

Scientific Management in Perspective

As a Means of Achieving Progressive Stabilization

| GENERAL PRINCIPLES | MAJOR ITEMS OF TECHNIQUE IN INDIVIDUAL ENTERPRISE | | |
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| | 1. WORK-PLACE | 2. SHOP | 3. PERSONNEL |
| RESEARCH IN ITS VARIOUS FORMS IS THE APPROACH TO SOLUTION OF ALL PROBLEMS OF MANAGEMENT. | Engineering Studies in design of equipment. Economic studies in size and output of machines. Methods study Time study Motion study Studies in behavior of materials Studies of skill | Studies of the relations of facilities and classes of skills available at the various work-places, and of the most effective co-ordination and proportioning of them under varying conditions of the kind and quantity of orders flowing into the shop. | Studies in mental and manual aptitudes Studies in personality requirements of various jobs Studies in emotional conditions and reactions Studies of group organizations |
| STANDARDIZATION PROVIDES THE BASIS OF UNDERSTANDING NECESSARY TO CO-OPERATIVE EFFORT, THROUGH FORMULATION OF PURPOSES, POLICIES, PLANS, PROJECTS, FACILITIES, METHODS, CONDITIONS, ETC., WHICH BECOME CONSTANT FACTORS IN PLANNING AND EXECUTION. | Specifications of Materials Machines Tools and apparatus Product Unit times Methods Jobs Conditions Wage rates Quality Quantity | Specifications covering co-ordination, proportioning and application of skills and facilities under various specified conditions of the kinds and quantities of work. Production schedules | Specifications of personality requirements for various jobs Specifications relating to hiring, promotion and discharge Specifications relating to training and sharing of information Specifications relating to personal and group relations |
| CONTROL IS EFFECTED BY CO-OPERATIVE OBSERVANCE OF THE "LAWS" INHERENT IN THE SITUATION, DISCOVERED BY RESEARCH AND MADE PRACTICAL BY FORMULATION IN TERMS OF STANDARDS. | Provision of materials and tools Specification of jobs or operations Inspection of product Inspection of performance | Functional separation of planning and execution Classification of operations Analysis of orders Routing; the analysis of the sequence of operations on a job Scheduling or assignment of operations to various work-places in accordance with routing Inspection: products, results, costs | Systematic intelligent direction of conduct in accordance with specifications indicated above |
| CO-OPERATION AS A MENTAL ATTITUDE IS A CONDITION OF EFFICIENT COMMON EFFORT, AND AS A MODE OF CONDUCT IS THE RESULT OF THE FORMULATION OF STANDARDS OF PURPOSE, FACILITY, METHOD AND RELATIONSHIP. | As a condition and as a result, co-operation is promoted by the combination of all factors in the total situation: understanding and acceptance of the common purpose; instruction and the understanding of details; acceptance and performance of complementary responsibilities; proper | | |

The order from left to right indicates roughly: (1) chronological development; (2) application to expanding managerial areas.

| MAJOR ITEMS OF TECHNIQUE IN INDIVIDUAL ENTERPRISE | | | COLLECTIVE ENTERPRISE |
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| 4. MARKETING | 5. FINANCE | 6. GEN. ADMINISTRATION | |
| Market analysis Quantitative Qualitative Studies of consumer demand Studies of the channels of distribution Studies in methods of selling Studies in sales promotion Studies of competition | Most of data required by this department are procured by other departments, e.g., costs Studies of market for capital Studies of customers' credits and collections Studies of prices of materials when purchasing is speculative instead of routine (e.g., cotton, rubber). Studies of financial ratios | Studies of the state and tendency of— Industry generally The particular industry The particular enterprise Industrial forecasting Studies of managerial operating ratios All researches of all departments contribute to the information required by general administration | Scientific management has not been applied (to the stabilization of industry on national and international planes, although experiments pointing in that direction have been initiated. These experiments, however, are not free from simultaneous experimentation in other fields of social organization |
| Specifications Sales schedules Quotas: territorial, commodity and personal Channels of distribution Methods of selling Prices Discounts Salaries and commissions | Specifications Standard costs Financial ratios | Specifications of Policy Projects Plans Master schedules Master budgets Operating ratios Ratios of relationship to the industry generally | |
| Functional separation of planning and execution | Inspection of financial aspects of management in terms of various ratios | Inspection of: Conformity of operations to budgets and schedules Special attention to exceptional situations Prompt decisions concerning changes in purpose and policy | |
| selection, assignment and promotion of personnel; provision of adequate facilities; just sharing of the joint economic rewards; humane personal relations; steady provision of work to be done. | | | |