

Budgeting, Costing and Estimating for the Injection Moulding Industry



Peter Jones

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Budgeting, Costing and Estimating for the Injection Moulding Industry

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Preface

Peter Jones is a practising consulting engineer with over thirty-five years' experience within the plastics industry. He has wide experience of mould design, toolmaking, production management and general management and has worked for a number of well-known companies including ICI, United Gas Industries, Bettix and Smiths.

During his time as an employee, he has held positions of estimator, chief mould designer, technical manager, general manager, production director and managing director – all within the injection moulding industry.

In his capacity as a consulting engineer, he has advised several well-known national and international companies in the engineering, oil, medical, pharmaceutical, electronics and consumer industries and many others.

Peter has advised on costing and estimating procedures, mould design and construction, processing, production and management. In project management roles, he has been responsible for setting up complete injection moulding plants for both internal use and stand-alone units. Several of these have been turnkey projects where all the plant, machines, mould tools, ancillaries, systems and personnel have been provided.

Additionally, he has lectured on costing, estimating, mould design, injection moulding and related topics to many well-known companies both in the UK and overseas.

The intention of this book is to provide a clear understanding of the interrelated processes of budgeting, costing and estimating for the injection moulding industry. It is designed to give a clear account of all the stages involved that lead to a company costing and estimating procedure for the injection moulding industry. It includes examples of all procedures at every stage and as such, it should prove of interest to anyone concerned with these most important topics.

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Budgeting, Costing and Estimating for the Injection Moulding Industry

Introduction

The objective of this book is to discuss and define the different methods of budgeting, costing and estimating that are normally used within the injection moulding industry.

In order to establish the costing system, the operating costs first have to be identified and quantified by means of a budget. Based on the budget, a costing system can then be developed that can be applied to determine the manufacturing cost of each product a company manufactures.

The estimating stage determines the selling price of the products that a company manufactures. In the injection moulding industry, a considerable amount of skill and experience is necessary to carry out this function successfully.

The underlying theme of this book is the maximisation of profits through the control of costs. Hence, emphasis is placed on ensuring the understanding of costing and estimating models through discussion and examples.

All companies have a hierarchical structure. This is necessary to define the duties and responsibilities of all the departments and employees. A typical example of the hierarchical structure of a company is shown in Figure 1. This illustrates the diverse job functions that are necessary in order for a company to operate properly. This example is typical of a medium-sized company, whereas in a smaller company several staff may have multifunctional roles combining two or more departments while other departments may not exist at all – like research and development for example. Conversely, larger companies may have much more complex structures with more departments and managers. Hence, the hierarchical structure of any company is a function of its size and the type of business it operates.

Whatever the structure of a company there are a few fundamental factors that are common to nearly all companies that determine whether the company will be successful:

- there must be a market for its goods or services;
- it must be able to sell them;

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- it must be able to provide them;
- it must be able to deliver them on time; and
- it must make a satisfactory profit.

In this respect, the injection moulding industry is no exception and must satisfy all these criteria to survive.

In order to be able to make the parts, a plant must be capable of producing them competitively. For example, if polystyrene cups or disposable coffee spoons are being

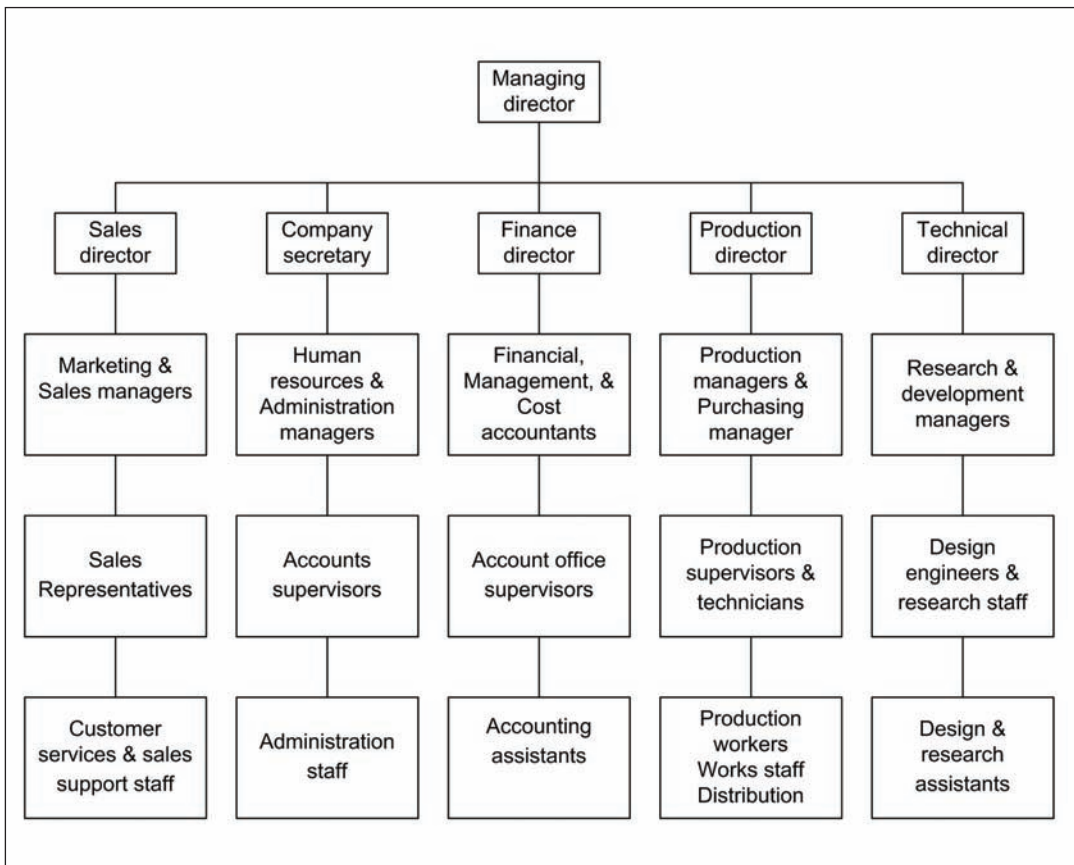


Figure 1 Typical hierarchical structure