

Mathematical Dynamical Systems

A short self-study course

by

Dr. P. Verma, Ph.D., P.E.

First published 2001 by Typesetting India, New Delhi, India
This edition published 2003 in Delhi by Typesetting India Pvt Limited
New Delhi India

Copyright © Typesetting India 2016

The right of Novel to be identified as author of this work has been asserted by her in accordance with the Copyright, Designs and Patents Act, 1988.

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without prior permission in writing from the publisher.

National Library of India
Cataloguing-in-Publication Data:

Typesetting India Templates
Sample Novel Design

ISBN 0 330 30171 x

Typeset in 12/16 pt New Caledonia by Typesetting India
Printed in India by Typesetting India

All text, events, names and places depicted in these pages are products of the author's imagination, and any similarity to actual persons, events and places is unintended and coincidental.

Dedication

To all of my friends, seniors, companies with whom I have had pleasure to work with, particularly Deepak Gupta, Baljeet Singh, Sudhan-shu who helped me in writing this book.

A very special thanks to P. Verma, who inspired me for writing study materials and to open my own company, who provides me with continuous support and directions.

Typeset by *ginn*

Contents

<i>Dedication</i>	iii
Chapter 1: The Beginning of Finance	1
Chapter 2: Finance Planning	6
Chapter 3: Investors' Report	11
Chapter 4: Corporate Plans	15
Chapter 5: Auditing Process	21
Chapter 6: Balance Sheet	25
Chapter 7: Financial Policies	30
Chapter 8: Legal Financial Issues	42
Chapter 9: Risk Management	65
Chapter 10: Value Added Services	88
Chapter 11: Role of Chartered Accountant	102
<i>References</i>	233
<i>Notation</i>	245

Introduction

CHAPTER

1

1. BASIC OF MATHEMATICS

The expanded sum-of-products and product-of-sums forms of Boolean expressions are useful not only in analysing these expressions but also in the application of minimization techniques such as the Quine–McCluskey tabular method and the Karnaugh mapping method for simplifying a given Boolean expression. The expanded form, sum-of-products or product-of-sums.

1.1. Company Sample and Method

The purpose of this study is to examine the importance of sustainability for Indonesian corporates.

- Experience and education available through cooperation of others (Master Mind Alliance):

$$\bar{x} = \frac{(x_1 + x_2 + x_3 \dots + x_n)}{n}$$

- This formula is usually written in a slightly different manner using the Greek capitol letter, Σ , pronounced “sigma”, which means “sum of...”:

$$\bar{x} = \frac{\Sigma x}{x}$$

- If we are working with a continuous data set and the values are given in intervals, we calculate the mid-point of the interval then multiply it with the frequency for calculating arithmetic mean.

Shortly after Mr. Darby received his degree from the “University of Hard Knocks,” and had decided to profit by his experience in the gold mining business, he had the good fortune to be present on an occasion that proved to him that “No” does not necessarily mean no.¹

■ EXAMPLE

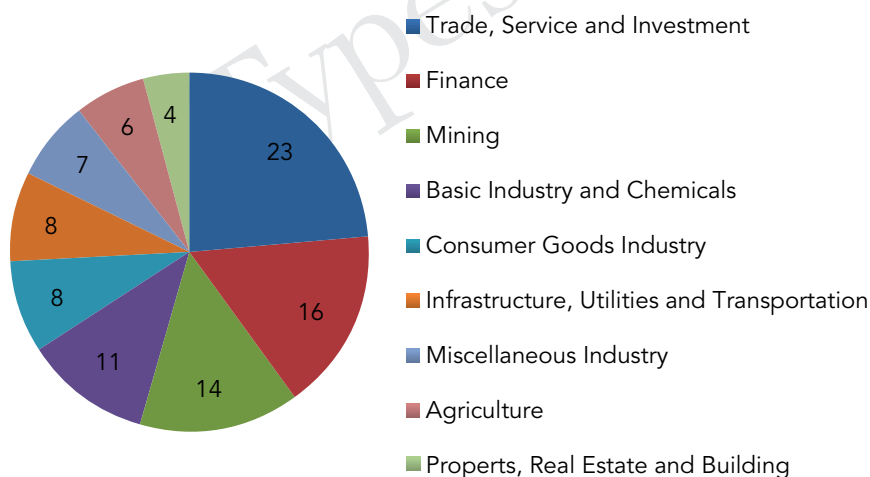
How do grocery cashiers know to hand you coupons you might actually use?

He loaded his soldiers into boats, sailed to the enemy’s country, unloaded soldiers and equipment, then gave the order to burn the ships that had carried them. Addressing his men before the first battle, he said, “You see the boats going up in smoke.

New Jersey. These difficulties were sufficient to have discouraged the majority of men from making any attempt to carry out the desire. ■

Down went the drills! Up went the hopes of Darby and Uncle! Then something happened! The vein of gold ore disappeared! They had come to the end of the rainbow, and the pot of gold was no longer there! They drilled on, desperately trying to pick up the vein again—all to no avail.

Figure 1.1:
Quantity of Annual Reports per Sector



I will keep the question and my answer to it in the comments section, but otherwise, That means that we cannot leave these shores alive unless we win! I will answer the question, correct any mistake it points to, remove

¹ Companies, which was the first in the world to mandate companies to undertake CSR in their Annual Reports

the comment and send you a thank you email to acknowledge that I appreciate your input.

Provides	Nominal	Ordinal	Internal	Ratio
“Counts,” aka “Frequency of Distribution”	✓	✓	✓	✓
The “order” of values is known		✓	✓	✓
Can multiple and divide values				✓
Has “true zero”				✓

Table 1.1:
Different Scales of Measurement

Those three Annual reports aren't analyzed because they are only published in Bahasa Indonesia.

Finance as well as the Trade, Service and Investment Sector. All other remaining companies are defined as manufactures, except 3 telecommunication companies which belong the *Infrastructure, Utilities and Transportation* sector.

1. create a short, self-study course by consolidating my key papers into a single, streamlined, coherent work.
2. The material I provide here covers about ten of my papers and were you to purchase these from the publishers, it would cost in the neighborhood of \$400 (US).

Before we start though we first need to take care of a few preparatory details. First, “feedback.” Please do use the comments box below to tell me what you think I could do better in my presentation.

Table 1.2:

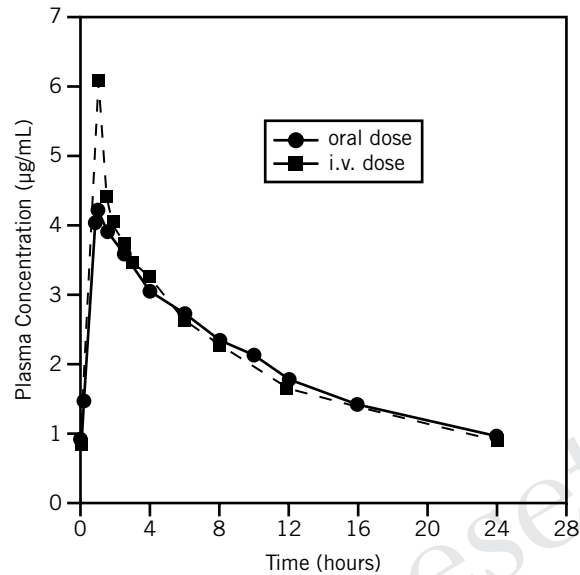
Non-analyzed companies with Annual Reports

No.	Company Name	Stock	Sector	Sub-Sector
1	ICICI Bank Ltd	ABMM	Trade, Service, Investment	Investment Company
2	ABN Amro	ADRO	Mining	Coal Mining
3	OBC bank of Commerce	ADHI	Property, Building Construction	Building Construction

Given the company sample the methodology includes the research of available Annual Reports as well as Sustainability Reports if they were published. In Annual Reports Indonesian companies disclose not only their financial performance but also have to include CSR and report about social and environmental performances according to Law No

40/2007 for Limited Liability Companies, which was the first in the world to mandate companies to undertake CSR in their Annual Reports.² Alongside to the research within the reports also the companies' websites are set as a useful platform to examine the attitude of companies towards sustainability.

Figure 1.2:
Different stages of
Analytics



² ACCA Report, 2012, p.30

Analyzes

CHAPTER

2

He did not say, “I will keep my eyes open for another opportunity, in case I fail to get what I want in the Edison organization.” He said, “There is but ONE thing in this world that I am determined to have, and that is a business association with Thomas A. Edison. I will burn all bridges behind me, and stake my ENTIRE FUTURE on my ability to get what I want.”

He left himself no possible way of retreat. He had to win or perish!

That is all there is to the Barnes story of success! A long while ago, a great war-rior faced a situation which made it necessary for him to make a decision which insured his success on the battlefield. He was about to send his armies against a powerful foe, whose men outnumbered his own. He loaded his soldiers into boats, sailed to the enemy’s country, unloaded soldiers and equipment, then gave the order to burn the ships that had carried them. Addressing his men before the first battle, he said, “You see the boats going up in smoke. That means that we cannot leave these shores alive unless we win! We now have no choice—we win-or we perish! They won.

