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## 1. INTRODUCTION

## 1.1 PURPOSE OF THIS BOOK

Businesses and projects rely on well-structured reports to ensure accurate communication about goals and objectives, requirements, designs, measuring and recording progress, etc. Unfortunately, many engineering and management reports are, for a variety of reasons, not conveying its message as clear as it should. In order to alleviate this problem - particularly for engineers and managers in the early stages of their careers – this book contains suggested **frameworks** for a selection of commonly used business management reports. (Two other books by the same authors contain frameworks for *project management reports* and *system engineering reports*.)

This book is intended as a **reference guide**, from which ideas can be sourced about the typical structure and contents of commonly used business management reports. The book does not provide blueprints for all reports that a manager might ever have to write, but it provides **guidelines** which should be **tailored** and **adapted** by common sense and experience, in order to suit specific circumstances.

The philosophy underlying this book is: **contents follow structure** - i.e. first carefully think about, and decide upon a report's structure, and then systematically fill in the contents. It is often when bits and pieces of contents are randomly gathered and combined, that irrelevant ideas are included in a report. Many report writers are reluctant to discard good-looking and nice-sounding ideas, once it had been gathered with great effort. However, when a report structure is defined first, the gathering of information becomes focused, and unnecessary material is either not collected at all, or it can be filtered out systematically.

It is not suggested here that once a report structure had been chosen, that this structure may then never be changed. However, by having a baseline structure, systematic and rational changes - instead of haphazard ones - can be made to the structure, in order to ensure an effective report. Very few people would first build a house and draw up the plans afterwards, but this mistake is far too often made when engineering and management reports are prepared.

## 1.2 SCOPE OF THIS BOOK

This book is about *frameworks* for management reports typically compiled in businesses. It is neither intended as a handbook on report writing (refer to NAGLE 1996 for this), nor as a detailed textbook on management. However, a few thoughts on the major generic elements of reports and on report quality assurance are provided in this chapter.

## **Chapter 1: Introduction**

Nine types of management reports are addressed in subsequent chapters of this book. Each of these reports is briefly discussed in terms of its typical purpose and scope, followed by a suggested framework for the report.

## 1.3 GENERIC ELEMENTS OF A REPORT

This section provides an overview of the typical major elements of engineering and management reports. It is again emphasised that the layout and contents of each of these elements must be tailored to suit specific requirements.

## 1.3.1 TITLE PAGE

The title page of a report should typically show the report's title, the authors' names, the issue date, name of the organisation issuing the report, report reference number, revision status (edition number), and a list of people to whom the report is distributed.

#### 1.3.2 EXECUTIVE SUMMARY / ABSTRACT

Providing a concise summary of engineering and management reports tells readers what the report is all about and enables them to ascertain whether the report contains relevant information for them, or maybe rather for someone else in their team. The summary should provide an overview of the whole report, and should not merely be a copy of the introduction or the final conclusions. It is normally included just before or just after the table of contents, but it might also be a section in the introductory chapter. After reading the executive summary / abstract, there should be no doubt in the reader's mind about:

- · the reasons why the report was compiled;
- · the issues addressed in the report; and
- · the main conclusions and/or recommendations made in the report.

## 1.3.3 TABLE OF CONTENTS

Besides a normal table of contents, a list of appendices, a list of tables, and a list of figures and/or photographs, plus the relevant page numbers, can also be included in order to:

- provide the reader with an overview of what information is provided in the report by means of appendices, tables, figures, and photographs; and
- to make it easier for the reader to locate these when referred to in the text.

## 1.3.4 ABBREVIATIONS AND TERMINOLOGY

Excessive use of non-standard abbreviations and terminology can make it difficult to read a report, and should therefore be avoided. It is good practice to provide an alphabetical list of all non-standard abbreviations and special terminology used, and their meanings - even when the report is prepared for a very specific audience who are familiar with the abbreviations and terminology used. This list can be

Chapter 1: Introduction

## 2. MISSION STATEMENT

## 2.1 PURPOSE AND SCOPE OF A MISSION STATEMENT

The *Mission Statement* of a business is a general, enduring statement of intent, describing who the business is, what it does, and what its values and business philosophy are. A mission statement helps both clients and staff of a business to know what the business is aiming for. A mission statement flows from the business management's *vision*, which is a description of their attainable dreams for the business. Although a mission statement should be concise, it is an important input for compiling a business plan (refer to chapter 5).

## 2.2 FRAMEWORK FOR A MISSION STATEMENT

**Exhibit 1** contains an example of a framework for a Mission Statement. (Also refer to PEARCE & ROBINSON for examples of other formats for a Mission Statement.)

#### **Exhibit 1: Framework for a Mission Statement**

## 1. WHO WE ARE

Briefly describe who the business is, e.g.:

Melikon Pty Ltd is an independent, privately-owned Engineering- and Business Consultancy - founded in South Africa in 1990; and based in Perth, Western Australia, since 2000. The directors of the company are a husbandand-wife team - both with engineering and management qualifications, and with extensive consulting and other work experience.

## 2. WHAT WE DO

Provide a brief overview of the business's main activities, e.g.:

Melikon provides engineering and business consulting services focussed on helping clients to optimise their maintenance management activities. This involves application of a variety of tools, such as:

- Business Process Re-engineering
- Feasibility and Trade-off Studies
- Maintenance Optimisation
- Project Management
- Logistics Engineering
- System Engineering
- Documentation
- Training

#### 3. VALUES AND BUSINESS PHILOSOPHY

## 4. MARKET RESEARCH REPORT

## 4.1 PURPOSE AND SCOPE OF A MARKET RESEARCH REPORT

It is often said that market research represents the voice of the consumer in a business; and its purpose is to help a business make better decisions about the development and marketing of products and/or services. (These can be new products / services aimed at existing or new markets; or it can be existing products / services aimed at existing or new markets.) Market research is an elaborate activity, addressing at least the following aspects, aimed at establishing suitable marketing strategies:

- characteristics of the product / service;
- the macro-environment (demographics, economic trends, political and legal issues, technological developments, and socio-cultural trends);
- · buyer needs, wants and behaviour;
- · market segments;
- competitors;
- · analysis of the above aspects and matching them with own abilities; and
- reaching conclusions about suitable marketing strategies.

There is a subtle difference between *market research* and *marketing research*. The latter is a sub-set of the former, specifically aimed at defining the best marketing strategies, once the market had been characterised.

Before data can be gathered and analysed as part of market research, the data needs and potential data sources must first be defined. Data can be obtained from both internal sources (e.g. sales and cost forecasts) and external sources. Primary external sources include consumers, retailers and wholesalers, while secondary external sources include government and trade association publications, and media reports. It is important to seek reliable data sources, and not to merely focus on the easily accessible ones.

Once data needs and potential data sources had been defined, research methods for gathering the data must be defined. Two main types of research are commonly used for this purpose:

- Exploratory research, which uses secondary external data, case studies, and interviews with knowledgeable people in order to learn more about the nature and scope of the market. Focus groups (6 to 12 consumers discussing potential new products / services) are often used for exploratory research.
- Conclusive research, which is used to test alternative product / service concepts. It either entails
  descriptive studies, using available demographic, use pattern, and other statistics; or it entails
  experimental research such as small-scale test markets.

Internal data can be obtained by questioning of relevant people in the organisation, or from internal reports; while secondary external data is mainly obtained in printed format. The two basic ways to gather primary external data are through questioning and observation. Questioning involves the use of questionnaires, or approaching individuals and asking them direct questions. Observation can be used to gather data from checkout counters in a shop, for example. Although questioning has definite disadvantages (BOYD & WALKER 1990, p.286), it is by far the most commonly used data gathering method for market research.

Sample design determines how respondents are identified and chosen for questioning. The first step here is to define the universe or population being studied - i.e. the group of potential buyers of the new product / service. Since markets develop with time, a time frame must usually also be coupled to the population to be studied. The next step is to determine how a sample will be chosen from the population, and there are three options:

- Random sampling, whereby every unit in the population has an equal probability of being selected. With this method, the results can be extrapolated to represent the whole population.
- **Non-probability sampling**, where the sample is not an average representation of the total population; and where the results cannot be extrapolated with certainty.
- Quota sampling, whereby the sample is chosen (not randomly) to parallel the population e.g. the sample will have the same percentage students as the total population, and the same percentage individuals within a specific income bracket as the total population, etc.

Once all the above preparatory steps had been executed, a Market Research Report can be compiled, which is a description of:

- · methods used for data gathering;
- the data gathered;
- · analysis of the data; and
- conclusions regarding further actions required to successfully market the product / service, or alternatively to redeploy resources towards more profitable options.

## 4.2 FRAMEWORK FOR A MARKET RESEARCH REPORT

**Exhibit 3** contains an example of a framework for a Market Research Report. (Also refer to BAYLISS 1993 and VIARDOT 1995 for more specific discussions on marketing.)

## **Exhibit 3: Framework for a Market Research Report**

## 1. INTRODUCTION

Describe the purpose and the scope of the document. Make it very clear for which business and for which time frame the document is compiled (problem formulation). Also describe the following:

identified data needs and potential data sources (internal, primary- and secondary external);

#### 2. THE OPPORTUNITY

## 2.1 DESCRIPTION OF THE PRODUCT / SERVICE

Describe the product / service for which the market research results are described in this document; and define whether it is aimed at the consumer market (bought for personal or household use by the ultimate consumers), or at organisational markets (bought for resale, as inputs for production, or for use in day-to-day operations). Then classify the product / service. Consumer products / services can be classified as follows:

- convenience products / services (e.g. groceries and taxi services);
- shopping products / services (e.g. cars and bank loans);
- speciality products / services (e.g. personal computers and internet services); and
- unsought products / services (e.g. insurance and medical services).

Industrial products / services can be classified as follows:

- raw materials (e.g. minerals and agricultural products);
- manufactured components and parts;
- installations (e.g. buildings and capital equipment);
- accessory equipment (e.g. computers, and machines for manufacturers); operating supplies (e.g. stationary); and
- business services.

## 2.2 NEEDS / WANTS ANALYSIS

Describe why there is thought to be a need and a want for the product / service. (Remember: People buy what they want, not what marketers think they need.) Also describe the likely product / service life-cycle, and how the needs and wants will change as the life-cycle progresses.

## 2.3 BUYING DECISIONS

In the case of consumer products / services, classify it in terms of the amount of information search and decision-making normally involved, e.g.:

- · expensive items (houses, cars, etc.) involve extensive information search, and complex decision-making; and
- utility items (groceries, etc.) involve routine information search, and simple decision-making.

Organisational buying decisions are made by the actual users in the organisation, by influencers (e.g. technical personnel), by gatekeepers (e.g. secretaries), by buyers, and by decision makers (managers). It is important to define which of these are the most important decision-makers in the intended market.

# 7. NEGOTIATION PREPARATION NOTES

## 7.1 PURPOSE AND SCOPE OF NEGOTIATION PREPARATION NOTES

Negotiation is about the exchange of tradables, finding out whether there are terms for co-operation which are mutually acceptable, and making decisions based on data (KENNEDY 1991). Consider a

situation whereby two parties, a *seller* and a *buyer*, are negotiating about the *price* of an item. Figure 7-1 shows that normally both the buyer and the seller will have ranges of prices in mind.

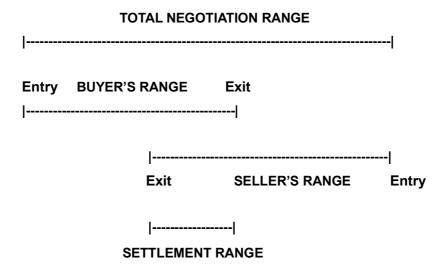


Figure 7-1: Negotiation and Settlement Ranges

The buyer wants to pay as little as possible, while the seller wants to get as much as possible. These are their respective *entry* points to the negotiation, and demarcate *the total negotiation range*. There is a price above which the buyer will not buy, and a price below which the seller will not sell - their respective *exit* points. Unless the buyer's exit point is higher than the seller's exit point, no deal is possible. The difference between these two exit points is the *settlement range*; and the two negotiators must come to an agreement somewhere within this range. Besides price, there are many other conditions applicable to different negotiation situations, for which a negotiation range and a settlement range can be quantified as in Figure 7-1.

In order to participate sensibly in negotiations, preparation is absolutely essential. The purpose of *Negotiation Preparation Notes* is to help the negotiator prepare systematically. Such notes are normally informal, and aimed at directing the negotiator's thoughts. Because the outcome of negotiation is uncertain, it is impossible to prepare the exact course of action in one report. However, the general direction of the negotiation process can be planned beforehand; and if the process is executed systematically, the results of one step can be used in preparations for the following steps.

The following preparations can be done for the indicated steps of a typical negotiation:

## Frameworks for ...

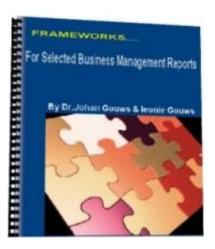
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