

## Problem Solving in Organizations

This concise introduction to the methodology of problem solving in organizations is an indispensable guide to the design and execution of practical business improvement projects in real organizational settings. The methodology is design-oriented and theory-informed. It encourages students to use the theory gained in their disciplinary courses by showing them how to do so in a fuzzy, ambiguous and politically charged real-life organizational context. The book provides an in-depth discussion of the various aspects and steps of the process of business and organizational problem solving. Rather than presenting the methodology as a recipe to be followed, the authors demonstrate how to adapt the approach to specific situations and to be flexible in scheduling the work at the various steps in the process. It will be indispensable to MBA and other students who venture outside the university walls to do real-life fieldwork.

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# Problem Solving in Organizations

A Methodological Handbook  
for Business and Management  
Students

SECOND EDITION

Joan Ernst van Aken  
Hans Berends  
Hans van der Bij



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## Contents

List of figures	<i>page</i> ix
List of tables	x
List of boxes	xi
Preface	xiii

## PART I FUNDAMENTALS

<b>1 Scope and nature of this handbook</b>	<b>3</b>
1.1 Objectives and target audiences	3
1.2 Design-oriented and theory-informed problem solving in organizations	5
1.3 How to use this handbook	8
<b>2 Student projects</b>	<b>9</b>
2.1 Introduction	9
2.2 Two basic process structures	10
2.3 Three knowledge-generating research processes	13
2.4 Problems caused by mixing different process structures	18
2.5 Concluding remarks	22
<b>3 Problem solving projects</b>	<b>24</b>
3.1 Introduction	24
3.2 Rational problem solving	24
3.3 Problem solving strategies	26
3.4 Theory-informed field problem solving	28
3.5 The application domain of design-oriented and theory-informed problem solving	30
3.6 The nature of field problem solving projects	31
3.7 The basic set-up of a field problem solving project	37
3.8 Characteristics of good field problem solving projects	39
<b>4 Designs and designing</b>	<b>42</b>
4.1 Introduction	42
4.2 Designing material entities	42

4.3	Social system design	52
4.4	Paradigmatic starting points in social system design	56
<b>5</b>	<b>Problem solving projects to develop generic theory</b>	<b>59</b>
5.1	Introduction	59
5.2	Research paradigms	60
5.3	Developing generic theory on the basis of problem solving projects	62

## PART II

### THE PROBLEM SOLVING PROJECT

<b>6</b>	<b>Intake and orientation</b>	<b>71</b>
6.1	Introduction	71
6.2	Intake	71
6.3	Orientation	76
6.4	Problem context	78
6.5	Problem definition	78
6.6	Assignment and deliverables	82
6.7	Project approach	83
6.8	Project costs and organization	87
6.9	Problem solving projects in different formats	88
6.10	Example	92
<b>7</b>	<b>Theory-informed diagnosis of business problems</b>	<b>99</b>
7.1	Introduction	99
7.2	Empirical exploration and validation of the business problem and its causes	100
7.3	Theoretical analysis	107
7.4	Process-oriented analysis	113
7.5	The diagnostic story	116
7.6	Alternative approaches: quick scan	117
7.7	Concluding remarks	118
<b>8</b>	<b>Solution design</b>	<b>119</b>
8.1	Introduction	119
8.2	The deliverables of the field problem solving project	119
8.3	The design process	121
8.4	Solution design	123
8.5	Solution justification	128
8.6	Solution design: the IIS case	130

<b>9 Change plan design and the actual change process</b>	137
9.1 The timing of change plan design	137
9.2 Change plan design	138
9.3 The change process	144
9.4 Change plan design: the IIS case	145
9.5 Change plan design: the importance of developing organizational support	150
<b>10 Evaluation, learning and termination</b>	153
10.1 Introduction	153
10.2 Project-oriented evaluation	154
10.3 Learning for the future	159
10.4 Scientific reflection	162
10.5 Personal and professional development	165
10.6 Project termination and reporting	166

## PART III

### METHODS

<b>11 Qualitative research methods</b>	171
11.1 Qualitative versus quantitative	171
11.2 Unit of analysis	173
11.3 Sampling and case selection	176
11.4 Qualitative data collection methods	178
11.5 Qualitative methods of analysis	182
11.6 Selecting a method	186
<b>12 Searching and using scholarly literature</b>	188
12.1 Introduction	188
12.2 Types of publication	189
12.3 Focusing a literature review	193
12.4 Searching the literature	194
12.5 Integrating ideas and findings	197
<b>13 Quality criteria for research</b>	201
13.1 Introduction	201
13.2 Controllability	203
13.3 Reliability	204
13.4 Validity	209
13.5 Recognition of results	212
13.6 Concluding remarks	213

## PART IV CASE MATERIAL

<b>14 Cases</b>	217
14.1 Introduction	217
14.2 The assignment: make a project proposal	217
14.3 Four cases	219
References	230
Author index	239
Index	240



## Figures

2.1	The empirical cycle	<i>page</i> 11
2.2	The problem solving cycle	12
2.3	The theory development process	14
2.4	The theory-testing process	16
2.5	Reflective redesign	18
3.1	The problem solving cycle	37
4.1	Process, object and realization design	43
4.2	Synthesis-evaluation iterations (loop A) and requirement-design iterations (loop B)	45
4.3	A general model for a design process	47
6.1	Example of a preliminary cause-and-effect tree	80
6.2	General structure of conceptual project design for the diagnosis in field problem solving projects	83
7.1	Results of incident analysis at ABC Research	111
7.2	Information-processing model	112
7.3	An example of a process diagram	115
7.4	Ishikawa diagram for a group of patients with chronic obstructive pulmonary diseases	116
8.1	The key activities in actual designing: synthesis-evaluation iterations	122
10.1	Number of damaged and missing products over a two-year period	156

## Tables

11.1	Choosing the unit of analysis	<i>page</i> 173
11.2	Strategies for selecting cases of a unit of analysis	177

## Boxes

2.1	Example of theory development process	<i>page</i> 15
2.2	Example of theory-testing process	17
2.3	Example of reflective redesign	19
2.4	Example 1	21
2.5	Example 2	22
6.1	Example of the use of an external exploration	73
6.2	Examples of business problems and corresponding assignments	74
6.3	Examples of parts of four exploratory interviews regarding the ABC Research case	92
6.4	Example of a project proposal	93
7.1	An indirect validation of a business problem	102
7.2	Multiple sources of evidence	106

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## Preface

This handbook provides the methodology for problem solving in organizations. Its target audience includes not just undergraduate and graduate students in management and in business but also other people regularly involved in business and organizational problem solving, such as junior management consultants or engineers and other professionals working in organizational contexts. This second edition is a thoroughly revised version of the 2007 edition. The revision includes a new chapter on how to use problem solving projects to develop generic theory, further detailed discussions on designs and the design process, and more illustrative cases and cases for instruction.

The ability to solve business and organizational problems in real-life organizational settings can be regarded as the key competence of managers and of professionals working in organizations. A powerful way for students to develop this competence is to engage in problem solving in real organizational settings under academic supervision. Solving paper cases can develop a number of cognitive competences, but not all the competences that are needed to be successful in the fuzzy, ambiguous and politically charged real-life organizational context. This handbook aims to provide a methodological basis for problem solving in organizations.

The theory given here can best be mastered through a – possibly brief – classroom course in which the contents of this handbook are discussed and in which, on the basis of some (paper) cases, training is given on issues such as problem definition, developing a project proposal, problem analysis and solution design. However, a richer learning experience can be realized if such classroom training is followed by the further development of problem solving competences through actual problem solving in the field, individually or in a (small) group. In this way the student can develop real ‘clinical experience’.

The scientification of the field of business and management has enabled it to develop into a respectable social science. This has led to the idea that the core competence of the business or management graduate is carrying out good explanatory research and that fieldwork for a business or management student means doing explanatory research. For academically trained people in disciplines such as sociology or ethnography, carrying out good explanatory

research is indeed their core competence, and for students in these disciplines fieldwork does indeed mean doing such research. However, as mentioned above, we are of the opinion that the core competence of business or management graduates is not explanatory research but knowledge-intensive field problem solving; in other words, not just researching ‘the actual’, but also designing and realizing ‘the preferred’.

Business or organizational problem solving is very different from business or organizational research. There are many books on methodology for business or organizational research, which are often quite similar to more general social science research methodology. However, they give the methodology for analysing *what is*, and focus on the development of descriptive and explanatory knowledge. In business or organizational problem solving, on the other hand, the focus is on designing *what can be*, or *what should be*, in order to improve the performance of a specific business system on one or more criteria. In order to be able to design a business system, or to redesign an existing one, one must analyse the present one and the possible causes of its less than satisfactory performance. For this, many classic (and non-classic, for that matter) methods of social science research can help. However, problem analysis is only the first part of field problem solving. Analysis should be at the service of the design of solutions (and the associated change plans). Therefore, the methodology given here is *design-oriented*: a problem solving project following this methodology aims at the design of a sound solution and change plan, and at the actual realization of performance improvement with the help of these designs. It is about business performance improvement on the basis of sound plans. It is not about making sophisticated analyses without designing solutions, nor about a process of logical incrementalism, or muddling through or trial and error, in which business problems are solved on the basis of increasing insight, developed along the way in a step-by-step process.

The methodology of this handbook is also *theory-informed*. In practice, problem solving in organizations is often carried out in a craftsman-like way, on the basis of business experience and common sense. However, the methodology presented in this book is theory-informed, based on state-of-the-art thinking on the types of business systems and types of problems in question and on the methods to be used in solving business problems (without, of course, disregarding common sense and relevant experience). Because of this, our approach can be regarded as a methodology for evidence-based practice, or, more specifically, evidence-based management (EBMgt). In fact, this book may be regarded as a foundation course in evidence-based management.

Our approach builds on the traditions of rational problem solving. The types of problem that are best suited to this approach should have a significant technical-economic content. At the same time, the approach recognizes that organizations are social systems, that realizing improvements in business system performance entails organizational change, and that effective organizational change needs not only technical-economic interventions (such as the presentation of a promising solution for the problem) but political and cultural interventions as well. Therefore, our focus is not simply on the design of technical solutions but also on the design of the change process that is needed to actually realize the performance improvement, and on the development of organizational support for the solution and the change plan.

Many regard the business school as a professional school, like medical schools and engineering schools, and regard the business or management graduate as a professional. In our view, this implies that field problem solving is the core competence of this graduate, rather than carrying out good explanatory research (as opposed to physicists or sociologists, for whom doing good explanatory research is indeed their core competence). However, in an *academic* approach to the profession, graduate students also need to develop the competence to add to the knowledge base of their field (just as medical doctors and engineers need to be able to add to the knowledge base of their fields, even if field problem solving is their core competence). Doing field problem solving projects generates a rich knowledge base, which can be used not only to solve the specific problem at hand but also as a basis to generalize across cases, thus developing new and relevant generic knowledge. Even if this book is not one on research methodology, it will nevertheless give methodological support for using the results of field problem solving for research. If academic supervisors choose the projects they are to supervise in line with their research interests, these projects can provide strong support for their research output.

Field problem solving should, in our opinion, be a very important element in any business or management course programme, as it aims to develop the core competence of the student. However, it is carried out in a terrain that has many more pitfalls and traps for the unwary than a university library. We hope that the methodology given in this handbook will help the student to navigate this challenging but important and rewarding landscape.

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