**Staffing the Organization for Logistics.**

- The interdisciplinary nature of logistics is such that a broad spectrum of personnel backgrounds and skills is required for the staffing of a logistics organization.

- There are planning and management functions, detail design engineering functions, analysis functions, technical writing functions, provisioning and procurement functions, transportation and distribution functions, maintenance and customer service functions, and so on.
Logistics Personnel Requirements.

1. Logistics Requirements and Planning.
   - Have in-depth understanding of logistics functions in the system life cycle.
   - Analyze technical requirements and define design criteria for system supportability.
   - Be aware of the interrelationships among the elements of logistics and with other facets of a program.

※ This person must understand system requirements, the system design and development process, customer/user operations and organization, and must be knowledgeable in the basic principles of management such as planning, organizing, scheduling, cost estimating, task implementation, and control.
Logistics Personnel Requirements.

2. System/Product Design Support.

- A design-oriented person, preferable with some design experience, who is knowledgeable about current design method (e.g., CAD, CAM, CAS) and has an in-depth knowledge of consumer operations, organization, facilities, personnel skills, and the user environment in general.

- The person must have an engineering background, be able to converse fluently with the design engineer and must be able to translate system requirements and field experience into design criteria.

- He or she is inclined to be a specialist in a given technical area and must be up to date concerning state-of-the art advances in that field.
Logistics Personnel Requirements.

3. Supportability Analysis.

- A person with a combination of skills in maintenance, maintenance analysis, statistical analysis, technical documentation, provisioning and procurement, logistics modeling, and data processing.

- This person must be capable of reviewing and evaluating design data, identifying maintenance tasks and the specific requirements for logistics support (e.g., spare/repair parts, test and support equipment, technical data, facilities, personnel and training), developing logistics management information, and processing of supportability analysis (SA) data.

- He or she must be thoroughly familiar with the customer environment, levels of maintenance, user operating and maintenance procedures, and organization structure and personnel skills, and should have actual hands-on maintenance experience in the field.
Logistics Personnel Requirements.


- A person knowledgeable in the different facets of supply chain management, material flow, and product support. Material flow includes the transportation and distribution of products from the supplier through the production stage, warehousing, and delivery to the user.

- Personnel in this area should be conversant in business practices, financial analyses, operations research methods, principles of inventory control, mathematics, and statistics.

- The other major thrust within this category is product support, or the maintenance and support of the system/product throughout the period of customer use.
Logistics Organization Structure.

Functional Organization Structure.

Company XYZ

- Marketing & Sales
  - Market Analysis
  - Purchasing & Contracting
  - Supplier Coordination

- Engineering
- Logistics
- Test & Evaluation
- Production Operation
- Quality Assurance

- System Engineering
  - Feasibility Studies, Operations, and Maintenance Requirement
  - Functional Analysis, Allocation, Design Review
  - Reliability, Maintainability, Human Factors, Supportability

- Logistics
  - IVS Planning
  - Supportability Analysis (SA)
  - Supply Support
    - Spare Parts
    - Procurement
    - Procurement & Inventory Control

- Test & Evaluation
  - Test & Evaluation Planning
  - System Integration and Test
  - Test Data Collection, Analysis, and Reporting

- Production Operation
  - Manufacturing Design & Industrial Engineering
  - Fabrication, Assembly, Inspection, and Test
  - Prime System Component and Element of Support

- Quality Assurance
  - Quality Planning
  - Statistical Process Control
  - Supplier Review and Control
Logistics Organization Structure.

Functional Organization Structure.

Advantages.

- Enables the development of a better technical capability for the organization.
- The organization can respond quicker to a specific requirement through the careful assignment of personnel.
- Budgeting and cost control is easier due to the centralization of areas of expertise.
- The channels of communication are well established. The reporting structure is vertical, and there is no question as to who is the boss.
Functional Organization Structure.

Disadvantages.

- It is difficult to maintain an identity with a specific project. No single individual is responsible for the total project or the integration of its activities.
- Concept and techniques tend to be functionally oriented with little regard toward project requirements.
- There is little customer orientation or focal point. Response to specific customer needs is slow. Decisions are made on the basis of the strongest functional area of activity.
- Because of the group orientation relative to specific areas of expertise, there is less personal motivation to excel and innovation concerning the generation of new ideas is lacking.
Product-line/Project Organization Structure.

Company GHI

- Project A
  - Engineering
  - Logistics
  - Test & Evaluation
  - Production Operation

- Project B
  - Engineering
  - Logistics
  - Test & Evaluation
  - Production Operation

[Blanchard, pp405-430]
Product-line/Project Organization Structure.

Advantages.

- The lines of authority and responsibility for a given project are clearly defined.
- There is a strong customer orientation a company focal point is readily identified, and the communication processes between the customer and the contractor are relatively easy to maintain. A rapid response to customer needs is realized.
- Personnel assigned to the project generally exhibit a high degree of loyalty to the project, there is strong motivation, and personnel morale is usually better with product identification and affiliation.
- The required personnel expertise can be assigned and retained exclusively on the project without the time sharing that is often required under the functional approach.
- There is greater visibility relative to all project activities. Cost, schedule, and performance progress can easily be monitored, and potential problem area (with the appropriate follow-on corrective action) can be identified earlier.
Product-line/Project Organization Structure.

Disadvantages.

- The application of new technologies tends to suffer without strong functional groups and the opportunities for technical interchange between projects.
- In contractor organizations where there are many different projects, there is usually a duplication of effort, personnel, and the use of facilities and equipment.
- From a managerial perspective, it is difficult to utilize personnel effectively in the transfer from one project to another.
- The continuity of an individual's career, his or her growth potential, and the opportunities for promotion are often not as good when assigned to a project for an extended period of time. Project personnel are limited in terms of opportunities to be innovative relative to the application of new technologies.
Matrix Organization Structure.

Company JKL

Program Management

Project A Manager

Project B Manager

Project C Manager

Engineering

Logistics

Test and Evaluation
Matrix Organization Structure.

Advantages.

- The project manager can provide the necessary strong controls for the project while having ready access to the resources from many different functionally oriented departments.
- The functional organization exist primarily as support for the projects.
- Technical expertise can be exchanged between projects with a minimum of conflict.
- Authority and responsibility for project task accomplishment are shared between the project manager and the functional manager.
- Key personnel can be shared and assigned to work on a variety of problems.
Matrix Organization Structure.

Disadvantages.

- Each project organization operates independently.
- From a company viewpoint, the matrix structure may more costly in terms of administrative requirement.
- The balance of power between the project and the functional organizations must be clearly defined initially and closely monitored thereafter.
- From the perspective of the individual worker, there is often a split in the chain of command for reporting purpose.
Direction.

The direction function of logistics management involves the ability to guide and motivate people so that the objectives of the organization are achieved and that an enduring and satisfying relationship between the employees and the organization exists.
Theories of Management Direction.

Maslow’s Need Hierarchy.
Theories of Management Direction.

Herzberg's Motivation Theory.

<table>
<thead>
<tr>
<th>Satisfaction Factors</th>
<th>Dissatisfaction Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Achievement-personal satisfaction in job completion and problem solving.</td>
<td>· Company policies and administration.</td>
</tr>
<tr>
<td>· Recognition-acknowledgement of accomplishments.</td>
<td>· Supervision.</td>
</tr>
<tr>
<td>· Work itself-actual content of the job.</td>
<td>· Working Conditions.</td>
</tr>
<tr>
<td>· Responsibility : both responsibility and authority in relation to the job.</td>
<td>· Interpersonal relations with supervisors, subordinates, and peers.</td>
</tr>
<tr>
<td>· Advancement : promotions on the job.</td>
<td>· Salary.</td>
</tr>
<tr>
<td>· Growth : promotions on the job.</td>
<td>· Status.</td>
</tr>
<tr>
<td></td>
<td>· Job security.</td>
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</tbody>
</table>
Theories of Management Direction.

Theory X and Y.

<table>
<thead>
<tr>
<th>Theory X</th>
<th>Theory Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Work is inherently distasteful and onerous, but necessary for survival.</td>
<td>· Work is as normal as play.</td>
</tr>
<tr>
<td>· Most people dislike and avoid work when possible.</td>
<td>· People will exercises self-direction and self-control in working toward objectives to which they are committed.</td>
</tr>
<tr>
<td>· Most people have to be coerced in order to get the job done so that the organization can meet its objectives.</td>
<td>· Commitment toward objectives depends upon the rewards associated with their achievement.</td>
</tr>
<tr>
<td>· Most people prefer to be directed, wish to avoid responsibility, have little ambition, and want job security above all.</td>
<td>· Most people can accept and even seek responsibility.</td>
</tr>
<tr>
<td></td>
<td>· Most people have the ability to be creative and solve organizational problems.</td>
</tr>
<tr>
<td></td>
<td>· The intellectual potential of employees is not utilized as much as it could be in industry today.</td>
</tr>
</tbody>
</table>
Controlling.  

Controlling is a managerial process that measures current performance against expected results and the taking of necessary action, if needed, to reach that goal.
Controlling Logistics Organization.

Controlling Process.

Measurement.
Objectives and goals should be in quantitative terms and be made measurable wherever possible.

Evaluation of Performance.
It should be stressed that logistics management must periodically check on the progress being made toward achieving the overall goals of the organization.

Feedback and Corrective Action.
Each identified problem should be analyzed and a cause-and-effect relationship should be determined so that the problem can be acted on effectively. Corrective action should be taken immediately.
New Concepts for Management Direction.

Empowerment.

- A condition whereby employees have the authority to make decisions and take action in their work areas without prior approval.
- Advantages.
  - Continuous improvement on a daily basis.
  - A combination of quality improvement.
  - Lead-time reduction.
  - Employee involvement.

Employee Involvement.

- The concept of utilizing the experience, creative energy, and intelligence of all employees by treating them with respect, keeping them informed, and including them and their ideas in decision-making process appropriate to their area of experience. Employee involvement focuses on quality and productivity improvement.
New Concepts for Managing Organization.

New Concepts for Management Direction.

Appraisal and Reward Systems.

- Typical practices do not create the required behavior in the workplace. For example, the traditional measure of labor efficiency for a machine operator sets into motion a variety of negative effects, such as a high volume of parts without quality.

- Imaginative system for measuring and rewarding workers have been introduced in recent years, including
  - Team-related peer assessment.
  - Team appraisals by management with each team member reaping identical rewards.
  - The completely salaried workforce that benefits from overall profits.
  - Expanded responsibilities and new skill sets, combined with the requirement for continuous and rapid learning, mandate new appraisal and reward system.
New Concepts for Management Direction.

Suggestion Programs.

- One effective method of empowering employees and involving them in various aspects of the organization is to develop an effective suggestion program.

- Effective suggestion programs allow employees to have direct input into the operations and functions of the organization.
  - Reward all good suggestions.
  - Encourage participation.
  - Implement suggestion quickly.
  - Allow anonymous as well as named submissions.
  - Thank individuals who contributed.
New Concepts for Management Direction.

Cross-Functional, Problem-Solving Teams.
Cross-functional problem solving teams involve workers from different departments who recommend solutions to solve major company-wide problems.

※ Concurrent Engineering.
A concepts that refers to the participations of all the functional areas of the firm in the product design activity.

Quality Circles.
A small group of people who normally work as a unit and who meet frequently to uncover and solve problems concerning the quality of items produced, process capability, or process control.
New Concepts for Managing Organization.

New Concepts for Management Direction.

Self-Directed Work Team.
Generally a small, independent, self-organized, and self-controlling group in which members flexibility plan, organize, determine, and manage their duties and actions, as well as perform many other supportive functions. It can have the authority to select, hire, promote, or discharge its members.
New Concepts for Management Direction.

Quality of Work Life (QWL).

- Processes by which an organization attempts to unlock the creative potential of its people by involving them in discussions affecting their work lives.

- Elements of QWL.
  - Participative management - employees participate in the decision-making processes of the job.
  - Innovative rewards and compensation systems - productivity is measured and contributions by individuals or teams are identified and rewarded.
  - Enhanced workplace democracy - these include stock ownership, worker self management, and empowered work environment.
1. The primary factors which influence the role of logistics in an organization include all the following, EXCEPT.
   A. Importance of logistics relative to the total costs of doing business.
   B. The need to manage trade-offs between major logistic cost categories and the financial impact of prospective lost sales.
   C. Nature of overall corporate strategy.
   D. The simplicity and efficiency of the logistic network.

2. A centralized management organization has all the following characteristics, EXCEPT:
   A. All important decisions are made or coordinated at the top.
   B. The organization is structured along functional lines.
   C. It try to balance between project based and functional based.
   D. Flow of information must be directed to and from the highest level.
3. The classification of an individual position within the organization can BEST be on basis of :
   A. Major purpose, process used, types of persons dealt with, special skills.
   B. Expected results, process used, place where work is done, major purpose.
   C. Special requirements for education, experience, certification, and technical skills.
   D. Major purpose, process used, types of persons dealt with, place where work is done.

4. According to A. H. Maslow's hierarchy, the human's priorities focus on ______ needs, as first in order of importance.
   A. Safety.       B. Physiological       C. Social       D. Esteem.
5. The primary functions of management are:
   A. Scheduling, organization, resource allocation.
   B. Planning, organization, control.
   C. Planning, organization, finance.
   D. Production, distribution, finance.

6. According to basic management principles, an effective communication must comply with all the following criteria, EXCEPT:
   A. Must be legal, even if based on a temporary departure from corporate policy.
   B. Must be clearly conveyed.
   C. Must be clearly understood and within comprehension of the recipient.
   D. Must be acknowledged by the recipient.
7. The project-functional form of organization is
   I. A matrix type of organization.
   II. Usually associated with smaller organizations.
   III. Usually associated with large organizations.

A. I  B. II, III  C. I, III  D. I, II, III

8. Centralization involves
   I. Decision making mostly at the top of the organization.
   II. Delegating authority and responsibility as far down in the organization as possible.
   III. Quicker decision making.

A. I  B. I, II  C. I, III  D. II, III
9. According to Herzberg, which of the following is NOT true
   A. Salary is a "satisfier"
   B. Recognition is a "satisfier".
   C. Working conditions is a "dissatisfier".
   D. Job security is a "dissatisfier".

10. Failure of good communications often occur because of
    I. The self-interest of the speaker.
    II. Democratic leadership style.
    III. Carefully listening.

   A. I    B. I, II    C. II, III    D. III
Performance Check.

Solutions.

1  2  3  4  5  6  7  8  9  10
D  C  D  B  B  A  C  C  A  A