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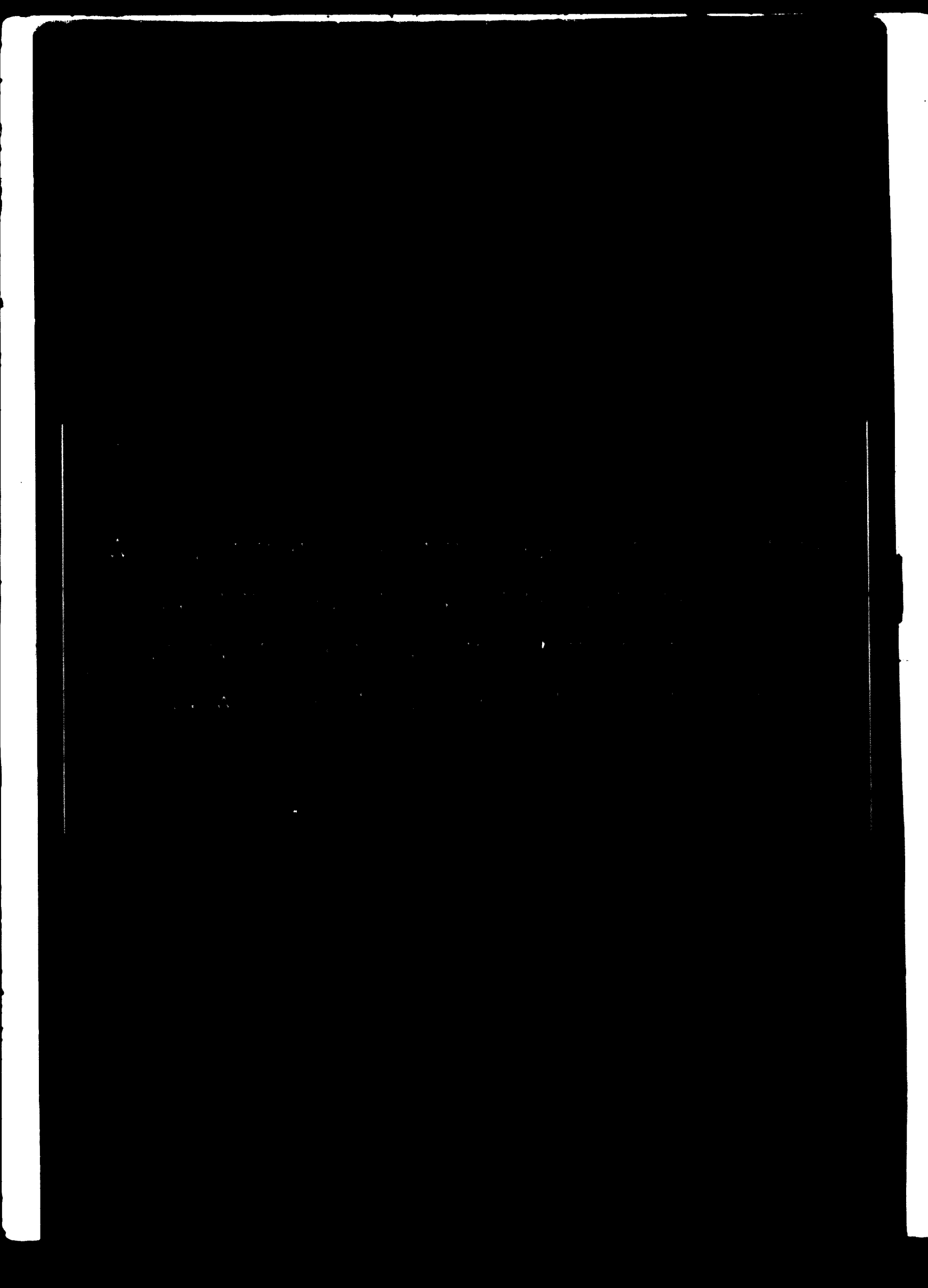
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**COMPUTERIZED COST ACCOUNTING, A FUNCTIONAL
CONTROL TOOL¹**

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¹ The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the Secretariat of UNIDO. This document has been translated from an unedited original.

Introduction

With the increasing complexity and size of business within a difficult business climate, the need for tight and more detailed financial planning and control is becoming more and more essential. In nearly every decision the business manager makes, he has to consider the present financial situation of the company and the financial impact of his decision. In addition, a number of factors exist today which make financial activities more vital than in the past:

- Administrative costs are rising at faster rates than revenues and profits
- Larger, more complex and rapidly changing organisational structures
- Increased complexities of products and services
- Extended needs for reporting due to influence outside of the company
- Increasing levels of competition
- Increasing costs for capital, raw materials and energy.

Because of those factors, all enterprises have to consider faster and more comprehensive systems in the area of financial management. Major parts of such a system are financial and cost accounting.

Cost Accounting Development

The former general accounting systems do not satisfy the requirements of modern business management. Current and up-to-date information about the budgetary situation in the cost centers and about the variable and fixed costs charged to the product are prerequisites for a functional control system. Variances caused by changes in prices, in production quantities or efficiency must be identified and analyzed because they are the input for urgent management decisions.

This recognition led to the introduction of the 2-circle accounting system, that means to a certain degree separating cost accounting from financial accounting. Today cost accounting normally works with standard prices while financial accounting is required by law to actual prices. The advantage of independence in regard to time period and valuation must be seen against the disadvantage that this system requires the accounting department to adjust between both.

To make the results more meaningful it became necessary to divide the cost in a proportional and a fixed part. This allows to display the dependence and correlation between charged cost and produced goods and delivers the critical boundary (contribution margin) where the production no longer covers the variable cost. On the other hand this splitting leads to a doubling of the data to be handled. Another method for improving the meaningfulness is to increase the number of cost types and, as far as it is sensible, the number of cost and work centers.

The accounting system of a medium size company works today with about 200 - 400 different cost types and 400 - 600 cost centers.

In addition the calculation process is done simultaneously by means of

Actual / Standard Cost
Planned Cost
Standard Prices
Absorption and Direct Cost
Standard and Actual Quantities

All this data can no longer be handled manually and therefore this administrative work is transmitted to the computer.

The capability of the computer to process a tremendous quantity of data gives us the opportunity to use different assessment methods ranging from the simplest way of a fixed amount up to the iterative method. Beyond that it will deliver consolidated cost center reports for all hierarchical levels and according to the organization of the company, specifically considering the secondary cost. The benefits of a computerized accounting system can only be employed if measures to assure data security have been taken. Data communication facilities support the data security by recording all transactions on a log-tape and by controlling the access to the stored data by codes and authority-tables. Data bases furnish advantageous features such as:

Data Independence
Logical Relationships
Reduction of Data Redundancy
Secondary Indices
Data Compression

which are prerequisites for an integrated control system including all applications of the production area as well as those of the financial area.

Interfaces of Cost Accounting to Financial and Production Areas

Cost accounting is the connecting mosaic stone between the applications on the production side and those on the business management side. Its processing is involved with

- Customer Order Servicing
 - o Pricing
 - o Estimates (in terms of cost, quantity, mach. utilization, burden) for calculation
 - o Control of product cost variances

- Engineering and Production Data Control
 - o Standard costs based on standard quantities taken out from Bill of Material - and Routing Data Base
 - o Information from and to Master Data Base

- Plant Monitoring and Control
 - o Production Data Entry during processing and completion message which triggers the end-calculation and the posting to the finished goods account

- Procurement and Stores Control
 - o Material Requisition Data
 - o Acceptance Message for Valuation of Incoming Material
 - o Valuation of stock

- **Financial Accounting**

- o **A lot of accruals and variances must be adjusted between F.A. and C.A.**
- o **Operation performance result**

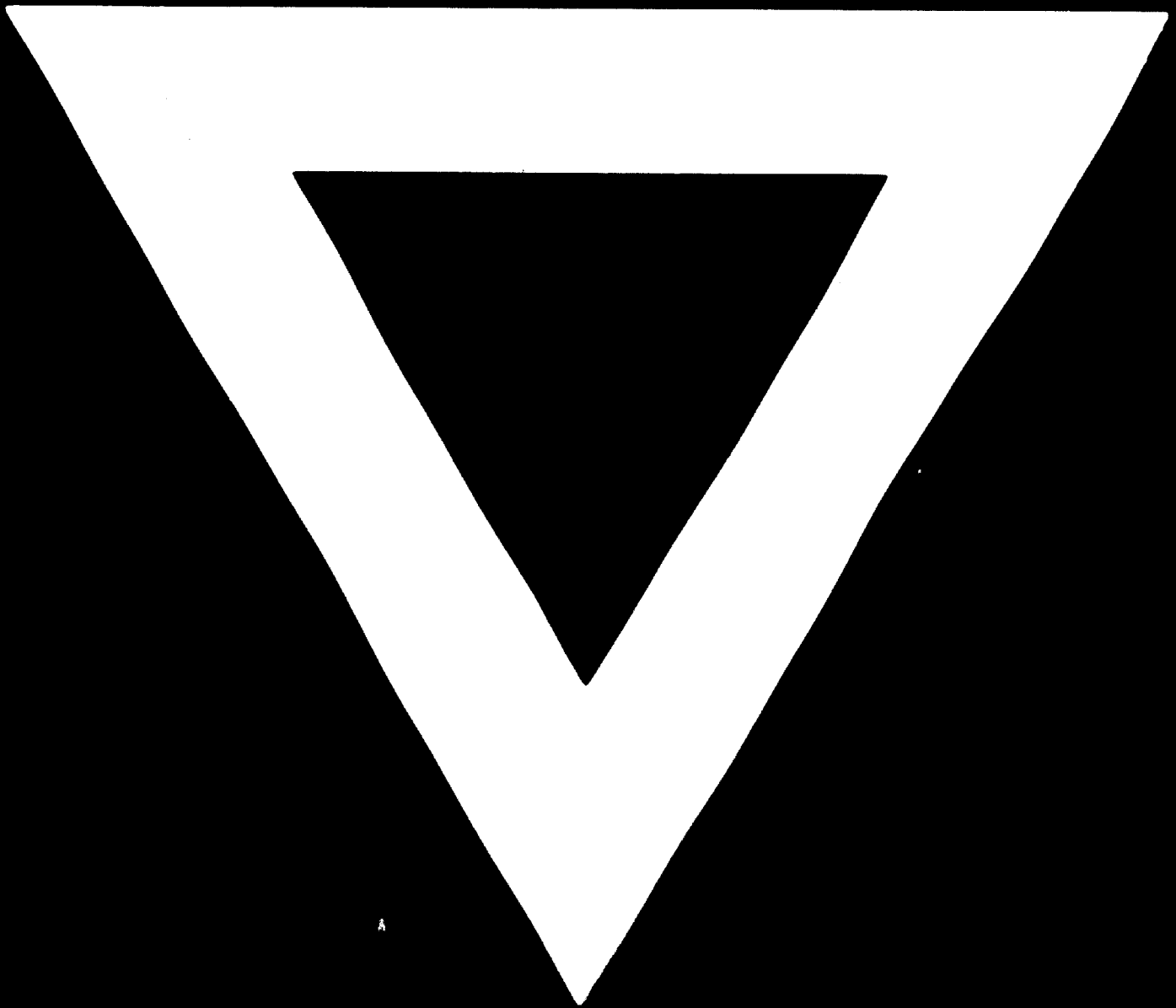
- **Short Range Planning**

- o **Cash Management based on Expenses and Revenues by C.A.**
- o **Budgeting is the prerequisite for the creating of planned cost.**

Even these few above mentioned interfaces show that there will be no Functional Control System without integrated Cost Accounting based on a common DB and considering the interfaces to production and ANP areas.



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