JOB DESIGN AND WORK ORGANIZATION

Matching people and technology for productivity and employee involvement

JOHN BAILEY

+06

8464133

Job Design and Work Organization

Matching people and technology for productivity and employee involvement

John Bailey

Principal Lecturer in Management and Organisational Behaviour SW Regional Management Centre, Bristol







Englewood Cliffs, N.J. London New Delhi Rio de Janeiro Singapore Sydney Tokyo Toronto Wellington 8464133

British Library Cataloguing in Publication Data

Bailey, John

Job design and work organization.

1. Work design

I. Title

658.3'06 T60.8

ISBN 0-13-509919-6

.

© 1983 by PRENTICE-HALL, INTERNATIONAL, INC.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of Prentice-Hall International Inc.

ISBN 0-13-509919 6

PRENTICE-HALL INTERNATIONAL INC., London
PRENTICE-HALL OF AUSTRALIA PTY., LTD., Sydney
PRENTICE-HALL CANADA, INC., Toronto
PRENTICE-HALL OF INDIA PRIVATE LIMITED, New Delhi
PRENTICE-HALL OF JAPAN, INC., Tokyo
PRENTICE-HALL OF SOUTHEAST ASIA PTE., LTD., Singapore
PRENTICE-HALL INC., Englewood Cliffs, New Jersey
PRENTICE-HALL DO BRASIL LTDA., Rio de Janeiro
WHITEHALL BOOKS LIMITED, Wellington, New Zealand

Typeset by Performance Typesetting Ltd., Milton Keynes Printed in the United Kingdom by A. Wheaton & Co. Ltd., Exeter

10987654321

Job Design and Work Organization

Matching people and technology for productivity and employee involvement

To my wife Rosemary and to our children Mark, Anna and Victoria for their patience, interest and encouragement.

此为试读,需要完整PDF请访问: www.ertongbook.com

Preface

This book is designed to appeal to the wide range of people interested in the problem of organizing people and work. Over the last two decades considerable interest and controversy has been generated from such developments as job enrichment and autonomous group working and several examples, such as those at ICI, Saab and Volvo, have attracted international interest and speculation. However, interesting though these may be, the question is how far this alternative approach to organizing people and work is practical and applicable to other situations. Are we looking at the application of a specialized technique or at a different approach to the way we organize people and work? This book (aimed both at people in industry such as managers, specialists and trade unionists, and at those studying for an industrial or commercial career) seeks to answer this question and provides a comprehensive review of newer approaches to the design of jobs and to the organization of work.

Many people in industry and those observing or studying it would acknowledge that we have not yet found the answer to gaining people's real commitment and involvement at work. Traditional approaches to organization and increased efficiency involving specialization, de-skilling and centralized management control have often failed, resulting in low productivity, lack of flexibility and alienation of people from their work. These problems are examined in Part I in relation to what we know about people and their needs at work. From this we can identify new criteria for effective job design and work organization, thus providing targets for people to work towards in practice. In the light of these criteria the book then examines how far techniques such as job rotation, job enrichment and group working meet these aims and overcome some of the problems identified.

From Part II of the book the reader will be able to establish the extent to which work restructuring has been implemented and how far it is applicable to his or her own situation and to different types of industry. While it may be easy to restructure jobs in light electronic assembly work, can the same be said for process type industries with their technological constraints? While people are aware of the problem on the shop floor, are there needs and opportunities for work structuring in office and white collar jobs? Also, how far really do these changes lead to the improvements in productivity and job satisfaction anticipated?

This book, however, is very much about application, and while it is one thing to read and talk about work restructuring it is quite another to do it. Therefore in Part III the implications of these developments are examined together with the issues involved in introducing this type of change. Thus problems like where we should start, who should be involved and how we should measure our results are examined, together with what tools and techniques are available to help the process in practice.

Finally, while the focus of the book is essentially on practice, new technology and changes in society are already influencing our approach to these problems.

xiv

Thus the final part of the book helps the reader to consider the implications of new technology on job design and work organization in the factories and offices of the future. In examining future trends it identifies the opportunities and constraints that may affect its future development and the sources and resources available to help those interested in this field.

This book is therefore not just an academic text. It seeks to combine both a thorough review of relevant theory and research with a pragmatic evaluation of work structuring in practice. Not only will it appeal to students as part of their overall education but it will also be of direct use to people in industry who are interested in improving their own effectiveness. While the book analyses past mistakes it also looks at future opportunities, examining both advantages and limitations of the techniques and how they can be applied in practice. It offers students and managers alike guidelines, checklists and tools that can be used both to aid and measure change and, through the many case studies, a wealth of practical experience.

Acknowledgements

I am provided here with an opportunity to convey my thanks to the many people who have helped and influenced me in developing my own knowledge and experience in this field and in the process of writing the book.

Apart from my experience as a consultant my earliest encouragement came from Roger Carter, Personnel Manager and later Factory Manager at Frys

Somerdale, part of Cadbury Schweppes.

I am particularly grateful to the late Prof. A.T.M. Wilson of the London Business School and to the International Council for the Quality of Working Life whose practical and financial assistance helped me visit many of the companies referred to in the book. In that respect my thanks are also extended to those who helped me in conducting my surveys. In particular Prof. Fleming Agersnap and colleagues at the Copenhagen School of Economics and Social Sciences, to Prof. Louis Davis and John Cotter at the Center for QWL, UCLA and Prof. George Strauss and Ray Miles at Berkeley University, all of whom offered much practical help and generous hospitality. Those thanks must equally be extended to the numerous people in the various firms I visited at the time. However, I am especially grateful to Dr. David Birchall and Prof. Ray Wilde of the Work Research Unit at Henley Administrative Staff College for their support and guidance at that stage.

Apart from my academic colleagues I have continued to receive practical help and encouragement from many people in industry who are interested in this field. In particular I would thank John Baker and David Hardy and their colleagues at Watney Mann and Truman Brewers for their interest and work, also Bernard Harvey for the pioneering work he has done at Clark's in Street, and Gordon MacKie, latterly Managing Director of Blackwell Bearings, for his interest and involvement.

Finally, however, apart from the very real help obtained from the reviewers some of the most useful support and assistance was provided by Jenny Blake, formerly of Tavistock Institute and Regional Secretary of the OD Network, together with Mike Beeby and Laura Heath, who have helped me run many seminars and have proved invaluable allies both to me and to job design.

Last but not least, my thanks go to Adrienne Workman who has patiently and promptly typed the many drafts and redrafts required to prepare the manuscript for

publication.

Contents

_					
P	refa	200	V	ii	i
	1616		A	н	

Acknowled	gements xv
-----------	------------

PARTI	CON	CEPTS	1

Chapte	er 1 Th	ne Problem 3
1.1	The Nat	ture of the Problem 3
	1.1.1	Failure of the traditional approach to organization and
		efficiency 3
4	1.1.2	The anachronistic factory 4
	1.1.3	Employee reactions and management attitudes 4
1.2	Traditio	nal Approaches to the Organization of Work 5
	1.2.1	Rationalization of production 5
	1.2.2	Scientific management 6
	1.2.3	Criticisms of scientific management 7
	1.2.4	Current job design criteria 7
1.3	Employ	ee Reactions and Alienation from Work 10
	1.3.1	Conflicting goals and policies 10
	1.3.2	Alienation 11
	1.3.3	Workers' experience of work 13
1.4	Problem	ns of Performance and Productivity 20
	1.4.1	Restriction of output 21
		Quality 23
	1.4.3	Flexibility of labour 24
	1.4.4	Absenteeism and labour turnover 24
1.5	Summa	
1.6	Referen	ces and Further Reading 27
Chapte	r2 W	hat Do People Need From Work? 28
2.1	Introdu	ction 28
2.2	Motivati	on as a Psychological Process 28
2.3	Develop	oments in Thinking about Motivation 30/
	2.3.1	Economic factors 31
	2.3.2	Social factors 33
	2.3.3	Psychological factors 35
2.4	Current	Thinking about Motivation 41
	2.4.1	Motivation as a complex process 41
	2.4.2	Influence of environmental factors 43
	2.4.3	Social comparisons and equity theory 45
	2.4.4	Expectancy theory 47
	2.4.5	Individual differences 48

viii		
VIII		

Contents

2.5	Implications for Job Design 52
2.6	Summary 53
2.7	References and Further Reading 54
Chapte	
3.1	Introduction 57
3.2	Background and Historical Development 58 3.2.1 Task and job rationalization 58
	3.2.1 Task and job rationalization 58 3.2.2 Job content 58
2.2	
3.3	Current Thinking and Theoretical Trends 60
	3.3.1 Definition of terms 62
0.4	3.3.2 Underlying theories and resultant strategies 62
3.4	Contributions from Recent Research to New Criteria for Job Design and
	Work Organization 63
	3.4.1 Job design 64
	3.4.2 Application of expectancy theory 67
	3.4.3 Socio-technical systems 72
3.5	Alternative Forms of Work Structuring 76
	3.5.1 Job rotation 77
	3.5.2 Job enlargement 78
	3.5.3 Job enrichment 78
	3.5.4 Group working 78
	3.5.5 The means and ends of work restructuring 80
3.6	Summary 82
3.7	References and Further Reading 83
D 4 D T 1	Through the same of the same o
PART	THE PRACTICE 85
Chapte	r 4 Extent and Form of Work Structuring 87
4.1	The Extent of Work Structuring 87
	4.1.1 Continental Europe 87
	4.1.2 The United Kingdom 89
	4.1.3 North America 90
	4.1.4 The Far East 91
4.2	The Form that Changes have Taken 92
	4.2.1 Job rotation 93
	4.2.2 Job enlargement 96
	4.2.3 Job enrichment 99
	4.2.4 Group working 106
4.3	Summary 113
4.4	References and Further Reading 113
7.4	heletences and Futulet heading 113

Chapt	er 5 W	ork Structuring on the Shop Floor 115
5.1	Batch P	roduction 116
	5.1.1	Maintenance workers and assemblers on service production – Philips, Denmark 116
	5.1.2	Machinists and instrument assemblers – Foss Electric, Denmark 117
	5.1.3	Mechanical workshop – Philips, Holland 119
	5.1.4	Group technology – Serck Audco, UK 119
	5.1.5	Conclusions 120
5.2	Large E	Batch and Mass Production 121
	5.2.1	Footwear workers – Clark's, UK 121
	5.2.2	Clothing workers – Emcar, UK 123
	5.2.3	Television assembly operators – Bang & Olufsen, Denmark 123
	5.2.4	Group working on television assembly – Philips, Holland, and Pye, UK 125
	5.2.5	Mass production of washing machines – Hoover, UK and Bosch Siemens, Germany 126
	5.2.6	Mass production of motor vehicles – Volkswagen, Germany, and Fiat, Italy 129
	5.2.7	Conclusions 131
5.3	Process	Production 132
	5.3.1	Biscuit making – United Biscuits, UK 133
	5.3.2	Socio-technical design of a pulp and paper mill – Hunsfos, Norway 135
	5.3.3	Refinery workers – Esso, Belgium 138
	5.3.4	Confectionery and pet foods operatives – General Foods, France and USA 139
	5.3.5	Conclusions 140
5.4	Summ	ary 141
5.5	Refere	nces and Further Reading 142
Chap	ter 6 V	Vork Structuring in Office and Service Functions 143
6.1	Work S	Structuring in the Office 143
	6.1.1	Insurance workers – Occidental Insurance, USA 144
	6.1.2	Job enrichment in a stock control office – British Oxygen, UK 144
	6.1.3	Computerization of purchase invoicing – Rolls Royce, UK 146
	6.1.4	Work restructuring in the Civil Service – UK 148
6.2		nization in a Distribution Department – A Detailed Case 150
	6.2.1	Background 150
	6.2.2	Management attitudes towards involvement of employees 151
	6.2.3	Problems in relation to the involvement objective 151

	 6.2.4 Distribution management's response to the problem 152 6.2.5 Problems with the existing structure 152 6.2.6 Changes made to the organization and people's jobs 153 6.2.7 Introduction of the changes 155
	6.2.8 Results and benefits of the changes 155
6.3	Summary 163
6.4	References and Further Reading 164
Conclu	sions to Part II – Work Structuring in Practice 1164
PART	III IMPLEMENTATION 169
Chapte	er 7 The Impact of Work Structuring 171
7.1	Introduction 171
7.2	Role of Supervisors 172
7.3	Role of Service Functions 174
	7.3.1 Quality control 175
	7.3.2 Industrial engineering 175
	7.3.3 Planning 175
7.4	Technology 176
7.5	Trade Unions 177
	7.5.1 Attitudes towards work structuring 177
-	7.5.2 Role of the Trade Union steward or representative 178
7.6	Participation and the Representative System 179
7.7	Wage Structure 182
7.0	7.7.1 An illustrative case 183
7.8	Management Information System 186
7.9 7.10	Organization Structure 188
7.10	Management Style and Organizational Climate 190
7.11	Summary 191
7.12	References and Further Reading 193
Chapte	r 8 Introducing Change 194
8.1	How Should We Approach Introducing Work Organization
	Changes? 194
	8.1.1 No one way 194
	8.1.2 Making the most of opportunities 194
	8.1.3 A planned approach 195
	8.1.4 The value of participation 196
	8.1.5 What can be learnt from industry's experience 197
8.2	Who Should be Involved in the Process? 199
	8.2.1 Role of the Trade Unions 199
	8.2.2 The need for a steering group 200
	8.2.3 Appointment of internal coordinator 200

Content	

	8.2.4	Development groups 201	
8.3		Do We Start? 204	
	8.3.1	What are we trying to achieve? 204	
		Where are we now? 204	
	8.3.3		
	8.3.4	The problem of diffusion 206	
8.4		ged for Training 209	
0, 1	8.4.1	Training as an aid to the diffusion process 209	
	8.4.2	Supervisory Training 210	
	8.4.3	- "	
	8.4.4	Conclusions on the need for training 214	
8.5		ms of Implementation 214	
	8.5.1	Contingency nature of work structuring 215	
	8.5.2	- 1. T.	
	8.5.3	015	
	8.5.4		
	8.5.5		
	8.5.6	The same of the sa	
	8.5.7		
	8.5.8	Organizational climate 217	
8.6	Manag	ing the Change Process 218	
	8.6.1	Time scale and scope of change 218	
	8.6.2	Work organizational development 218	
	8.6.3	Developing a change strategy 220	
8.7	Role of	f a Third Party 221	
	8.7.1	Role of third party in work organization development	222
	8.7.2	Nature of the role 223	
	8.7.3	Focus or points of intervention 225	
	8.7.4	Use of knowledge and role of theory 226	
	8.7.5	The client/consultant relationship 227	
	8.7.6	Intervention strategy 228	
	8.7.7	Conclusions on the role of the third party 229	
8.8	The No	eed for Evaluation 230	
8.9	Summ	ary 233	
8.10		nces and Further Reading 236	
		• • •	
PAR	FIV P	ROSPECTS 239	
Chap	ter 9	New Technology 241	
9.1	Introdu	action 241	
9.2		ning 243	
9.3	Roboti	cs 244	
9.4	Proces	s Control 245	

xii	Contents
-----	----------

9.5 9.6	Comp	facturing Services 246 outer Aided Design 247			
9.7	Word Processing 248				
9.8	Trade	Unions and the Introduction of New Technology 252			
9.9	Summ	nary 254			
9.10	Refere	ences and Further Reading 254			
01-	40	Future Trande 256 /			
-	ter 10	Future Trends 256			
10.1		ralization 256			
10.2		of the Assembly Line 257			
	10.2.1	,			
		Potential of dock assembly 258			
		Future implications of the dock assembly approach 260			
10.3		eld Sites 262			
	10.3.1	Significance of greenfield sites 263			
		Scope of changes involved 263			
		Results obtained 264			
		Planning problems 265			
		Diffusion 265			
10.4	Quality	of Working Life/Life 266			
		Quality of working life 266			
	10.4.2	Quality of life 267			
10.5		unity Development 268			
10.6	Public/S	Service Sector 269			
10.7		ative Work System Design 270			
	10.7.1	Design process 271			
	10.7.2	The development process 273			
10.8	Education	on and Training 274			
	10.8.1				
		Education on the shop and office floor 276			
	10.8.3	Trade Unions 277			
	10.8.4	Quality circles 277			
10.9	Summa	ry of Opportunities and Constraints 280			
10.10	Sources	and Resources 284			
		Research 284			
	10.10.2	Education 285			
	10.10.3	Information and advice 286			
	10.10.4	Development 286			
10.11	Summai	ry 286			
10.12	Reference	ces and Further Reading 288			

Appendix 290

Index 297

PART I

Concepts

The first part of this book seeks to examine some of the underlying thinking about organization and the needs of the individual. Traditional approaches to organizing people and work are examined and their effectiveness, particularly in regard to employee reactions and motivations, is explored. Current thinking on human motivation is examined, with particular regard to its implications for job design and work organization. Finally, in the first part of the book, current thinking on alternative approaches to the organization of people and work are examined with a view to determining the criteria for effective job design and work organization.



CHAPTER 1

The problem

What is the problem? Why have traditional approaches to organization and increasing efficiency failed? How far do poor organization and lack of job design contribute to the problems of alienation from work, low productivity and lack of flexibility? What has been the impact of increased specialization and centralized management control on people's sense of involvement and commitment at work? Why do we need to change?

1.1 THE NATURE OF THE PROBLEM

1.1.1 FAILURE OF THE TRADITIONAL APPROACH TO ORGANIZATION AND EFFICIENCY

Many people feel we have not yet found the answer to gaining people's involvement and commitment at work. Traditional approaches to organization and increasing efficiency often seem to fail in practice to achieve the improvements in performance and productivity anticipated. Increased specialization, the de-skilling of jobs and more centralized management control, while they are felt necessary for increased efficiency, often result in more boring and monotonous work, a lack of sense of responsibility and involvement leading, in some cases, to indifference or even positive feelings of alienation from work.

The costs of our failure to adequately match the needs of the organization from an efficiency point of view with the needs of employees on whom the organization depends can be high. While some of these costs may be reflected in relatively visible features such as poor operator performance, absenteeism, labour turnover, strikes and disputes, others are less immediately obvious but may ultimately be of greater significance. Thus factors such as lack of flexibility of labour, poor quality, late deliveries, overmanning and resistance to changes in method and technology may in the longer term incur greater costs in terms of a company's productivity and competitive position.

However, ultimately the greatest cost of our failure to effectively involve our employees is one of lost opportunity in tapping and developing the contribution that people at all levels in the organization can make to the continuing improvement and success of the organization in meeting the increasing

and changing demands made upon it.