
Contents

Introduction	xi
Part 1. The Operational Reality of Co-design in LLSAs	1
Introduction to Part 1	3
Chapter 1. The Living Lab: A Reality Belonging to a Collective History	5
Jean-Paul DEPARTE, Pierre MÉRIGAUD	
1.1. What is a Living Lab for healthcare and independent living?	5
1.2. Incubation: establishing the LL as a collaborative initiative	6
1.3. The LL as a sustainable crucible for approaches to co-design	8
1.4. Governing a Living Lab and the associated challenges	9
1.5. The economic model of an LL.	10
1.6. Managing competencies in a Living Lab	10
1.7. The Living Lab as a space for learning interdisciplinarity	11
Chapter 2. Running Co-design: Collaborative Projects and Co-design Sessions	13
Barbara BAY, Samuel BENVENISTE, Agnès CAILLETTE-BEAUDOIN, Pauline COIGNARD, Hélène DUCHE, Alexandre DUCLOS, Gilles GAMBIN, Marie-Pierre JANALHIAC, Valérie MICHEL-PELLEGRINO, Arnault THOURET	
2.1. Support for innovation projects	13
2.2. Co-design: organization, running, iteration of sessions	14
2.3. The benefit of acculturation: the example of CEN Stimco’s “Live my Life”	18

Chapter 3. Problems and Methods of Involving Users in Co-development Projects	21
Samuel BENVENISTE, Myriam LEWKOWICZ, Stéphane SOYEZ	
3.1. The challenges and difficulties of involving users: an international perspective	21
3.2. Involving professionals are future users	22
3.3. Motivating non-expert users	22
3.4. Means of involving non-expert users.	23
3.5. Methods of presenting objects to future users.	25
3.6. “Discovery” approaches aimed at the public: type, challenges and relationships with Living Labs	25
Chapter 4. Involving Industrialists	29
Gérald COMTET, Jean-Marie MOUREAUX	
4.1. Taking the market risks associated with classic project management	29
4.2. Motivating the “industrial fabric” and LLSAs: shared interests or interest sharing?	31
4.3. The Living Lab as “provider”: what “market” is there for Living Labs?	35
4.4. Tensions, conflicts and balance between stakeholders in co-design	36
Part 2. Challenges of Co-design and Independent Living	39
Introduction to Part 2	41
Chapter 5. Co-design: Methodologies for Investigating, Developing and Sharing Knowledge in View of New Solutions for Future Use	43
Barbara BAY, Samuel BENVENISTE, Marie-Catherine BEUSCART-ZEPHIR, Alexandre DUCLOS, Marie-Pierre JANALHIAC, Guillaume JÉGOU, Myriam LEWKOWICZ, Hervé PINGAUD, Nadine VIGOUROUX	
5.1. Codevelopment, co-design: what are we talking about?	43
5.2. Sciences, techniques, methods and co-design tools	46
5.2.1. The human sciences in co-design: ergonomics, anthropology/ethnography and sociology	46
5.2.2. Design thinking in Living Labs.	55
5.2.3. Techniques and tools.	57

5.3. Using scenarios: principles and feedback	59
5.3.1. Principles.	59
5.3.2. Scenarios involving medical cooperation: Prométée (reappropriation experiment from preestablished scenarios reported by J.M. Moureaux)	60
5.3.3. Involving the patient in writing scenarios: feedback on the experiment	61
5.3.4. Providing solutions for serious disabilities: the limits of research, Palliacom (experience reported by M. Abraham, Télécom Bretagne and N. Vigouroux, IRIT).	63
5.4. Mastering the technologies.	65
5.4.1. Living Labs and research	66
5.4.2. Discussion: interdisciplinarity	68
Chapter 6. Co-design and Health Technology Assessment: Controlling and Establishing Reproducibility	71
Marie-Catherine BEUSCART-ZEPHIR, Myriam LEWKOWICZ, Jean-Marie MOUREAUX, Nadine VIGOUROUX	
6.1. Assessment approaches.	72
6.1.1. Relationships between assessment and co-design methods	72
6.1.2. Iterative evaluation in practice: ergonomic approach	73
6.1.3. From iterative assessment to measuring the effects produced.	74
6.1.4. Assessment when co-designing solutions for healthcare versus medico-economic assessment	74
6.1.5. Adaptive and continuous measurement of a solution's global impact.	76
6.2. Measurement: from qualitative to quantitative	77
6.2.1. The metric for successful interaction linked to an ergonomic approach: experience provided by N. Vigouroux (IRIT)	78
6.2.2. Quantifying the subjective in a professional context	79
Chapter 7. The Purposes and Reality of Collective Appropriation of Social Innovation	81
Barbara BAY, Pauline COIGNARD, Hélène DUCHE, Elisabeth GARAT, Cédric ROUTIER, Stéphane SOYEZ	
7.1. Landmarks	81
7.2. Feedback	83
7.2.1. Graines de Pays (E. Garat, president of the association)	83

7.2.2. Humanité (S. Soyez, director of the Ateliers d'Humanité	86
7.2.3. La Fabrique de l'hospitalité, CHRU de Strasbourg (Regional University Hospital Centre)	89
Part 3. Diverse Perspectives on Co-design	91
Introduction to Part 3	93
Chapter 8. Critique of the Living Lab Approach	95
Gregory AIGUIER, Valentin BERTHOU, Gérard DUBEY, Gérald GAGLIO, Gilles GAMBIN, Alain LOUTE, Stéphane SOYEZ	
8.1. Interplay between players	95
8.1.1. Relationships with industrial players (G. Gaglio)	95
8.1.2. Innovation in LLSAs: open? (V. Berthou)	95
8.1.3. Co-design: who, why? (L.E. Dubois)	97
8.2. The Living Lab and organizational/social changes	97
8.2.1. The Living Lab approach as social participation (A. Loute).	97
8.2.2. The concept of governance (A. Loute, V. Berthou).	98
8.3. Conclusion	100
8.4. Bibliography	101
Chapter 9. Co-design Methods	103
Agnès CAILLETTE-BEAUDOIN, Marie-Ange COTTERET, Gérard DUBEY, Gérald GAGLIO, Gilles GAMBIN, Hamza IBA, Stéphane SOYEZ	
9.1. Expansion and tensions	103
9.1.1. Heterogeneity of methods within LLs (G. Gaglio)	103
9.1.2. Interdisciplinarity (M. Lewkowicz)	104
9.1.3. The ethnographic and ergonomic approaches (M.C. Beuscart-Zéphir, M. Lewkowicz)	105
9.2. Elements of progress	108
9.2.1. Scenario method (M. Lewkowicz, V. Berthou)	108
9.2.2. Co-design and assessment (G. Gaglio, M.C. Beuscart-Zéphir)	109
9.2.3. The question of measurement (M.A. Cotteret).	113
9.3. Bibliography	115
Chapter 10. Living Lab Approach and Learning	117
Mathias BÉJEAN, Agnès CAILLETTE-BEAUDOIN, Gérald GAGLIO, Hamza IBA, Myriam LEWKOWICZ, Jean-Claude MOISDON	
10.1. Deployment, appropriation, domestication (M. Lewkowicz, I. Hamza)	117

10.2. Learning from co-design (G. Gaglio)	118
10.3. Similarities, differences and complementarities between the LL approach and intervention research (M. Béjean, J.-C. Moisdon)	119
10.4. Bibliography	120
Chapter 11. Other Views	123
Gregory AIGUIER, Karima BOURQUARD, Louis-Etienne DUBOIS, Guillaume JÉGOU, Véronique LESPINET-NAJIB, Myriam LEWKOWICZ, Alain LOUTE, Hervé PINGAUD	
11.1. Co-design (L.E. Dubois)	123
11.2. Interdisciplinarity (M. Lewkowicz)	125
11.3. From interdisciplinarity to transdisciplinarity (V. Lespinet-Najib)	126
11.4. From user-centered design to universal design (V. Lespinet-Najib)	127
11.5. Participative design in the Living Lab and the usefulness of scenarios (M. Lewkowicz)	129
11.6. The Living Lab approach as social participation (A. Loute, G. Aiguier)	130
11.7. The concept of governance (A. Loute, G. Aiguier)	131
11.8. Three themes for consideration taken from engineering (H. Pingaud)	132
11.8.1. Theme no. 1: the dynamic and range of the network effect.	132
11.8.2. Theme no. 2: an identity that asserts itself in a complex environment	133
11.8.3. Theme no. 3: market or progress?	133
11.9. The potential of new capture technologies for instrumented usage observation (G. Jégou).	134
11.10. The concept of the test bed (K. Bourquard)	136
11.11. Bibliography.	138
Part 4. The LLSAs' and the Forum's Value Added	143
Introduction to Part 4.	145
Chapter 12. LLSA Solutions	147
Robert PICARD	
12.1. Stakes and challenges of a shared representation of LLSA solutions	147
12.2. The LLSAs' generic offer	149

12.2.1. The four phases of Living Labs' offer	149
12.2.2. The special case of "derivative products"	153
Chapter 13. LLSA Typologies	155
Robert PICARD	
13.1. Typology characterizing market orientation (supply vs. demand)	155
13.1.1. "Technological" LL	155
13.1.2. LL "market access"	155
13.1.3. Identifying types.	156
13.2. Typology characterizing competencies and methods.	156
13.2.1. The "medical" Living Labs	158
13.2.2. "Disability" Living Labs.	158
13.2.3. "Participation" Living Labs	159
13.2.4. Identifying types.	159
Conclusion	161
Appendix	163
Glossary	167
General Bibliography	179
List of Authors	183
Index	187