

Contents

Preface — V

Foreword — VII

Acknowledgments — IX

Author's biography — XI

How to position this book — XV

1 You and the company — 1

- 1.1 Getting acquainted/for whom is this guide? — 1
- 1.2 Context — 2
- 1.3 Company's Narrative — 3
- 1.4 Purpose and implications of structure — 4
- 1.5 The world outside — 4
- 1.6 The discrepancy factor — 9
- 1.7 The human factor — 13
- 1.8 Karl Friedrich Hieronymus von Münchhausen — 16
- 1.9 Summary — 18

2 Innovation and sustainability — 20

- 2.1 What is innovation? — 20
- 2.2 Company maturity and required mindset and skill sets — 21
- 2.3 Mind over matter — 23
- 2.4 Company memory and copied behavior — 26
- 2.5 Sparking dynamic interaction in the group — 28
 - 2.5.1 Group Photo — 29
 - 2.5.2 Role Play — 32
 - 2.5.3 Map — 33
- 2.6 Trust and safety — 34
- 2.7 Circular innovation and Business Evaluation Cycle — 34
- 2.8 What is sustainability? — 36
- 2.9 Summary — 41

3 The Self-Innovation Method — 42

- 3.1 Introduction — 42
- 3.2 Preparation — 43
 - 3.2.1 Company Support Base — 43
 - 3.2.2 Presenters — 43

3.2.3	Company Innovation Team —	44
3.2.4	Agenda with timing —	44
3.2.5	Content —	46
3.2.6	Criteria —	46
3.2.7	Brain food and drinks —	46
3.2.8	Venue —	47
3.2.9	Time —	47
3.2.10	Presentation and recording tools —	48
3.2.11	Wrap-up —	48
3.2.12	Photo booth/Role Play —	49
3.3	Execution —	49
3.3.1	6-Steps SIM at a glance —	49
3.3.2	SIM example: security of drinking water supply —	51
3.3.3	Workflow: day 1 of SIM Workshop —	54
3.3.4	Workflow: day 2 of SIM Workshop —	59
4	Design to deploy —	69
4.1	Introduction —	69
4.2	Sustainable design guidelines —	70
4.3	Consequences of circular innovation and deployment —	76
4.4	Summary —	77
5	Sources of inspiration —	78
5.1	History of intensified chemical technologies —	78
5.2	Overview of intensified chemical technologies —	79
5.3	Cost estimating intensified technologies —	81
5.4	How to use the overview —	81
5.5	International exhibitions and process engineering contractors —	83
5.6	Summary —	85
6	Epilogue —	86

References — 89

Appendices

Appendix 1: client list — 95

Appendix 2: intensified chemical technologies, including process functions, driving forces and maturity levels — 97

Index — 131