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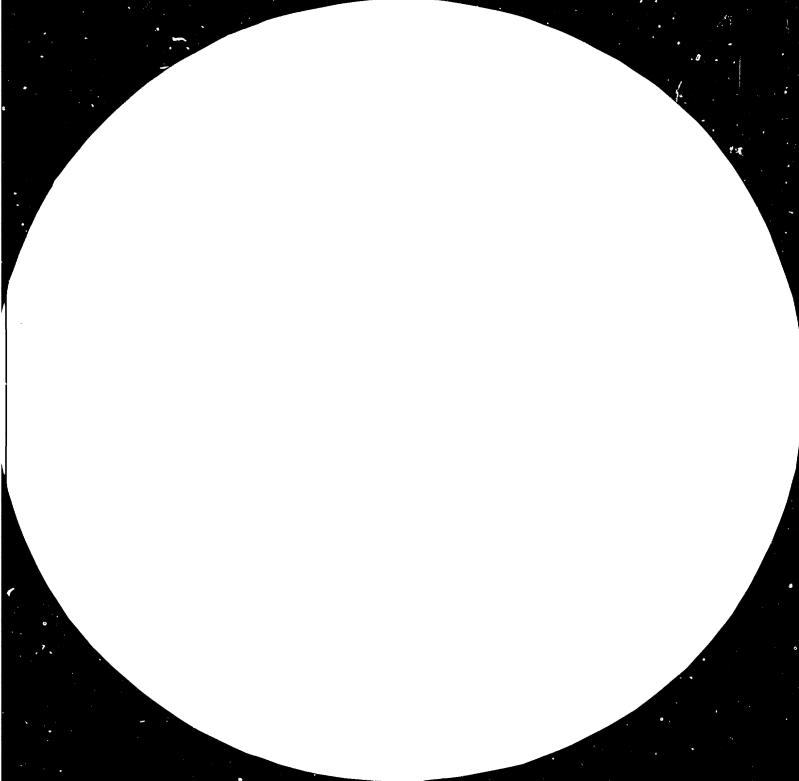
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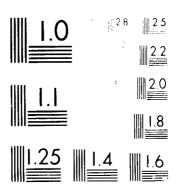
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United Nations Industrial Development Organization

Workshop on Selection of Technology for Assembly of Electronic and Electrical Products in Developing Countries Utrecht, Netherlands, 4 - 8 May 1981

OUTLINE OF CASE STUDY*

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Case study of proposal for television assembly plant

Contents

- 1. Introduction and purpose of the case
- 2. Market and commercial situation assumption. Long term plan leading to identification of type of product.
- 3. Product specification, characteristics and description
- 4. Assembly plant capacity to be reached in year three
- 5. Investment costs : building
 - equipment
 - facilities
 - working capital
 - ~ land
 - other costs, showing know-how, royalties etc.
- 6. Plant flow-chart and description of operations
- 7. Detailed specification of plant unit operations to include:
 - 7.1 Components and materials
 - 7.2 Utilities
 - 7.3 Plan lay-out
 - 7.4 Manpower, engineering and skills
 - 7.5 Training with operation for provision of training by supplier
 - 7.6 Quality control including factory transmitter
 - 7.7 Maintenance
 - 7.8 Materials, handling and management
 - 8. Alternatives and simplifications to base case Feasibility study with cash flows showing the relation of capital investment to labour costs
 - 9. Production management and organisation chart
 - 10. Ex-factory price of the product
 - 11. Plant development to increase local added value (vertical integration)
 This will include a long term plan for development of do's and do not's
 - 12. Product development potential, with estimated costs, included in technical agreement
 - 13. Local, commercial, technical infra-structure requirements
 - a) Product, to be field tested
 - b) Plant conditions of choice of location
 - 14. Draft agreement
 - 15. Program of construction and delivery network planning.

OUTLINE OF CASE-STUDY:

Being a proposal for a television plant to be established in an industrializing country.

Aim.

In order to obtain an optimal input from the participants of the workshop for the guidelines to be compiled, a concrete case will be discussed.

As the workshop will deal with the electronic assembly industry with a special focus on technology choice, it was decided to select as example a television assembly plant to be established in an anonymous developing country.

By incorporating as many elements as possible in the proposal the deliberations on this case will hopefully lead to practical issues for the guidelines.

Contents.

The proposal contains following information:

- Market situation and a 4-year production plan.
- Product specification.
- e Proposals for both a small and large scale approach together with relevant data on investments for a complete plant.
- e Masterplan (networkplanning) for the establishment of a TV plant indicating leadtime of components and equipment to be delivered, training periods, local assistance, etc.
- e Information on the costprice (ex factory) related to production series and alternative chosen (small scale/large scale) and data on feasibility.
- Flow chart of the assembly process and brief description of the operations involved.

- Data on vertical integration in view of local added value.
- A draft agreement.

In principle the proposal is worked out in a describtive way in order to allow the participants to familiarize themselves quickly with the case. Data are provided in such a way that they give room for discussion, however do not require to spend much time on detailed calculations.

As the workshop focusses on technology choice special attention has been paid by presenting some examples of small scale approach vs. large scale approach.

Mechanism.

The mechanism of the negotiations (deliberations) will be as follows:

the "boss group" will request the "negotiating party" to discuss the establishment of a TV plant in a country with "the supplier" on the basis of a proposal worked out by "the supplier".

In the process of discussing all facets must be covered and serve as imput for the guidelines.

