) Closed-looped information cycles
 - C) Follow-up with requisitioners

TASK 36. Resolve delivery/receiving problems.

Knowledge of:

- 1) Ownership issues
 - A) Point of acceptance
 - 1.0 On delivery
 - 2.0 After inspection
 - 3.0 After functional/performance specifications are met
 - 4.0 At payment
 - B) Title liability relationships
- 2) Transportation documentation
 - A) Bill of lading
 - B) Manifest
 - C) Delivery receipt
 - D) International documents
- 3) Sources of potential receiving problems
 - A) Terms and conditions
 - B) Delivery dates
 - C) Supplier position on resolving discrepancies
 - D) Pay policies on material discrepancies
 - E) Paperwork matching process
 - F) Special handling
 - 1.0 Perishable
 - 2.0 Hazardous 3.0 Shelf life

INVENTORY MANAGEMENT

TASK 37. Organize and control the storage of materials. Knowledge of:

- 1) Inventory classifications
 - A) Raw materials
 - B) In-process
 - C) Finished goods
 - D) MRO
 - E) Resale goods
 - F) Capital goods
 - G) Construction materials
 - II) Hard goods/soft goods
 - I) Components
- 2) Inventory management systems
 - A) Order-point (e.g., EOQ)
 - B) EOQ
 - C) Cyclical
 - D) Cycle counting
 - E) Just-in-Time
 - F) Other
- 3) Procedures for determining when to order materials
 - A) Usage rates/demand variation
 - B) Safety stock
 - C) Unique items
 - D) Lead time

- 4) Stores management systems
 - A) Open stores
 - B) Closed stores
 - C) Random access
 - D) Automated warehouse approach
- 5) Contractor operational systems

TASK 38. Organize and control the storage/disposal of hazardous/regulated materials.

Knowledge of:

- Types of hazardous/regulated materials and how they are handled and stored
 - A) Chemicals
 - B) Radioactive materials
 - C) Flammables
 - D) Explosives
 - E) Medical wastes
 - F) Packaging materials
 - G) CFCs and HCFCs
 - H) Other materials defined as hazardous or regulated
- 2) Options for disposal
 - A) Waste services
 - B) Recovery/conversion/redistribution
 - C) On-site disposal
 - D) Local vs. long distance
- 3) Legal issues regarding hazardous wastes
 - A) Regulations
 - 1.0 OSHA
 - 1.1 General concepts
 - 1.2 Material Safety Data Sheets
 - 1.3 Documentation of required training
 - 2.0 Hazardous Materials Transportation Act
 - 3.0 National Environmental Policy Act
 - 3.1 EPA
 - 4.0 Federal Register
 - 5.0 Resource Recovery and Conservation Act (RERA)
 - 6.0 State/local regulations
 - B) Ownership and liability/Insurance
 - 1.0 While on premises
 - 2.0 After disposal
 - 3.0 Traceability
 - 4.0 In transit
- Political/social issues related to hazardous waste disposal
- 5) Methods to minimize the creation of hazardous wastes
 - A) Use 100% of material in process
 - B) Monitor initial purchasing practices

TASK 39. Determine sources of and reconcile inventory discrepancies.

Knowledge of:

- 1) Concepts of inventory control
 - A) Perpetual vs. periodic
 - B) Inventory flow control procedures
 - 1.0 Record systems
 - 2.0 Audit trails
 - 3.0 Cycle counting
 - 3.1 Frequency
 - 3.2 Triggering criteria
 - 4.0 Physical counting
 - C) Inventory reconciliation procedures
 - 1.0 Consignment
 - D) External inventory specialists

TASK 40. Review inventory to verify that materials are rotating/turning.

Knowledge of:

- 1) ABC Concept
- 2) Turnover rates
- 3) Dependent/independent inventory
- 4) Shelf life and expiration rates5) Valuation of inventory
 - A) LIFO
 - B) FIFO
 - C) Average
 - D) Lower of cost or market

TASK 41. Handle obsolete equipment/materials, surplus equipment/materials, and scrap.

Knowledge of:

- 1) Reasons for the disposition of obsolete/surplus materials
 - A) Investment recovery
 - B) Space management
 - C) Technical and economic obsolescence
- 2) Reasons for placing disposal function with purchasing
 - A) Access to services/sources
 - B) Knowledge of requisitioners' ordering habits
 - C) Knowledge of market
- 3) Classes of materials subject to disposal
 - A) Surplus/obsolete inventory
 - B) Surplus/obsolete equipment, tooling, and fixtures
 - C) Scrap
 - D) Waste
- 4) Methods of disposal
 - A) Return, resale, or trade-in to suppliers
 - B) Use in other parts of the organization
 - C) Sale
 - 1.0 To other organizations
 - 2.0 To the public/not-for-profit
 - 3.0 To employees
 - 4.0 To dealers and brokers
 - 5.0 To recycling centers
 - 6.0 To flea markets/swap meets
 - 7.0 At auctions
 - 8.0 Lot sales
 - 9.0 Determining "Fair Market Value"
 - 10.0 Other
 - D) Donations
 - E) Disposal/recycling
 - F) "Abandon in place"
 - G) Cannibalization
- 5) Legal issues regarding the disposal of materials
 - A) Warranties
 - B) Liability
 - C) Tax implications and benefits
 - D) Applicable regulations

REAL ESTATE FUNCTION

TASK 42. Establish/maintain records of real estate owned by the organization.

** DROPPED BY COMMITTEE **

TASK 43. Direct/conduct the purchase, sale, and/or leasing of real estate.

** DROPPED BY COMMITTEE **

TASK 44. Form/issue real property agreements.

** DROPPED BY COMMITTEE **

TASK 45. Monitor the maintenance activities of organization - owned real estate.

** DROPPED BY COMMITTEE **

SPECIAL CONSIDERATIONS FOR ENHANCING PURCHASING PERFORMANCE

TASK 46. Recommend/implement changes to the organization's purchasing and materials management policies as needed.

Knowledge of:

- 1) The scope of the buying function
 - A) Purchasing/Procurement
 - B) Contracting
 - C) Materials management
 - D) Supply management
 - E) Logistics
 - F) Licensing
- 2) The role of purchasing in organizational strategies
 - A) Public sector
 - B) Private sector
 - C) Not-for-profit

TASK 47. Develop new/alternate materials, equipment, and sources of supply.

Knowledge of:

- 1) Role of purchasing in product/service design
 - A) Research and development
 - B) Substitution
 - C) Product innovation
 - D) Contracting for design services
 - E) Qualified Products Lists (QPL)
- 2) Early supplier involvement
- 3) Legal issues
 - A) Patents
 - B) Copyrights
 - C) Royalties
 - D) Trademarks
 - E) Licensing
 - F) Joint ventures G) Intellectual property rights
 - II) C.I.S.G.
- 4) Issues in international purchasing
 - A) Resources
 - 1.0 Brokers
 - 2.0 Consuls, embassies, missions
 - 3.0 Banks
 - 4.0 Export Trade Companies/Associations
 - 5.0 Chambers of commerce
 - 6.0 Governments
 - 7.0 Other

 - B) Financial considerations
 - 1.0 Exchange rates
 - 2.0 Letters of credit
 - 3.0 Drafts
 - 4.0 Insurance
 - 5.0 Terms of payment
 - 6.0 Method of shipment
 - 7.0 Customs and tariff
 - C) Documentation

 - D) Potential benefits E) Potential Problems
 - - 1.0 Tariff issues
 - 2.0 Non-tariff issues
 - 2.1 Currency issues
 - 2.2 Economic/political issues
 - 2.3 Regulation
 - 2.4 Cultural differences

- 2.5 Standards
- 2.6 Cartels
- 2.7 Time differences
- 2.8 Language differences
- 2.9 Different business practices
- F) Glossary of terms
 - 1.0 Ad valorem
 - 2.0 Charter rates
 - 3.0 Time/value rates
 - 4.0 International Committee on Transportation (INCO) terms

TASK 48. Develop a standardization program.

Knowledge of:

- 1) General issues in standardization and simplification
 - A) Advantages and disadvantages
 - B) Procedures/Steps in applying
 - 1.0 Standardization committees
 - 2.0 Involvement of other departments
 - 3.0 Effects on production methods/operations
 - C) Application to high-use or high-volume items
 - D) Application to procurement of facilities
 - E) Application to procurement of MRO items

 - F) Brand names versus generic names (i) Administration cost per part number
- 2) Organization standards
- 3) Government standards
 - A) National Bureau of Standards
- 4) International standards
- 5) Standards associations
 - A) S.A.S.
 - B) A.N.S.I.
 - C) A.S.T.M.
 - D) I.S.O. (9000)
 - E) B.S.I.
 - F) D.I.N.
 - G) Underwriter's Laboratory
 - H) Consortia

TASK 49. Develop a cost-reduction/cost-avoidance program (e.g., value analysis, consolidation of orders/suppliers).

- 1) Issues to be considered when establishing a cost-reduction program
 - A) Advantages and disadvantages
 - B) Status of the standards program
 - C) Coordination with other departments
 - D) Time requirements
 - E) Effect on quality and service
 - F) Effect on operations
 - G) Calculating cost avoidance/reduction
 - II) Market testing
- I) Top management support
- 2) Elements of a cost-reduction program
 - A) Organization-wide buying agreements
 - 1.0 Centralized buying
 - 2.0 Lead divisional buying
 - 3.0 Commodity councils
 - B) Pool buying and cooperative purchasing
 - C) Long-term agreements
 - D) Contracting for total requirements
- 3) Quality issues
 - A) Purchaser coordination with quality assurance/con-
 - B) Purchaser coordination with receiving/using department
 - C) Coordination with supplier quality assurance/control efforts

- D) Mutual cost reduction
- 4) Value analysis/value engineering
 - A) Process
 - B) Techniques
 - C) Organizational requirements
 - D) Function in relation to cost and quality
- 5) Other forms of cost reduction
 - A) Improved form, fit, and function
 - B) Easier use
 - C) Administrative savings
 - D) Improved quality

TASK 50. Develop/utilize a computerized purchasing system. Knowledge of:

- 1) Computer basics
 - A) Fundamental computer terminology
 - 1.0 Microcomputer
 - 2.0 Minicomputer
 - 3.0 Mainframe
 - 4.0 CPU
 - 5.0 Input/output devices
 - 6.0 Batch processing
 - 7.0 Time-sharing/Real-time
 - 8.0 Networking
 - 9.0 Software
- 2) Uses of computers
 - A) Processing, manipulating, and storing data
 - B) Forecasting/modelling
 - C) Graphics
 - D) Desktop publishing
 - E) Electronic mail
 - F) Word processing
 - G) Performance measurement
- 3) Systems needs and specifications
 - A) Files required
 - 1.0 Supplier data files
 - 2.0 Item specifications
 - 3.0 Other
- Applications of computers to purchasing and materials management
 - A) Inventory management
 - 1.0 Computing balance-on-hand
 - 2.0 Computing order quantities/when to order
 - 3.0 Billing/accounting
 - 4.0 Maintaining buy history
 - 5.0 Generating or forwarding stock requisitions
 - 6.0 Master file maintenance
 - B) Receiving
 - 1.0 Generate receiving reports
 - 2.0 Transmitting receiving information
 - C) Procurement
 - 1.0 Preparation of purchase orders
 - 2.0 Maintaining supplier performance history
 - 3.0 Interface with Accounts Payable/Stores /Fixed Assets
 - 4.0 Open-order status
 - D) Electronic Data Interchange (EDI)
 - 1.0 Basic concepts
 - 1.1 Definition of EDI
 - 1.2 Categories of Systems
 - 1.2.1 One-to-many
 - 1.2.2 Value-added network
 - 1.2.3 Incremental paper trail
 - 1.3 Advantages of EDI
 - 1.4 Disadvantages of EDI
 - 1.5 EDI Standards
 - 1.6 Use of third-party networks
 - 2.0 Steps in Implementing EDI

- 3.0 Role of EDI in the procurement strategy of the firm
- 4.0 Legal issues in EDI
- 5) User training
- TASK 51. Develop/implement a minority/women/small business/disadvantaged supplier development program.

Knowledge of:

- Sources of information for socially or economically disadvantaged suppliers
 - A) Small Business Administration 1.0 PASS
 - B) Minority Business Directories
 - C) Minority Business Development Councils
 - D) Local minority chambers of commerce
 - E) Business fairs
- Small Business/Small Disadvantaged Business (SB/ SDB) Requirements
- 3) State and local programs
- 4) Issues in developing programs
 - A) Organizational policies
 - B) Impediments
 - C) Benefits
 - D) Assessing program goals

TASK 52. Implement a Material Requirements Plan (MRP).

- 1) Purpose of MRP
 - A) Purchasing's role
- 2) Requirements of MRP
 - A) Master production schedule
 - B) Bill-of-material files
 - C) Known lead times
 - D) Unique part numbers
 - E) Inventory records
 - F) Software requirementsG) Organizational requirements
 - 1.0 Top management support
 - 2.0 Education
 - 3.0 Discipline
- 3) Major premises of the system
 - A) Lead time offset
 - B) Aggregation of demand
 - C) Level-by-level explosion
 - D) Regeneration
 - 1.0 Frequency
 - 2.0 Type
 - E) Time fences
 - 1.0 Planned orders
 - 2.0 F.P.O.
 - F) MRP Table
 - G) Inventory issues (e.g., expediting and de-expediting)
- 4) Issues in the implementation of MRP
 - A) Benchmarking and goal setting
 - B) Forming project teams
 - C) Phased implementation
 - D) Evaluation
- 5) Output of MRP
 - A) Material Requirements Plan
 - B) Order/action messages
- 6) User-established parameters and their effects
 - A) Lot size
 - B) Lead time
 - C) Safety stock
 - D) Yield and shrinkage
 - E) Schedule changes

TASK 53. Implement a Manufacturing Resource Plan (MRP II). Knowledge of:

- 1) Closed-loop information process
 - A) Business Plan
 - B) Production Plan
 - C) Master Schedule
 - D) MRP
 - E) Capacity Requirements Plan
 - F) Feedback
- 2) Extensions
 - A) Distribution Requirements Plan (DRP)

EXTERNAL/INTERNAL RELATIONSHIPS

TASK 54. Develop/manage effective relationships with suppliers. Knowledge of:

- 1) Benefits of good supplier relations
- 2) Ways of promoting good relations
 - A) Returned goods policy
 - B) Payment of invoices
 - C) Equitable treatment of suppliers
 - D) Periodic supplier surveys
 - E) Enhanced two-way communication
- 3) Issues in supplier product education and involvement
 - A) Advantages
 - B) Possible problems
- 4) Issues in reciprocity
 - A) Legality
 - B) Impact on suppliers
 - C) Domestic vs. international
- 5) Concepts of continuous improvement
 - A) Quality
 - B) Cost
 - C) Design
- 6) Supplier partnerships
 - A) Starting
 - Matching product/service with supplier management strategy
 - B) Maintaining
 - C) Concluding
 - D) Reverse marketing

TASK 55. Develop/manage effective relationships with other internal departments.

Knowledge of:

- Basic functions performed by other key departments in an organization and their relation to purchasing
 - A) Top Management
 - B) Engineering/Design/Research
 - C) Quality Control
 - D) Manufacturing/Production
 - E) Accounting/Finance
 - F) Marketing/Sales
 - G) Facilities
 - II) Logistics/Production Planning
 - I) Product/Business Managers
 - J) M.I.S.
 - K) Legal
 - L) Public Relations/Affairs
 - M) Other materials functions
 - N) Other departments
- 2) Interdepartmental communication
 - A) Mechanisms
 - B) Role/perception of purchasing within the organization
 - C) Establishment of trust

TASK 56. Represent the buying organization in meetings with corporation, government agencies, professional associations, and other organizations.

Knowledge of:

- 1) Meeting dynamics
- 2) Associations
 - A) Trade
 - B) Professional
 - C) Group Purchasing Organizations (GPO)
- 3) Issues in the external role and perception of purchasing

ADMINISTRATIVE ASPECTS OF THE PURCHASING DEPARTMENT

TASK 57. Develop goals and objectives of a purchasing department. Knowledge of:

- Fundamental objective of the purchasing department:
 To provide the highest value at optimum cost to the organization
- Strategic goal of the purchasing department: To develop and monitor supply relationships for goods, services, and materials in support of the organization's overall strategic goals
- 3) Issues related to the establishment of objectives
 - A) Priority of objectives
 - B) Integration of objectives
 - C) Goal alignment
 - D) Measurability of objectives

TASK 58. Plan and develop operating policies, guidelines, and procedures for the control of department work flow.

- 1) Nature of Management Control
 - A) Before-the-fact controls
 - 1.0 Budgets
 - 2.0 Plans
 - 3.0 Forecasts
 - 4.0 Procedures manual
 - B) During-the-fact controls
 - 1.0 Quality control
 - C) After-the-fact controls
 - 1.0 Audits
 - 2.0 Periodic reports
 - 3.0 Procedures reviews
- 2) Ways of assigning purchase requeststo purchasing staff
 - A) Commodity orientation
 - B) Department orientation
 - C) Special project
 - D) By volume
 - E) In rotation
 - F) Purchasing councils
 - G) Type of contract orientation
- 3) Procedures for controlling purchase requests
 - A) Logging (Manual/computerized)
 - 1.0 Manual
 - 2.0 Computerized
 - B) Location information
 - C) Status information
- 4) Alternative release systems
 - A) Systems contractB) Kanban/pull signals
 - C) Direct release arrangements
- 5) Priority sequences for handling purchase requests
 - A) First-come, first-served
 - B) Arrangement by need date
 - C) Rush orders/emergencies
- Relationships between policies, procedures, objectives, desk routines, and forms

- 7) Organization policies that affect purchasing
- 8) Centralization vs. decentralization
 - A) Advantages
 - B) Disadvantages

TASK 59. Develop/utilize criteria for evaluating purchasing department performance.

Knowledge of:

- Reasons for departmental (macro-level) performance appraisal
 - A) To determine departmental effectiveness in meeting organizational needs
 - B) To determine effectiveness of department management
 - C) Measuring improvement/deterioration
 - D) Providing incentives for improvement
- 2) Steps in department-level evaluation
 - A) Determine department objectives
 - B) Determine criteria for success
 - C) Determine appraisal factors
 - 1.0 Contributions to profitability
 - 2.0 Timeliness of actions
 - 3.0 Prices paid for materials
 - 4.0 Material quality
 - 5.0 Supplier reliability
 - 6.0 Order quantity and inventory investment
 - 7.0 Customer satisfaction
 - 7.1 External customers
 - 7.2 Internal customers
 - 8.0 Creativity
 - D) Internal audits/Self-governance
 - E) Exercising management control in response to results

TASK 60. Ensure the maintenance of files of contracts, bids, agreements, and leases.

TASK 61. Ensure the maintenance of records of capital equipment, vehicles, tools, etc.

TASK 62. Ensure the maintenance of files on product/service specifications, descriptions, prices, lead times, etc.

Knowledge of:

- 1) Requirements for records management
 - A) Government/Legal
 - B) Organizational
 - C) Other
- 2) Formats for record retention
 - A) Records on paper
 - B) Computer records
 - C) Microfilm/Microfiche
 - D) Other media

TASK 63. Prepare a purchasing department budget.

Knowledge of:

- 1) Purposes for a budget
- 2) Steps in budgeting
 - A) Review goals and objectives
 - B) Define needed resources
 - C) Estimate the dollar value of resources
 - D) Present the budget/obtain the appropriation
 - E) Control expenditures
- 3) Types of budgets
 - A) Zero-based budgets
 - B) Cash-flow budgets
 - C) Profit and loss budgets
 - D) Line item
 - E) Program
 - F) Capital

- G) Flexible
- H) Revenue
- I) Needs budget
- 4) Elements subject to budgetary control

TASK 64. Design operational forms.

Knowledge of:

- 1) Reasons for forms
 - A) Communication
 - B) Operational control
 - C) Records
 - D) Consistency of approach
- 2) Types of forms used by purchasing
 - A) Purchase requisition
 - B) Traveling requisition
 - C) Bill of materials
 - D) Purchase order/contract
 - E) Receiving documents
 - F) Inspection documents
 - G) Change orders
 - II) Computer-generated forms
 - I) Material return form
 - J) Other
- 3) Elements of form design/management
 - A) Available media
 - B) Organization of information
 - C) Instructions
 - D) Forms control
 - E) Retention periods
 - F) Privacy Act/Public information implications
 - G) Cost implications

PERSONNEL ISSUES

TASK 65. Supervise and delegate work to purchasing department staff.

Knowledge of:

- 1) Issues in organizational management and administration
 - A) Delegation of Authority
 - B) Chain of Command
 - C) Span of Control/Span of Information Dissemination
 - D) Line and staff relationships
 - E) Management By Objectives (MBO)
- 2) Theories of management
 - A) Motivational theories
 - B) Styles
- 3) Topics in group dynamics
 - A) Formal work groups
 - B) Informal work groups
 - 1.0 Social groups
 - 2.0 Pressure groups

TASK 66. Hire/promote/dismiss purchasing department personnel. Knowledge of:

- 1) Issues in selection and hiring
 - A) Regulations
 - 1. Equal Employment Opportunity Act
 - 2. Affirmative Action
 - B) Orienting new employees
 - C) Skill requirements
- 2) Issues in employee promotion
 - A) Standards/certification
 - B) Career advancement
 - C) Advantages/disadvantages of promoting within
 - D) Advantages/disadvantages of hiring outside employ-
 - E) Training needs
 - F) Succession planning

- 3) Issues in the termination of employees
 - A) Consistent documentation/evaluation
 - B) Adherence to established personnel policies/procedures/union requirements
 - Quantifying/qualifying discussion to terminate employee

TASK 67. Evaluate purchasing staff performance.

Knowledge of:

- 1) Issues in employee evaluation
 - A) Determine department objectives
 - B) Determine criteria for success
 - C) Determine appraisal factors
 - 1.0 Quantitative Factors 2.0 Qualitative Factors
 - D) Conduct interviews/Give feedback
 - E) Team and/or peer input
 - F) Self-assessment
 - G) Employee accountability
 - H) Customer input
- 2) Uses of performance appraisal data
 - A) Salary increase
 - B) Promotion
 - C) Personal/career development
 - D) Employee morale
 - E) Disciplinary action

TASK 68. Conduct/authorize formal job training for the development of the professional competence of the staff.

Knowledge of:

- 1) Types of initial job training (functional orientation)
 - A) Learning by doing
 - B) The sponsor system
 - C) Formal classroom training
 - D) Functional rotation
- 2) Types of continuous professional development
 - A) Job rotation
 - B) On-the-job training
 - C) Self training
 - D) Management development training
 - E) Apprenticeship training
 - F) Formal/classroom training programs
 - G) Continuing educational offerings
 - II) Secondment programs
 - I) Site visits to organizations/suppliers
 - J) Audio/videotapes
 - K) Books/publications
 - L) Peer-to-peer
 - M) Experiential learning
 - N) Job analysis/Diagnostic evaluation (e.g., PHRASE)
- 3) The development of training manuals
 - A) Responsibility
 - B) Relationship to general training manuals
 - C) Use as an ongoing reference
- 4) Training, cost efficiency, and measurement of outcome
- 5) Professional certification

TASK 69. Resolve employee performance problems.

Knowledge of:

- 1) Issues in employee discipline
 - A) Corrective action process
 - 1.0 Notice of problem
 - 2.0 Effort to resolve problem
 - 3.0 Monitoring progress
 - B) Types of problems
 - 1.0 Performance problems
 - 2.0 Attitude, stress, burn-out
 - 3.0 Theft

4.0 Substance abuse

- C) Documentation
- D) Collective bargaining requirements
- E) Employee assistance programs

APPENDIX H: PURCHASING MANAGER JOB DESCRIPTION

A purchasing manager is an individual working for any private, public, or nonprofit organization, who performs and/or has primary responsibility for the procurement of materials, equipment, or services for that organization. The size of the purchasing manager's department may range from one person to several thousand. The commodities may be purchased either for the use of the organization, for the manufacture or development of other materials, or for resale to other organizations or the general public.

In order to perform this function, the purchasing manager will engage in, or else will have direct responsibility for, some or all of the following functions: reviewing procurement requests; soliciting and evaluating proposals; analyzing current and potential suppliers; conducting negotiations; executing, implementing, and administering contracts; developing forecasts and procurement strategies; supervising and/or monitoring the flow and storage of materials; and developing working relationships with suppliers and with other departments within the organization.

The purchasing manager has or shares responsibility for the administrative aspects of the purchasing department; and will usually perform personnel functions such as hiring, training, and supervising other purchasing personnel.

CENTER FOR ADVANCED PURCHASING STUDIES •

THE CENTER FOR ADVANCED PURCHASING STUDIES (CAPS) was established in November 1986 as the result of an affiliation agreement between the College of Business at Arizona State University and the National Association of Purchasing Management. It is located at The Arizona State University Research Park, 2055 East Centennial Circle, P.O. Box 22160, Tempe, Arizona 85285-2160 (Telephone [602] 752-2277).

The Center has three major goals to be accomplished through its research program:

- · to improve purchasing effectiveness and efficiency;
- · to improve overall purchasing capability;
- to increase the competitiveness of U.S. companies in a global economy.

Research under way and planned includes: World-Class Purchasing; Purchasing Education and Training Requirements and Resources; Purchasing/Materials Management's Role/Responsibility for Total Quality and Customer Satisfaction; Supplier Partnering and Strategic Alliances; and the annual benchmarking reports of purchasing performance by industry.

CAPS, affiliated with two 501 (c) (3) educational organizations, is funded solely by tax-deductible contributions from organizations and individuals who want to make a difference in the state of purchasing and materials management knowledge. Policy guidance is provided by the Board of Trustees consisting of:

R. Jerry Baker, C.P.M., the National Association of Purchasing Management

William A. Bales, C.P.M., Union Pacific Railroad, Retired

William Bothwell, Northern Telecom Inc.

John Cologna, C.P.M., General Electric Company

Montague E. Cooper, C.P.M., Chevron U.S.A. Inc.

John Davin, U.S. Postal Service

Norman M. Doerr, Burlington Northern Railroad

Harold E. Fearon, Ph.D., C.P.M., the Center for Advanced Purchasing Studies and Arizona State University

Theodore D. Hadley, Jr., C.P.M., the National Association of Purchasing Management

Lowell Hoffman, Colgate-Palmolive Company

Donna Lynes-Miller, C.P.M., Arcop, Inc.

Robert R. Paul, McDonnell Douglas Corporation

Alvin J. Williams, Ph.D., University of Southern Mississippi

The following section is a partial list of major contributors to CAPS' research effort, including business corporations and affiliated organizations. A complete list of contributors may be found in the current CAPS Annual Report.

Business Organizations/Foundations

\$60,000 and Over	Texas Instruments	Conoco/Du Pont	The Pillsbury Company
ATOT	Incorporated	Corning Incorporated	RJR Nabisco, Inc.
AT&T BellSouth Communications	U S WEST Business	Eastman Kodak Company	Shell Oil Company
Inc.	Resources, Inc.	G.E. Company, Corporate	TRW Foundation
Northern Telecom Inc.		Sourcing	Union Pacific Railroad Co.
roccom me.	\$20,000 and Over	Honeywell Inc.	Westinghouse Foundation
\$40,000 and Over		Intel Corporation	
	ARCO	1	

BP America Carnival Cruise Lines Chevron U.S.A. Inc.

Lockheed Leadership Fund Mobil Foundation

\$10,000 and Over

Amoco Corporation Burlington Northern Railroad Burlington Resources Foundation Caterpillar Inc. CSX Transportation Deere and Company Digital Equipment Corporation Exxon Company, U.S.A. Hughes Aircraft Company Kraft, Inc. Martin Marietta Corporation Merck & Co., Inc. Phillips Petroleum Company Polaroid Corporation Raytheon Company Southern Pacific Transportation Company Texaco Services, Inc. Unisys Corporation

\$5,000 and Over

Ameritech Services
Apple Computer, Inc.
Bell Atlantic
Bridgestone/Firestone
Trust Fund, A Charitable
Trust of Bridgestone/
Firestone, Inc.

CN North America
Distribution Magazine, A
Chilton Publication
Frigidaire Company
GenCorp Foundation Inc.
General Mills, Inc.
The HCA Foundation
Marathon Oil Company
NYNEX Telesector
Resources Group
Oryx Energy Company
Sandoz Pharmaceuticals
United Technologies
Corporation
Xerox Corporation

Under \$5,000

Americhem Inc. ANR Freight Systems, Inc. ARCO Marine, Inc. Arcop, Inc. ARGO-TECH Corporation Avery, Materials Group Bank of America Barnes Group Foundation The Bauer Group Carl Karcher Enterprises Carter Chemicals & Services, Inc. C.M. Almy & Sons, Inc. Coastal Savings Bank Comerica Inc. Concord Realstate Corporation Dragon Products Co.

Eli Lilly & Co. Ernst & Young E-Systems, Inc. First National Bank of Chicago Freeway Corporation General Dynamics The Glidden Company Haluch & Associates Hondo Oil & Gas Company Imperial Litho/ Graphics, Inc. Industrial Distribution Association International Minerals & Chemicals Corporation Keithley Instruments, Inc. Lexmark International, Inc. The Lincoln Electric Company Loctite Corporation L-Tec Welding & Cutting Systems Marion Merrell Dow, Inc. The Martin-Brower Company Miller/Bevco Morton International Inc., Specialty Chemicals Group Industrial Chemicals & Additives N.I.G.P., Arizona State Capitol Chapter North American Philips North Canton Tool Co.

Northrop Corporation Oatey Company Ohio Power Company Olin Corporation Charitable Trust Oryx Energy Company OXY USA Inc. Pacific Bell Parker Hannifin Corporation The Parsons Corporation Pharmaceutical Manufacturers Association Prime Computer, Inc. The Quality Castings Company Restaurants & Institutions Rohm and Haas Company Searle & Co. SGS-THOMSON Microelectronics, Inc. Shamrock Hose & Fitting Company Simmons Precision Product Inc. Society Corporation Textron, Inc. Thiokol Corporation TTX Company Union Camp Corporation The Upjohn Company

Affiliated Purchasing Associations

Akron Arizona Arkansas Association Management Augusta (Georgia) Bay Area Boston Canton Area Carolinas-Virginia Central Iowa Central Nebraska Central Pennsylvania Chicago Cincinnati Cleveland Columbus Dallas Dayton Delaware Denver Detroit District II District III

District V

District VII District X District XII Eastern Iowa East Tennessee Florida Central Florida First Coast Florida Gold Coast Florida Space Coast Fox Valley, Wisconsin Georgia Inland Empire Kansas City Lehigh Valley Lima Area Madison Area Maine Maryland Memphis Mid-Ohio Valley Milwaukee Missouri Ozarks New Jersey New Mexico

District VI

New Orleans New York North Central North Central Ohio Northeastern Pennsylvania Northwestern Pennsylvania Oklahoma City Old Dominion Oregon Petroleum Industry Buyers Group Philadelphia Pittsburgh Rail Industry Group Reading Rhode Island Rochester Sabine-Neches Saginaw Valley San Diego San Fernando Valley Santa Barbara Silicon Valley South Bend

Southern Arizona

Southwestern Michigan Spokane Springfield St. Louis Syracuse and Central New York Tampa Bay Tenneva Toledo Area Transportation Group Treasure Valley Tri-State Tulsa Twin City Utah Utility Purchasing Management Group Washington, D.C. Western Colorado Western Kentucky Western Michigan Western New England Western Pennsylvania Youngstown District

CENTER FOR ADVANCED PURCHASING STUDIES

THE RESIDENCE OF THE PARTY OF T

P O. Box 22160 Tempe, Arizona 85285-2160 (e02) 753-2277