Brief contents

Pre	face	v
Brie	ef contents	vii
Cor	ntents	ix
List	t of figures	xiii
List	t of insets	xix
Intr	oduction	1
Par	t One: Decision problems and decision-making procedures	5
1	Decision problems	
2	Goal and problem-finding systems as requirements for	
	the discovery of decision problems	17
3	Rational decisions	29
4.	Decision-making procedures	
Par	t Two: A general heuristic decision-making procedure	57
5	Overview of the decision-making procedure	59
6	Discovering and analyzing the decision problem	
7	Developing and evaluating options	91
8	Establishing the overall consequences of the options and	
	making the final decision	
9	A case study illustrating the application of the procedure	149
Par	t Three: Special issues and approaches to resolving them	171
10	Decision sequences	
11	Information procurement decisions	
12	Collective decisions	197
Fin.	al remarks	210
		= 10
Glo	ossary	221
Ind	ex	229
Bib	liography	235



Contents

Brie	of cont	ents		vii		
List	of fig	ures		Xiii		
List	of ins	ets		xix		
Intro	oducti	on		1		
Par	t One:	: Decisio	on problems and decision-making procedures	5		
1	Decision problems					
	1.1	•	ecision problem			
	1.2		of solving decision problems			
	1.3	-	of decision problems			
2	Goal and problem-finding systems as requirements for					
_	the discovery of decision problems					
	2.1		inctions of goal and problem-finding systems			
		in the discovery of decision problems17				
	2.2		systems			
		2.2.1	Goal systems as combinations of single			
			goals	18		
		2.2.2	Approaches to classifying goal systems			
	2.3	Proble	em-finding systems	22		
3	Rational decisions					
	3.1					
		proced	dures as a framework for rational decisions	29		
	3.2	The requirements of a rational decision process				
	3.3					
	management science					
4.	Decision-making procedures					
	4.1	Decision-making procedure defined41				
	4.2		ifferent types of decision-making procedures			
		4.2.1	The parameters of decision-making			
			procedures and their values	42		
		4.2.2	•			
		4.2.3	A comparison of heuristic and analytic			
			decision-making procedures	44		

		4.2.4	Examples of the different types of decision-making procedures	48		
Par	t Two	: A gene	eral heuristic decision-making procedure	57		
5	Overview of the decision-making procedure					
•	5.1	o,				
	•••		dure	59		
	5.2	-	roposed sequence of tasks			
	5.3	A brief explanation of the tasks				
	5.4	The basis of the general heuristic decision-making				
	· · ·	procedure				
6	Discovering and analyzing the decision problem					
•	6.1		vering the decision problem			
	6.2		zing the decision problem			
		6.2.1	General considerations for problem			
			analysis and naming	77		
		6.2.2	Establishing the decision situation			
		6.2.3				
			naming the sub-problems	83		
		6.2.4	Determining the problem structure	88		
7	Deve		and evaluating options			
	7.1	Develo	oping options	91		
		7.1.1	General considerations for developing			
			options			
		7.1.2	Techniques for the development of options			
	7.2	Defining the decision criteria				
	7.3	Drawing up possible scenarios1				
	7.4	The configuration of the decision problem as result				
			os 3, 4 and 5			
_	7.5		mining the consequences of the options	109		
8	Establishing the overall consequences of the options and					
		king the final decision1				
	8.1	General considerations1				
	8.2	Overview of the decision maxims and their				
	0.0		ability			
	8.3		on maxims for overcoming polyvalence			
		8.3.1	Utility value maxim The maxim of the quasi-univalent decision			
	84		on maxims for overcoming risk			
	0.4		UT HIMANUS IUI UVEILUUNIIU IISK	130		

		8.4.1 Expectation value maxim			
		8.4.2 Utility expectation value maxim	131		
		8.4.3 Problems with the application of the			
		decision maxims for overcoming risk			
	8.5	Decision maxims for overcoming uncertainty			
	8.6	Using decision maxims in combination to overcome			
		polyvalence and risk or polyvalence and			
		uncertainty			
	8.7	Evaluation of the decision maxims			
9	A case study illustrating the application of the procedure				
	9.1	The situation1			
	9.2	Discovering and analyzing the problem			
		9.2.1 Discovering the problem	151		
		9.2.2 Analyzing the problem			
		9.2.3 Summary of analysis			
	9.3	Developing and evaluating options	161		
		9.3.1 Developing options	161		
		9.3.2 Evaluating options	165		
	9.4	Making the decision	170		
Par	t Thre	e: Special issues and approaches to resolving them	171		
10	Decision sequences				
		What do we mean by a decision sequence?			
		Using decision trees to represent decision	170		
	10.2	sequences	174		
	10.3	Choosing the best option in a decision sequence			
		Case study with a decision sequence			
11		ormation procurement decisions			
	11.1 Information procurement as a decision at the meta-				
	,	level	185		
	11.2	Recommendations for decisions on information	100		
	11.2	procurement	186		
12	Calla				
12	Collective decisions				
	12.1	concerns account and mon gramming importantes	107		
	12.2	in companies			
	12.2	Group goal systems and group decision behaviour			
		12.2.1 Group goal systems			
	40.0	12.2.2 Group decision behaviour			
	12.3	Rules for making collective decisions	205		

xii Contents

	12.3.1	Differing individual orders of preference as starting point	205
	12.3.2	Requirements for forming a collective order of preference	206
	12.3.3	Classic rules for the formation of a collective order of preference or for determining the option preferred by the	
	1024	More complex precedures for the formation	209
	12.3.4	More complex procedures for the formation of the collective order of preference	211
Final remarks		219	
Glossary			221
Index			229
Bibliograp	hv		235