

Nicolai Andler

**Tools**

for

**Project Management,  
Workshops and Consulting**

A Must-Have Compendium of  
Essential Tools and Techniques

Third  
Edition



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Nicolai Andler Tools for Project Management,  
Workshops and Consulting



**Nicolai Andler** graduated from the Technical University of Berlin with a combined Masters of Commerce and Masters of Chemical Engineering degree with distinction. The Technical University of Berlin is one of the few universities that have a faculty for systems engineering, which is the science on which this book is partly based. He also holds a Master of Management degree from the French Graduate School of Business in Toulouse (Grande Ecole Supérieure de Commerce de Toulouse – MBA equivalent) with a specialization in ‘management of multinational groups’ and ‘international business strategies.’

Before founding his own company, the Ignite Group, Nicolai Andler was a senior consultant with an IT and CRM consultancy for several years. Prior to working in the IT consulting field, he had freelance experience in management consulting in Europe and several years of management consulting (business transformation projects focusing on business process reengineering and supply chain improvements) with an international management consultancy in South Africa. He has worked with clients in the financial services (retail banking, life insurance, and employee benefit), public sector (education, revenue and customs, government agencies), waste management, chemical and petrochemical industries.

Since 2010, Nicolai Andler is a managing partner at the Swiss consulting company MC2 Institute that specialises in management consulting, training, and e-learning for companies, corporate universities and tertiary education institutions. For MC2, he also created the award winning business tools platform ‘Solverra’.

Besides his management consulting activities, Nicolai Andler works as a business analyst in the IT area, as a guest lecturer at various academic institutions, as a trainer and facilitator for companies and as a business coach for entrepreneurs.

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# Tools for Project Management, Workshops and Consulting

A must-have compendium of  
essential tools and techniques

by Nicolai Andler

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# Brief contents/Overview of tools

The author's rating is based on his subjective perception of ease of use and effectiveness ('added value for time invested').



😊	😊😊	😊😊😊
Advanced experience/ skill required	Average experience/ skill	Easy; just try it!

Purpose of category	Tools or technique name	Page	Ease of use	Effectiveness
Define situation/ problem  ➡➡➡➡	5W Problem questions	58	😊😊😊	😊😊
	Problem definition	59	😊😊	😊😊😊😊
	Boundary examination	65	😊😊	😊😊
	Problem tree	68	😊😊	😊😊
	From As-Is to To-Be	72	😊😊	😊😊
	Problem goal twist	75	😊	😊😊
	SPIN	77	😊	😊😊
	Kepner/Tregoe problem diagnosis	79	😊😊	😊😊
	Reverse the problem	81	😊😊	😊😊
	Hypotheses	82	😊	😊😊😊😊
	Hypothesis tree	83	😊	😊😊
	Competing hypotheses	88	😊	😊😊
	Issue tree	89	😊😊	😊😊
	Influence matrix	92	😊	😊😊
	Fishbone or Cause-effect tool	94	😊😊	😊😊
	Black box	96	😊😊😊	😊😊
	IS – IS NOT	99	😊😊😊	😊😊😊😊
	Stakeholder expectation management	101	😊😊	😊😊
	Stakeholder analysis	103	😊😊	😊😊😊😊
	Stakeholder map	109	😊😊😊	😊😊
	Stakeholder influence matrix	112	😊😊	😊
	Stakeholder accordion	114	😊😊	😊😊
	Stakeholder swapping	116	😊😊	😊😊😊😊
	Context diagram	118	😊😊	😊😊
	Silo view	122	😊	😊😊
	Helicoptering	124	😊😊	😊😊
	Mind map	125	😊😊😊	😊😊
Diagnosis plan	128	😊	😊😊	

Purpose of category	Tools or technique name	Page	Ease of use	Effective-ness
Information gathering 	Desk research/database research	144	😊	😊😊
	Interview (unstructured)	145	😊	😊😊
	Socratic debate	146	😊	😊😊
	Focus interview	150	😊	😊😊😊
	Systemic questions	152	😊😊😊	😊😊
	Six Pillars	156	😊😊	😊
	Tripod (mixed)	160	😊	😊😊😊
	Octagon	161	😊😊	😊😊
	Focus groups (unstructured)	163	😊	😊😊😊
	Survey/field study	165	😊😊	😊😊
	Direct observation (DILO = day in the life of)	167	😊😊😊	😊😊
	Delphi or expert panel	168	😊😊	😊
	Scenario analysis	169	😊😊	😊
	Questionnaire (structured)	171	😊😊	😊😊
	Climate assessment (structured)	173	😊😊😊	😊😊
Information gathering plan	177	😊😊	😊😊	
5 Whys	178	😊😊😊	😊😊😊	
Creativity 	Brainstorming	182	😊😊	😊😊
	Cardstorming	184	😊😊😊	😊😊
	6-3-5	186	😊😊😊	😊😊😊
	Questions circle	187	😊😊😊	😊😊
	Lotus blossom	188	😊😊😊	😊😊😊
	Irritating words	189	😊😊	😊😊😊
	Mental provocation	191	😊😊	😊😊😊
	Cross associations	192	😊😊	😊😊
	Funny Man	194	😊😊	😊😊
	Opponents advocate	195	😊	😊😊
	Fishpond	197	😊	😊
	Bionic	198	😊😊	😊
	Synectics	198	😊	😊
	Bisociations	202	😊😊	😊😊
	Distraction	203	😊😊	😊
	Provocative associations	204	😊😊	😊😊😊
	RARA	205	😊	😊😊
	Morphological matrix	207	😊😊	😊
	Attribute listing	208	😊😊	😊
Nyaka (defect analysis)	209	😊😊	😊😊	
Merlin technique/Osborn checklist	211	😊😊	😊😊😊	
Information consolidation 	Cornell notes	219	😊😊😊	😊😊
	Pareto (80:20)	221	😊😊	😊😊😊
	ABC	223	😊	😊😊😊
	Information matrix	225	😊😊	😊😊
	Card sorting	227	😊	😊😊
	Affinity diagram	228	😊😊	😊😊😊
	Venn diagram	230	😊😊	😊
	Force field	232	😊😊	😊😊

Purpose of category	Tools or technique name	Page	Ease of use	Effectiveness
Goal setting ▶▶▶▶▶	Objectives tree	240	😊😊	😊😊
	Goal hierarchy	243	😊😊	😊😊😊
	Charter	246	😊😊	😊😊😊
	Goal catalogue	247	😊😊	😊😊
	X-matrix (Hoshin)	250	😊😊	😊😊
	SMART goals	253	😊😊😊	😊😊
	Goal grid	254	😊😊😊	😊😊
	Well-defined outcomes	255	😊😊	😊😊
	3 P statements	258	😊😊😊	😊😊😊
	SNAP	259	😊😊	😊😊
Strategic analysis ▶▶▶▶▶	Value chain analysis	267	😊😊	😊😊😊
	Critical success factor (CSF)	271	😊	😊😊
	Hedgehog	274	😊😊😊	😊😊
	SWOT and TOWS	277	😊😊	😊😊
	Life cycle	284	😊😊😊	😊
	5 Forces	289	😊	😊😊
	Competitor analysis	293	😊	😊😊
	Customer segmentation	297	😊	😊😊😊
	Strategic market group	300	😊😊	😊😊
	Environmental analysis (PEST)	304	😊	😊😊
Strategic development	Business matrix	307	😊😊	😊😊
	Product/market mix	312	😊😊	😊
	Blue ocean	315	😊😊	😊😊😊
	Strategic development options	319	😊😊	😊😊😊
	Strategy matrix	324	😊😊	😊😊😊
Technical analysis ▶▶▶▶▶	Architectural decomposition view	326	😊	😊😊
	Functional decomposition	328	😊	😊😊
	Process analysis	331	😊😊	😊😊😊
	Interface analysis	334	😊	😊😊
	Logical data relationship	338	😊	😊😊
	Entity relationship diagram	340	😊😊	😊😊😊
	Technology and systems landscape	342	😊	😊😊😊
	Requirements catalogue	344	😊😊	😊😊😊
	Logical and functional system modelling	346	😊😊😊	😊😊
Organisational analysis ▶▶▶▶▶	Organisational structure	350	😊😊	😊😊😊
	Diamond grading	355	😊😊	😊
	Org structure versus process	356	😊😊	😊😊😊
	Span of control	358	😊😊	😊😊😊
	Organisational assessment	360	😊	😊😊
	Powergram	361	😊😊😊	😊😊
	Communication net	364	😊😊	😊😊😊
	Communication matrix	366	😊😊	😊
	Communication structures	370	😊😊	😊



Purpose of category	Tools or technique name	Page	Ease of use	Effectiveness
Decision making 	Decision tree	377	😊😊	😊😊
	Perspectives <sup>3</sup>	379	😊😊	😊😊
	Argument balance	380	😊😊😊😊	😊😊😊😊
	Swap sorting	382	😊😊😊😊	😊😊😊😊
	Pair ranking	382	😊😊😊😊	😊😊😊😊
	Cross of beliefs	384	😊😊	😊😊
	Polarities	385	😊😊	😊😊
	Utility analysis	387	😊	😊😊😊
	Nominal group	389	😊😊😊😊	😊😊😊😊
	100 Points	391	😊😊😊😊	😊😊😊😊
	Cartesian coordinates	392	😊😊	😊😊
	Vroom Yetton	393	😊😊	😊😊
	Risk analysis	396	😊	😊😊
	Prioritisation matrices	401	😊😊😊😊	😊😊😊😊
	Think 360	406	😊😊	😊😊
Distance mapping	408	😊😊	😊	
Reflections	411	😊😊	😊	
Project management 	Project contract	421	😊😊	😊😊
	LogFrame	424	😊	😊😊
	Project roadmap/programme	430	😊😊	😊😊😊😊
	Work breakdown structure	432	😊😊	😊😊😊😊
	Gantt chart	436	😊😊😊😊	😊😊😊😊
	Project work plan	437	😊😊	😊😊
	Project environment analysis	438	😊😊	😊😊
	Project structure	440	😊	😊😊
	Project management roles and responsibilities	442	😊😊	😊😊
	Project communication plan	445	😊	😊😊
	Accountability matrix (CIDA)	449	😊😊	😊😊
	Stakeholder communication	451	😊	😊😊
	Workshop guideline	453	😊😊	😊😊
	Expectation review	455	😊😊😊😊	😊😊😊😊
	Booz ball evaluation	456	😊😊😊😊	😊😊😊😊
	Six thinking hats	457	😊😊	😊😊
Action steps and reviews	458	😊😊😊😊	😊😊😊😊	
Project management skills radar	459	😊😊	😊😊	
Checklists and questions	Check questions for a project start	463	😊😊😊😊	😊😊😊😊
	Check questions to review ideas and qualitative information	464	😊😊😊😊	😊😊😊😊
	Check questions to define the current situation – diagnostic	464	😊😊😊😊	😊😊😊😊
	Check questions to define goals and objectives	465	😊😊😊😊	😊😊😊😊
	Check questions during an analysis	466	😊😊😊😊	😊😊😊😊
	Check questions during decision making	467	😊😊😊😊	😊😊😊😊
	Check questions for the project initiation phase	468	😊😊😊😊	😊😊😊😊
Scenarios ('shopping list' of tools)	Author's top 10 tools	469	😊😊😊😊	😊😊😊😊
	Good practice for project and problem definition	469	😊😊	😊😊
	Project planning and definition	471	😊😊	😊😊😊😊
	Strategic analysis	472	😊	😊😊
	Org analysis and org design	473	😊😊	😊😊
	Organisational restructuring	474	😊😊😊😊	😊😊😊😊
	Feasibility study	474	😊😊😊😊	😊😊😊😊
	System development	475	😊😊	😊😊
	Strategy workshop	476	😊😊	😊😊
	Business process improvements	477	😊😊😊😊	😊😊😊😊

# Application areas of each tool

(At the end of the book, there is an alphabetically sorted overview.)

Name of tool or technique	Page	Define Situation	Information gathering	Cre-ativity	Informa-tion consoli-dation	Goal setting	Strate-gic analysis	Techni-cal analysis	Org. analysis	Decision making	Project management
5W Problem questions	58	x	x								
Problem definition	59	x				x					x
Boundary examination	65	x	x								
Problem tree	68	x				x					
From As-Is to To-Be	72	x				x		x			
Problem goal twist	75	x				x					
SPIN	77	x								x	
Kepner/Tregoe problem diagnosis	79	x									x
Reverse the problem	81	x		x							
Hypotheses	82	x				x					
Hypothesis tree	83	x									
Competing hypotheses	88	x									
Issue tree	89	x			x			x			
Influence matrix	92	x									
Fishbone or Cause-effect tool	94	x		x						x	
Black box	96	x									x
IS – IS NOT	99	x				x					x
Stakeholder expectation management	101	x				x					x
Stakeholder analysis	103	x									x
Stakeholder map	109	x				x					x
Stakeholder influence matrix	112	x							x		x
Stakeholder accordion	114	x									
Stakeholder swapping	116	x									
Context diagram	118	x			x			x	x		
Silo view	122	x						x	x		
Helicoptering	124	x									
Mind map	125	x		x	x						x
Diagnosis plan	128	x									x
Desk research/database research	144		x								
Interview	145		x								
Socratic debate	146		x								

Application areas of each tool

Name of tool or technique	Page	Define Situation	Information gathering	Creativity	Information consolidation	Goal setting	Strategic analysis	Technical analysis	Org. analysis	Decision making	Project management
Focus interview	150		x								
Systemic questions	152		x								
Six Pillars	156		x				x				
Tripod	160		x								
Octagon	161		x								
Focus groups	163		x								
Survey/field study	165		x								
Direct observation (DILO)	167		x								
Delphi or expert panel	168		x								
Scenario analysis	169		x	x			x			x	
Questionnaire	171		x								
Climate assessment	173		x						x		
Information gathering plan	177	x	x								x
5 Whys	178	x	x	x		x					
Brainstorming	182			x							
Cardstorming	184			x							
6-3-5	186			x							
Questions circle	187			x							
Lotus blossom	188			x							
Irritating words	189			x							
Mental provocation	191			x							
Cross associations	192			x							
Funny Man	194			x							
Opponents advocate	195			x						x	
Fishpond	197			x							
Bionic	198			x							
Synectics	198			x							
Bisociations	202			x							
Distraction	203			x							
Provocative associations	204			x							
RARA	205			x						x	
Morphological matrix	207			x							
Attribute listing	208			x							
Nyaka	209			x							
Merlin technique/Osborn checklist	211			x							

Name of tool or technique	Page	Define Situation	Information gathering	Creativity	Information consolidation	Goal setting	Strategic analysis	Technical analysis	Org. analysis	Decision making	Project management
Cornell notes	219		x		x						
Pareto (80:20)	221				x					x	
ABC	223				x						
Information matrix	225				x						
Card sorting	227				x						
Affinity diagram	228				x						
Venn diagram	230				x						
Force field	232	x		x	x						
Objectives tree	240	x				x					x
Goal hierarchy	243					x	x				x
Charter	246					x					x
Goal catalogue	247					x					
X-matrix (Hoshin)	250					x	x				x
SMART goals	253					x	x				
Goal grid	254					x					
Well-defined outcomes	255					x					
3 P statements	258					x					x
SNAP	259					x					
Value chain analysis	267						x				
Critical success factor (CSF)	271						x				
Hedgehog	274						x				
SWOT and TOWS	277						x				
Life cycle	284						x				
5 Forces	289						x				
Competitor analysis	293						x				
Customer segmentation	297						x				
Strategic market group	300						x				
Environmental analysis (PEST)	304						x				
Business matrix	307						x				
Product/market mix	312						x				
Blue ocean	315			x			x				
Strategic development options	319					x	x				
Strategy matrix	324						x				
Architectural decomposition view	326	x						x	x		

Application areas of each tool

Name of tool or technique	Page	Define Situation	Information gathering	Creativity	Information consolidation	Goal setting	Strategic analysis	Technical analysis	Org. analysis	Decision making	Project management
Functional decomposition	328	x						x			
Process analysis	331							x	x		
Interface analysis	334							x			
Logical data relationship	338							x			
Entity relationship diagram	340				x			x			
Technology and systems landscape	342							x			
Requirements catalogue	344							x			
Logical and functional system modelling	346			x				x			
Organisational structure	350						x		x		
Diamond grading	355								x		
Org structure versus process	356							x	x		
Span of control	358								x		
Organisational assessment	360								x		
Powergram	361								x	x	x
Communication net	364								x		
Communication matrix	366								x		x
Communication structures	370								x		
Decision tree	377			x	x					x	
Perspectives <sup>3</sup>	379									x	
Argument balance	380									x	
Swap sorting	382									x	
Pair ranking	382									x	
Cross of beliefs	384					x				x	
Polarities	385						x	x		x	
Utility analysis	387									x	
Nominal group	389									x	
100 Points	391									x	
Cartesian coordinates	392			x						x	
Vroom Yetton	393									x	
Risk analysis	396						x	x		x	
Prioritisation matrices	401					x	x			x	
Think 360	406									x	
Distance mapping	408						x			x	
Reflections	411									x	

Name of tool or technique	Page	Define Situation	Information gathering	Creativity	Information consolidation	Goal setting	Strategic analysis	Technical analysis	Org. analysis	Decision making	Project management
Project contract	421	x				x					x
LogFrame	424	x				x					x
Project roadmap/ programme	430					x	x				x
Work breakdown structure	432										x
Gantt chart	436										x
Project work plan	437										x
Project environment analysis	438	x							x		x
Project structure	440								x		x
Project management roles and responsibilities	442										x
Project communication plan	445										x
Accountability matrix (CIDA)	449								x		x
Stakeholder communication	451										x
Workshop guideline	453		x								x
Expectation review	455	x				x					x
Booz ball evaluation	456									x	x
Six thinking hats	457			x							x
Action steps and reviews	458										x
Project management skills radar	459										x

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# Foreword

This book is of the kind you always wanted but didn't think would or could ever exist: the universal field theory of problem solving.

My experience in science (Chemical Engineering) and business (management consulting) over the years has led me to believe that the world of problem solving approaches, methods, tools and techniques is infinite and wobbling. I found during my own struggles in professional life that the only salvation was to make do with the tricks I had come across more or less by happenstance.

Nicolai Andler, indoctrinated by systems engineering and equipped with an admirably systematic mind, has taken upon himself to get order and structure into this conglomerate of problem solving tools and techniques.

To do this, he has based himself on his mental model of a stepwise iterative problem solving process correlated with 10 categories of tools. He scanned the universe of tools and compiled them intelligently in this book so that it has become a real encyclopaedia for problem solvers of all kinds.

It is amazing and comforting to see how this book creates such clarity about the ramifications in the problem solver's mind. And it is hilarious to realize how straightforward dealing with problem and project situations can be.

The author also spells out a warning: tools and techniques require skills and experience in order to be used appropriately and effectively. Cognitive and methodical competence is one thing – social and implementation competences are the other critical ingredients of problem solving mastery.

In this respect, Nicolai Andler's book is a treasure of operational information, both for people who have long been into the practice of project management and consulting, as well beginners in need of a roadmap.

*Prof. Dr.-Ing. Tom Sommerlatte*

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# Preface

*'Most ideas on management have been around for a very long time, and the skill of the manager consists in knowing them all and, rather as he might choose the appropriate golf club for a specific situation, choosing the particular ideas which are most appropriate for the position and time in which he finds himself.'* (Sir John Harvey-Jones)

This book developed as a result of my requirement to have a simple, comprehensive and well-structured repertoire of tools for my own consulting activities. Whenever I wanted to 'pull the rabbit out of the hat', I used to waste time browsing through previous project work to find things I had done previously. In order to avoid having to 'reinvent the wheel' each time, I developed my own 'cheat sheet' – a list with names of tools to prompt and remind me of what was 'available'. While developing and implementing an 'internal consultancy and project office' project for a client, the idea emerged to share my compendium of tools with the client and train the employees in the use and application. Since then, this document has undergone many revisions. My exposure to many different disciplines, e.g. psychology, economics, engineering, systems thinking, strategic management, organisational design, coaching, counselling, change management, organisational behaviour, customer relationship management, systems analysis and design, and IT architecture and communication has shaped and influenced the collection of tools in this book.

For the previous 2<sup>nd</sup> edition, categories had been edited, tools were expanded or added. Containing 23 new tools, the book comprised 122 tools, as well as additional categories and business scenarios.

For this edition, for which the book has been considerably revised and enlarged, client feedback, workshops and trainings again provided many ideas for improvements. 30 new tools have been added to cater for requests from professionals, students and readers. The now 152 tools were regrouped within their categories in a more sequential and practical order. For example, the tools in the category situation definition are now bundled and sequenced in a more useful way, starting with tools used for problem definition, followed by tools that deal with people (stakeholder management) and lastly contextual tools. In a similar way tools in the category information gathering and information consolidation are now grouped according to the qualitative or quantitative nature of the information the tools primarily deal with. The overview tables and introduction sections of each tool category have also been rearranged and upgraded with additional diagrams to help you find a suitable tool more easily.

My heartfelt thanks to all the readers and users of the book who, through their purchase, have contributed to its global distribution and have provided great feedback,



helping me to improve the book. Some readers voiced their need for a 'golden thread' – a guideline on which tools to use and in which sequence. Whilst there is no 'simple painting-by-numbers', there is certainly a basic logic, which I tried to convert into a diagram for you (see section 2.3.6).

As the author, I have a wish: Help me establish this book as an international standard so that the work of all problem solvers, consultants, project managers, trainers and other related professionals becomes easier, better and smarter. My wish is that this book helps to save much time and ultimately ensure that users have a 'work-free weekend'. So please refer to it, use it, distribute it and provide me with ideas to improve it. And if you think that I have misrepresented intellectual property or missed a valuable alternative reference or source: please contact me at [na@NicolaiAndler.com](mailto:na@NicolaiAndler.com). For the latest updates, digital templates and related service offering, visit [www.NicolaiAndler.com](http://www.NicolaiAndler.com).

I also want to make you aware of a complementing work that addresses the 'short-comings' of this book: 'the soft skills'. Watch out for the book 'Tools for Change Management, Leadership and Coaching – A most complete compendium of tools and techniques for managing change and working with organisations, teams and individuals'.

Cape Town, May 2016

Nicolai Andler

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# 1 Introduction to the concept and application of this book

## 1.1 Structure of this book

The book starts with a brief introduction (chapter 1) to the competence model on which this book is based, as well as the book's particular focus: improving the methodical competence as part of an individual's personal development. Chapter 2 explains the concept – categories of tools and techniques aligned to a problem solving process – followed by a description of how to use the book most effectively and efficiently. How to search, identify and select the appropriate tool is described in section 2.3 together with an example of a compilation of tools ('shopping list' to prepare a workshop). Additional scenarios of typical business situations and a suggested compilation of appropriate key activities, tools and techniques ('shopping lists') can be found in chapter 9. The section 2.3 'How to select the right tool' also provides a selection tree ('how to find a tool') for further directions.

The subsequent four chapters represent the four problem solving process steps. The sub-chapters contain the relevant categories of tools and techniques. For example, 'diagnosis', the first problem solving process step in chapter 3 contains the three tool categories 'define the situation' (chapter 3.1), information gathering (chapter 3.2), and creativity (chapter 3.3) in the sub-chapters. This structure enforces process thinking along with the knowledge of which tool is most likely to be needed and used in which problem solving process step. Alternatively, the brief content section at the beginning of this book allows direct access to all categories of tools.

## 1.2 How to use the book

Either *browse* through. Look for what you know and what you still want to know more about. Several techniques might be familiar to you in some way or another. Build on this familiarity and combine old and new. If you are relatively new to this field, you might want to read it *cover to cover* to gain an overview of what is available. As a more experienced user, you might want to dive into those points that attract your interest – perhaps more complex techniques and new approaches. If you are looking for a specific tool, go to section 2.3 'How to select the right tool'.



Use this book as *your toolbox*. Every experienced user has his own well-developed toolbox of his personal favourite tools and techniques. This book is designed to provide you with valuable tools and information to create, develop and *enhance your own toolbox* over time. Be innovative, open and creative. You might find additional applications for some of the tools somewhere else or with a different objective. Take on new ideas and perspectives to enhance your portfolio of tools and please write to me (na@NicolaiAndler.com) with the new ideas and tools you have discovered so they can be included in future editions of this book.

*Author's note:* I use 'he/his' for simplicity reasons only. Please substitute with 'she/her' wherever appropriate.

### 1.3 The target audience of this book

A large number of business people have made use of consulting work in recent years: they have either been exposed to consultants on the job, or were responsible for hiring them. At the very least, however, they would have heard of consulting work and results through somebody they know. Not often, though, is the consultant's job really understood. We are currently in a business phase where people enquire about, even question and study at depth, the apparent 'magic and secrets of consulting' in order to demystify, better understand and be able to question what consultants are doing, in order to potentially do the job themselves.

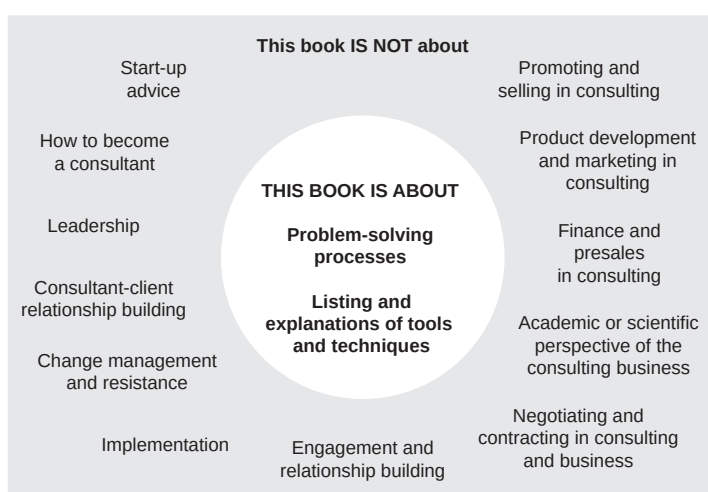
A *typical customer* of this book is:

- A practising consultant who wants to find other tools and techniques to complement his portfolio and to have a source of reference
- An employee in an internal consulting department (the new trend!) who wants to study and learn the portfolio of tools
- A manager who wants to know more about the 'secret consulting weapons' and the consulting buzz-words and techniques
- An individual who wants to solve business problems himself without the use of an external consultant
- A business student who wants to learn some smart and effective tools for his (case) studies or who is interested in systems thinking or management consulting
- Hopefully lecturers and teachers who want to expand their knowledge beyond the 'BCG matrix' and include this approach in their lectures
- Not an absolute beginner

## 1.4 The scope of this book

This book is intended as a practical and simple collection of tools and techniques that are ‘ready-to-use’ without having to study for hours and plunge into the depths of theory and science.

The ‘IS – IS NOT’ tool (see figure 1 and chapter 3.1.17 for more details around the tool) defines ‘what is in and out of scope’ of this book. Most consulting books deal with the setting up and running of a consultancy – not this one! This book only deals with the tools and techniques you will need and could apply during (consulting) projects, problem solving situations, workshops, etc. Therefore, it is the toolbox for the job itself.



**Figure 1** ‘In’ and ‘out of scope’ areas of this book

Two decades ago, Peter Block pointed out that ‘techniques are not enough’ in his famous book *Handbook of Flawless Consulting*. Although he is still right today, I am sure that knowing more of the right tools and techniques and being able to apply them does not harm either.

## 1.5 Skills and competencies for your personal development

The overall intention of this book is to help with your personal development, in particular enhancing your cognitive and methodical competence.

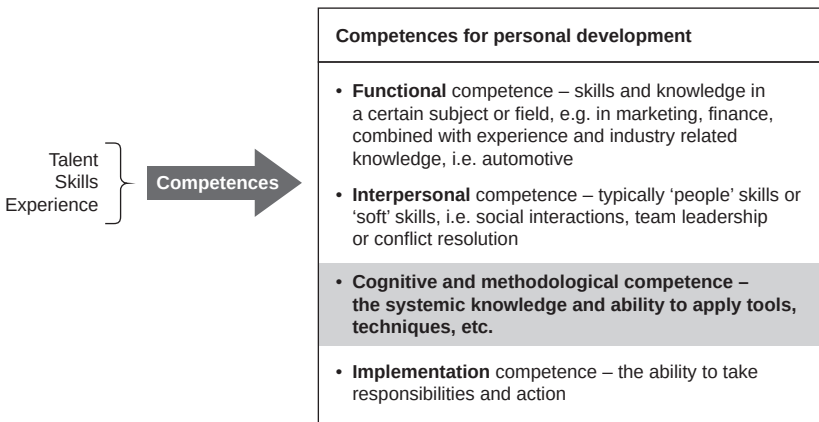
What makes up a competence? Three things influence and shape a competence:

- *Talent* – natural qualities, innate abilities or endowment in some field or activity or something you are born with.

- *Skills* – abilities you can learn, study, or acquire through training, e.g. accounting skills.
- *Experience* – the accumulation of knowledge or skill that results from direct participation in events or activities. It is the application of theory in the practical world and the resulting learning.

All three together – talent, skills and experience – build a *competency*. Human Resource and personal development professionals distinguish between four different types of competency (see figure 2).

- *Functional competence* – skill and knowledge in a certain subject or field, e.g. in marketing, finance, sales, engineering, combined with experience and industry related knowledge, e.g. automotive. This competency is tangible and measurable in terms of degrees and years and is normally documented on your CV.
- *Interpersonal competence* – typically ‘people’ skills or ‘soft’ skills, e.g. social interactions, team leadership or conflict resolution. The key concept in this area is ‘emotional intelligence’.
- *Cognitive and methodological competence* – the systemic knowledge and ability to apply rational analytical logic, tools, techniques, etc.
- *Implementation competence* – the ability to take responsibilities and implement tasks successfully.



**Figure 2** Four competences of personal development – the focus is on the cognitive and methodical competency

This book focuses on the cognitive and methodological competency. In order to enhance your current repertoire, the book provides a comprehensive list of tools and techniques. Instead of just listing them in any kind of order, the approach

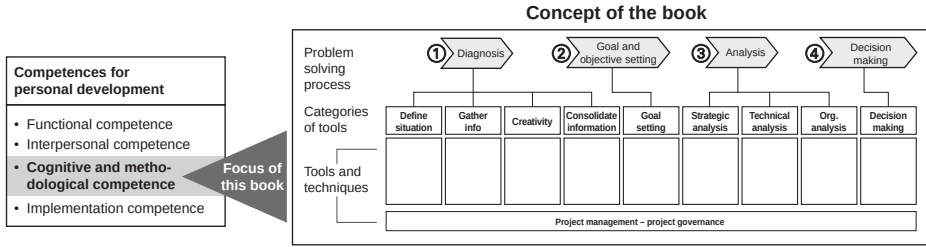


Figure 3 Competences and the concept of this book

combines a simple 4-step problem solving approach with relevant categories of tools. Each category lists the tools that are most likely to be required and needed while working through each specific process step. Figure 3 shows how the competency-model and the concept of this book relate to each other.

## 1.6 Clarification on methodologies, models, tools and techniques

This book’s centres of attention are tools and techniques. I try to follow KISS (= *Keep it simple, stupid*). In order to free up the book of academic ballast, the underlying theories and models have not been scientifically proven. Terminology and abbreviations can sometimes be useful, but are often rather counter productive when it comes to explaining business and consulting terms to outsiders (figure 4). Consultants tend to use ‘TLA’s’ (three letter acronyms) to simplify, but also to avoid having to explain the content behind it. Ask them, if you don’t understand the business jargon! It is likely that you are not the only individual who should ask questions – even the speaker might not really know what he is talking about.

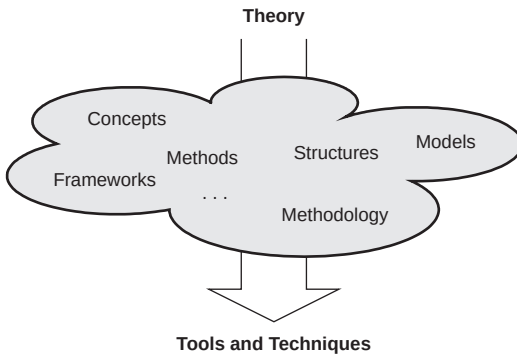


Figure 4 Underpinning for tools and techniques

I do not wish to engage in a discussion about the underpinnings of the selected tools and techniques. Theory came first and somehow, via a variety of models, structures, frameworks, etc., tools and techniques resulted. A tool or technique provides guidelines on how to apply and carry out certain tasks.

*Author's notes*

Whatever name or term you use and how you define *it*: *It* needs to work successfully for you. That is all that matters.

The main purpose of tools and techniques is to provide you with a structure for your thoughts and actions. The tools do NOT replace your own intuition, lines of thought, and critical dialogue with the topic. Use tools as a stimulus and suggestion and customise them according to your needs.

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## 2 Problem solving approach and application

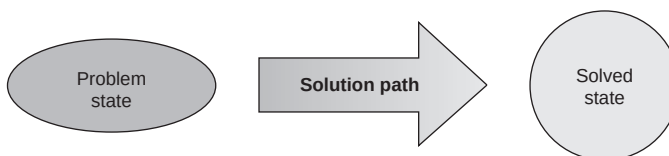
The basic concept on this book is to provide a compendium of tools and techniques typically used in a project management, consulting or workshop environment. A problem solving process is used as a framework around which all categories of tools and techniques are grouped, in order to be able to deal with all issues or problems in every domain of your business life. This book brings together tools and techniques to enhance your methodological competency while focusing on the interdisciplinary areas of strategy, organisational structure, information systems, and project management.

*The underlying concept of this book is a universal problem solving process consisting of four steps (diagnosis, goal setting, analysis and decision making). This problem solving process is applicable to any type of problem and situation. Tools and techniques, which have a similar purpose, are grouped into the same category.*

So, the overarching framework is the problem solving process, which is discussed in the next section (chapter 2.1). The tools and techniques ‘rank beneath’ the problem solving framework in nine different categories.

### 2.1 Problem solving

When solving a problem, we normally want to achieve more than just getting rid of some unacceptable situation. More often we are also trying to achieve some other more desirable state. Theoretically speaking, we’re trying to move from the problem state to the solved state (see figure 5). We do so by crossing what is called ‘the solution path’. It seems obvious that if we do not focus some of our attention on the solved state, the likelihood of attaining it is diminished. Unfortunately, the problem state is what often attracts most of our attention.



**Figure 5** Problem solving and the solution path