

Coinnovation research

Manual for experiential research into organizational coinnovation

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1 Coinnovation research

1.1 Introduction

This manual contains a method for research into organizational coinnovation. The coinnovation process is the organizational development and market adoption of original ideas into new goods, services, and practices by cooperating organizations. Coinnovations are the outcomes of the coinnovation processes. The aim of this manual is to provide a comprehensive method to researchers who want to investigate organizational coinnovation. In this first introductory chapter the four basic themes of the method are summarized. In the next four chapters these themes are further explained. The sixth and final chapter contains guidelines for the use of the method and the composition of a coinnovation research report.

1.2 The research method

The research method is based on ten years of research¹. Coinnovation processes were studied in the house building industry in the Netherlands, and in other industries in other countries. Four themes were discovered to be important factors in the coinnovation process. The research method is based on these research findings and consists of four themes. Within each theme three research tools are developed. These research tools enable the researcher to assess the current and future coinnovative direction of an organization for each research theme.

1.3 Four research themes

The themes of the coinnovation research method are:

1. Coinnovation management practices: the organizational control routines that are used to direct coinnovation processes.
2. Coinnovation leadership styles: the organizational behavior routines that are used to direct and control coinnovation processes.
3. Coinnovation drivers: the organizational and environmental mechanisms that stimulate and direct organizational coinnovation processes.
4. Coinnovation cycles: the series of stages coinnovative organizations repeatedly go through.

1.4 Plan of the manual

This first chapter is a general introduction into the aim and scope of the coinnovation research method. The research method is presented in four themes. Each theme is the subject of a chapter (chapter 2 – 5). In the subsequent chapters the fundamentals of a theme are explained in terms of a research structure, and the research structure is translated into three research tools: a questionnaire and two assessment forms. The questionnaire contains the basic questions that have to be answered to assess the coinnovative status of an organization. The first assessment form is a tool to map the *current* coinnovative direction of an organization. The second assessment form is a tool to map the *future* coinnovative direction of an organization. The sixth chapter contains guidelines for conducting coinnovation research and the composition of a coinnovation report.

1.5 Bibliographical notes

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2 Coinnovation management practices

2.1 Introduction

The first theme in the method for coinnovation research is *coinnovation management practice*. A coinovation management practice comprises the organizational routines to direct and control coinovation processes. This chapter starts with the presentation of the basic structure for research into organizational coinovation management practices (§2.2). In the next section this research structure is translated into two research tools: a research questionnaire and a direction assessment form (§2.3). In the fourth section the research structure is translated into the third tool: a prospective direction assessment form (§2.4). Bibliographical notes are summarized in the last section (§2.5).

2.2 Research structure

In this section the research structure is presented. Coinnovation management practices are divided into six distinctive categories: coinovation design, coinovation planning, coinovation systems, coinovation goal setting, coinovation positioning, and coinovation interaction¹.

Coinnovation design

Organizations create a grand design for coinovation. The grand design is developed by a staff department or by a hired consultant's firm, and is based on market and business research. Top management decides to adopt or reject the design. When a final design is approved, a next organizational step is to implement the design into the organization. The design for coinovation is presented to other management levels in the organization and the design is used as a blueprint for coinovative action. Simple inspection routines are used to

verify whether the coinnovation design is implemented in the organization, and to improve the implementation².

Coinnovation planning

Organizations make a coinnovation plan and coinnovative activities are planned in time. Coinnovative projects are defined, activities that have to be performed are described, and it is determined which results have to be accomplished. The planning of various projects enables the organization to direct and control coinnovation processes on a time scale. Planning practices are performed at all management levels in the organization. Instruments that are used to support planning practices, are: plans, projects, planning charts, and evaluations of plans³.

Coinnovation systems

Organizations use coinnovation systems. A coinnovation system consists of formal working procedures, work result documents, work result measurements, and corrective actions. The coinnovation system provides standardized processes for creating, directing and controlling coinnovative action in the organization. Coinnovation systems are practiced at the work floor level in the organization. The control function is performed by the organization's managers. Instruments that are used to support coinnovation systems, are: certified management systems like the ISO-9000 series, audits by managers, and handbooks in which the coinnovation system and its outcomes is documented⁴.

Coinnovation goal setting

Organizations set and realize coinnovation goals. The goals can be symbolic to provide the organization with a vision, or very specific to focus every day coinnovative organizational action. Coinnovative goal setting and goal realization is both a top down and a bottom up practice. Top management defines coinnovation goals, at lower management levels these coinnovation goals are translated into measurable targets and results, and the results contribute to the coinnovative performance of the organization and to the development of new coinnovation goals. Instruments that are used to support coinnovation goal setting, are:

performance measurements, the deployment of goals in the organization, target setting, and continuous improvement programs⁵.

Coinnovation positioning

Organizations gain or sustain a competitive advantage in the marketplace by positioning themselves in the market as a coinnovative company. The positioning of the organization as a coinnovative firm is prepared and executed by the marketing and sales department and heavily supported by top management. In their publicity campaigns organizations cooperate with organizations with whom they coinnovate. Instruments that are used to support coinnovation positioning, are: analysis of the coinnovativeness of competitors, advertising campaigns, trademarks, and patents⁶.

Coinnovation interaction

Organizations interact with their environments. Distribution and allocation of information and knowledge is stimulated. Communication with other organizational departments, competitors and other organizations is important and creativity is stimulated. Interaction practices are supported by top management. Top managers, middle level managers, r&d officers, work floor managers, and work floor employees are responsible for cross-departmental and –organizational information sharing. Cross-departmental and cross-organizational development of coinnovations is a main goal in the coinnovation interaction practice. Instruments that are used to support interaction practices, are: project teams, cross-functional contacts, and informal r&d departments⁷.

2.3 Direction research

In this section the research structure is translated into a research questionnaire (see Toolbox 2.1) and a direction assessment form (see Toolbox 2.2). The research questionnaire facilitates the assessment of the current direction of the coinnovative management practice(s) of an organization. The direction assessment form facilitates the documentation of this assessment.

Toolbox 2.1 Research questionnaire for coinnovation management practices

Coinnovation management practices

Coinnovation design

Has the organization a grand design for coinnovation?
Is the grand design implemented into the organization?
What are the coinnovation results?

Coinnovation planning

Has the organization a time-based coinnovation plan?
Does the coinnovation plan contain coinnovation projects?
What are the coinnovation results?

Coinnovation systems

Has the organization a coinnovation system?
Is the system and its outcomes administrated?
What are the coinnovation results?

Coinnovation goal setting

Does the organization have a coinnovation goal program?
Are the goals translated into targets and are these targets met?
What are the coinnovation results?

Coinnovation positioning

Does the organization position itself in the market as coinnovative?
Is the organization seen as coinnovative by the customers and competitors?
What are the coinnovation results?

Coinnovation interaction

Does the organization promote cross-departmental and –organizational knowledge sharing?
Are all employees responsible for cross-boundary knowledge distribution?
What are the coinnovation results?

Toolbox 2.2 Direction assessment form for coinnovation management practices

	Coinnovation management practices
	Coinnovation design
	Elements of the coinnovation design: _____
	Implementation results: _____
	Coinnovation results: _____
	Coinnovation planning
	Elements of the coinnovation plan: _____
	Coinnovation projects: _____
	Coinnovation results: _____
	Coinnovation systems
	Elements of the coinnovation system: _____
	Administration of the system and its outcomes: _____
	Coinnovation results: _____
	Coinnovation goal setting
	Coinnovation goals: _____
	Coinnovation targets: _____
	Coinnovation results: _____
	Coinnovation positioning
	Coinnovative position in the market: _____
	Coinnovative image in the market: _____
	Coinnovation results: _____
	Coinnovation interaction
	Elements of cross-boundary interaction: _____
	Responsibilities for cross-boundary interaction: _____
	Coinnovation results: _____
	Coinnovation management practice(s)
	<input type="radio"/> Design <input type="radio"/> Planning <input type="radio"/> Systems <input type="radio"/> Goal <input type="radio"/> Positioning <input type="radio"/> Interaction
	Direction of the coinnovation management practice(s) for coinnovation

2.4 Prospective direction research

In this section the research structure is translated into a prospective direction assessment form (see Toolbox 2.3). The assessment of the future direction of the coinnovative management practices of the organization is the last step in this part of the research method. The prospective direction assessment form facilitates the documentation of this step.

2.5 Bibliographical notes

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3 Coinnovation leadership styles

3.1 Introduction

The second theme in the method for coinnovation research is *coinnovation leadership style*. A coinnovation leadership style is the set of organizational behavior routines that are used to direct and control coinnovation processes. This chapter starts with the basic structure for research into coinnovation leadership styles (§3.2). It continues with a translation of this research structure into two research tools: a research questionnaire and a direction assessment form (§3.3). In the fourth section the research structure is translated into a third tool: the prospective direction assessment form (§3.4). Bibliographical notes are summarized in the last section (§3.5).

3.2 Research structure

In this section the research structure is presented. Coinnovation leadership styles are divided into four elementary types: charismatic leadership, instrumental leadership, strategic leadership, and interactive leadership¹.

Charismatic leadership

Charismatic leaders envision, energize, and enable people to coinnovate. Charismatic leadership is needed to generate energy, create commitment, and direct individuals towards new objectives, values or aspirations. To a certain degree, charismatic leaders neglect organizational boundaries and official roles, use visionary statements, and try to stimulate co-workers' contributions to renewal. They are catalysts and facilitators of the coinnovation process, create a context for selecting the relevant people, help others to overcome barriers, and accelerate the realization of their vision².

Instrumental leadership

Instrumental leaders ensure that employees really act in a manner consistent with the new coinnovative goals. The instrumental leader sets coinnovative goals, establishes standards, defines roles and responsibilities, and creates systems and processes to measure, monitor and assess behavior and results and to administer corrective action. An instrumental coinnovation leader sets challenging goals and rewards behaviors that are directed toward fulfillment of the goals. The instrumental leader initiates structure and team innovativeness, and delineates task boundaries within which members of a project have to work. They act as project planners and as interfacers between coinnovating departments in organizations³.

Strategic leadership

Strategic leaders develop the organization's strategic coinnovation competencies. These leaders are strategically committed to coinnovation, inclined to make bold decisions despite the uncertainty of their outcomes, and invest in coinnovation even when faced with plummeting profit margins. Strategic leadership is often located at the top of the organization. Highly effective strategic leaders have the authority for approval of key ideas and also devote substantial time to discussion on technical matters and to detailed design. A strategic leader assembles and motivates a group with enough power to lead the innovative effort, and facilitates the development of the coinnovative capabilities of employees⁴.

Interactive leadership

Interactive leaders show individualized consideration when providing support, coaching and guidance to employees in coinnovation processes and projects. An interactive leader develops leadership throughout the organization and considers leadership as a function that can be shared with, and performed by multiple persons. The interactive leader stimulates others to become innovative and provides them with powerful support to translate their enthusiasm and knowledge into new coinnovative initiatives. The interactive leader forms and empowers innovative teams in the organization. These teams are given freedom in developing problem solutions. Coinnovative individuals are given a major role in the overall design of coinnovative projects in the organization⁵

3.3 Direction research

In this section the research structure is translated into a research questionnaire (see Toolbox 3.1) and a direction assessment form (see Toolbox 3.2). The research questionnaire facilitates the assessment of the current direction of the organizational leadership style(s) for coinnovation. The direction assessment form facilitates the documentation of this assessment.

Toolbox 3.1 Research questionnaire for coinnovation leadership styles

Coinnovation leadership styles

Charismatic leadership

- Do the leaders communicate a coinnovative vision?
- Do the leaders commit co-workers to coinnovation?
- Do the co-workers contribute to coinnovation?

Instrumental leadership

- Do the leaders set coinnovative goals and create coinnovative processes?
- Do the leaders assure and control the organizational coinnovation processes?
- Do the co-workers contribute to coinnovation?

Strategic leadership

- Do the leaders initiate strategic coinnovation projects in the organization?
- Do the leaders power organizational coinnovation processes and projects?
- Do the co-workers contribute to coinnovation?

Interactive leadership

- Do the leaders empower co-workers to be innovative?
- Do the leaders develop additional coinnovation leadership in the organization?
- Do the co-workers contribute to coinnovation?

Toolbox 3.2 Direction assessment form for coinovation leadership styles

Coinovation leadership styles			
Charismatic leadership			
The leaders' coinovation vision: _____			
The co-workers' commitment to coinovation: _____			
The co-workers' contributions to coinovation: _____			
Instrumental leadership			
The coinovative goals and processes created by the leaders: _____			
The coinovation processes assured and controlled by the leaders: _____			
The co-workers' contributions to coinovation: _____			
Strategic leadership			
The strategic coinovation projects initiated by the leaders: _____			
The innovation processes powered by the leaders: _____			
The co-workers' contributions to coinovation: _____			
Interactive leadership			
The innovators empowered by the leaders: _____			
The additional leaders developed by the leaders: _____			
The co-workers' contributions to coinovation: _____			
Coinovation leadership style(s)			
<input type="radio"/> Charismatic <input type="radio"/> Instrumental <input type="radio"/> Strategic <input type="radio"/> Interactive			
Direction of the coinovation leadership style(s)			

3.4 Prospective direction research

In this section the research structure is translated into a prospective direction assessment form (see Toolbox 3.3). The assessment of the future direction of the coinnovative leadership style(s) in the organization is the last step in this part of the research method. The prospective direction assessment form facilitates the documentation of this step.

Toolbox 3.3 Prospective direction assessment form for coinnovation leadership styles

Coinnovation leadership styles			
Future coinnovation leadership style(s)	<input type="radio"/> Charismatic	<input type="radio"/> Instrumental	<input type="radio"/> Strategic
			<input type="radio"/> Interactive
Future direction of the coinnovation leadership style(s)			

Charismatic leadership			
Chosen coinnovation vision (to be communicated by the leaders): _____			
Chosen co-workers' commitment to coinnovation (to be created by the leaders): _____			
Expected co-workers' contributions to coinnovation: _____			

Instrumental leadership			
Chosen coinnovative goals and processes (to be created by the leaders): _____			
Expected coinnovation processes (to be assured and controlled by the leaders): _____			
Expected co-workers' contributions to coinnovation: _____			

Strategic leadership			
Chosen strategic coinnovation projects (to be initiated by the leaders): _____			
Chosen coinnovation processes (to be powered by the leaders): _____			
Expected co-workers' contributions to coinnovation: _____			

Interactive leadership			
Chosen innovators in the organization (to be empowered by the leaders): _____			
Chosen additional leaders in the organization (to be developed by the leaders): _____			
Expected co-workers' contributions to coinnovation: _____			

3.5 Bibliographical notes

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4 Coinnovation drivers

4.1 Introduction

The third theme in the method for coinnovation research is *coinnovation driver*. A coinnovation driver is an organizational or environmental mechanism that stimulates and directs organizational coinnovation processes. This chapter starts with the basic structure for research into the coinnovation drivers that stimulate and direct the organization's coinnovative performance (§4.2). In the third section the research structure is translated into two research tools: a research questionnaire and a direction assessment form (§4.3). In the fourth section the research structure is translated into a third tool: the prospective direction assessment form (§4.4). Bibliographical notes are summarized in the last section (§4.5).

4.2 Research structure

In this section the research structure is presented. Innovation drivers are divided into four categories: environmental pressure, technological capability, knowledge exchange, and boundary spanning¹.

Environmental pressure

Environmental factors force and stimulate organizations to coinnovate. Many coinnovations are developed because of market demand, or because of governmental pressure. Customers continuously seek for new products and services. Organizations that are capable of serving the renewal needs of customers, gain and sustain market share. In addition to this, governmental bodies and regulating institutions use their regulatory power to direct the coinnovative activities of organizations. Organizations that are capable of reacting and proacting to these regulatory changes sustain, protect, and enforce their position in the industrial landscape².

Technological capability

Technologies enable organizations to develop coinnovations. Many organizations build their strong reputation with a technology strategy and with technological competencies. They develop new technological solutions and seek for opportunities to integrate it in new coinnovative products and services. In many cases the integration of new technologies by coinnovating organizations results in a original products. New markets have to be developed for these technology-driven coinnovations. The market adoption of the techno-coinnovations is stimulated by information campaigns, marketing effort, and financial support from capital investors³.

Knowledge exchange

Knowledge enables organizations to coinnovate. Knowledge about technological developments, about opportunities in markets, and about the possibilities to work with other organizations, is necessary to coinnovate. The creation of knowledge networks consisting of universities, research institutes, and commercial organizations enables knowledge exchange in and between organizations and industries. Industry-wide programs promoting collaborative arrangements between organizations contribute to organizational coinnovation projects. In a coinnovative industry and in coinnovative organizations, research & development is a crucial activity⁴.

Boundary spanning

Initiatives that go beyond departmental, organizational and industrial boundaries enable organizations to coinnovate. A cross-departmental initiative is the integration of the design, production, and marketing functions in an organization to develop a coinnovative, producible, and marketable product design. A way to go across organizational boundaries is the integration of suppliers' innovations or innovative customer demands in the organizational processes and organizational products. Examples of cross-organizational and cross-industrial initiatives are strategic alliances and long-term relationships with other organizations⁵.

4.3 Direction research

In this section the research structure is translated into a research questionnaire (see Toolbox 4.1) and a direction assessment form (see Toolbox 4.2). The research questionnaire facilitates the assessment of the current direction of the coinnovation drivers that stimulate and direct the coinnovative activities of an organization. The direction assessment form facilitates the documentation of this assessment.

Toolbox 4.1 Research questionnaire for coinovation drivers

Coinnovation drivers

Environmental pressure

Does the market stimulate and force organizations to coinnovate?
Do governmental bodies stimulate and force organizations to coinnovate?
What is the organizational coinnovative response to the market and the regulations?

Technological capability

Does the organization have a technology strategy?
Does the organization have technological competencies?
How does the organization develop markets for technology-based coinnovations?

Knowledge exchange

Does the organization participate in knowledge networks?
Does the organization participate in industry-wide collaboration programs?
What is the organization's r&d-function's contribution to coinnovation?

Boundary spanning

Does the organization have alliances for coinnovation?
Does the organization integrate externally developed innovation in its processes and products?
Does the organization intergrate design, production and marketing?

Toolbox 4.2 Direction assessment form for coinovation drivers

<p>Coinnovation drivers</p> <p>Environmental pressure Coinnovative market forces: _____ Coinnovative governmental forces: _____ Organizational response to market pressure and governmental pressure: _____</p> <p>Technological capability The organization's technology strategy: _____ The organization's technological competencies: _____ The organization's development of markets for technology-based coinovations: _____</p> <p>Knowledge exchange The organization's participation in knowledge networks: _____ The organization's participation in industry-wide collaboration programs: _____ The organization's r&d-function's contribution to coinovation: _____</p> <p>Boundary spanning The organization's alliances for coinovation: _____ The external innovations adopted by the organization: _____ The organization's integration of design, production and marketing: _____</p> <p>Coinnovation driver(s) <input type="radio"/> Environmental pressure <input type="radio"/> Technological capability <input type="radio"/> Knowledge exchange <input type="radio"/> Boundary spanning</p> <p>Direction of the coinovation driver(s)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
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4.4 Prospective direction research

In this section the research structure is translated into a prospective direction assessment form (see Toolbox 4.3). The assessment of the future direction of the coinnovation drivers that stimulate and direct the coinnovative activities of an organization, is the last step in this part of the research method. This form facilitates the documentation of this step.

Toolbox 4.3 Prospective direction assessment form for coinovation drivers

Coinovation drivers		
Future coinovation driver(s)	<input type="radio"/> Environmental pressure	<input type="radio"/> Technological capability
Future direction of the coinovation driver(s)	<input type="radio"/> Knowledge exchange	<input type="radio"/> Boundary spanning
<hr/> <hr/> <hr/> <hr/> <hr/>		
Environmental pressure		
Expected coinovative market forces: _____		
Expected coinovative governmental forces: _____		
Chosen response to market pressure and governmental pressure: _____		
Technological capability		
Chosen organization's technology strategy: _____		
Chosen organization's technological competencies: _____		
Chosen organization's development of markets for technology-based coinovations: _____		
Knowledge exchange		
Chosen organization's participation in knowledge networks: _____		
Chosen organization's participation in industry-wide collaboration programs: _____		
Chosen organizational r&d-function's contribution to coinovation: _____		
Boundary spanning		
Chosen organization's alliances for coinovation: _____		
Chosen external innovations adopted by the organization: _____		
Chosen organization's integration of design, production and marketing: _____		

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5 Coinnovation cycles

5.1 Introduction

The fourth theme in the method for coinnovation research is *coinnovation cycle*. A coinnovation cycle is a series of stages a coinnovating organization repeatedly goes through. This chapter starts with the basic research structure for assessing the position and direction of the organization in the innovation cycle (§5.2). In the next section the research structure is translated into two research tools: a research questionnaire and a direction assessment form (§5.3). In the fourth section the research structure is translated into a third tool: the prospective direction assessment form (§5.4). Bibliographical notes are summarized in the last section (§5.5).

5.2 Research structure

In this section the research structure is presented. An innovation cycle is divided in four stages: independent strategizing, coinnovative strategizing, coinnovative organizing, and coinnovation realization. Coinnovating organizations go through all four stages, and in the sequence presented. Organizations often go through a coinnovation cycle several times, and often are in several innovation cycles at the same time¹.

Independent strategizing

An organization independently sustains and strengthens its competitive market position. The market, the society, the political climate, and the stakeholder interests change, and the organization is forced to innovate. The organization explores the possibilities to innovate independently. The product portfolio is analyzed and the organization tries to renew existing products, to enter new markets with existing products, and to develop completely new products for new markets. Projects are started to renew products, to study developments in

markets, and to define, design, produce and market innovative products on existing and new markets².

Coinnovative strategizing

An organization wants to coinnoate. It meets with other organizations and explores the possibilities for joint research & development and coinnoation projects. Places where organizations can be met, are: conferences, trade fairs, and industrial networks. Research ideas, knowledge, and capabilities are shared and the organizational awareness of the coinnoative potential of other organizations grows. The organization chooses other organizations - and on the other side, is chosen by them - to coinnoate with. Together they develop a coinnoation strategy, define coinnoative projects, and determine the expected output of their coinnoative activities³.

Coinnovative organizing

Organizations organize for coinnoation. They negotiate about the distribution of costs and revenues, and enter into contracts with each other. They start coinnoation projects, and develop coinnoation plans. The organizations decide which innovations to produce, how to cooperate, how to divide and share responsibilities, and how to govern the coinnoation projects and processes. They establish a coinnoation organization in which the planned innovations have to be developed, designed and produced. The coinnoation organization has the form of a(n) alliance, joint venture, quasi firm, learning network, interfirm network, r&d consortium or partnership⁴.

Coinnovation realization

The coinnoation organization realizes the innovations planned. Coinnovation management practices are used to direct and control the coinnoation processes. The output of the coinnoation organization is positioned in existing or new markets by means of intensive information and marketing campaigns. The adoption of the coinnoations by the market is a main objective. When the planned coinnoations are designed, developed and can be produced, the coinnoation organization transforms from a design-construct-oriented organization into a communication and marketing organization. The communication and

marketing activities are directed towards the adoption of the innovation by existing or new markets⁵.

5.3 Direction research

In this section the research structure is translated into a research questionnaire (see Toolbox 5.1) and a direction assessment form (see Toolbox 5.2). The research questionnaire facilitates the assessment of the current position and direction of the organization in the innovation cycle. The direction assessment form facilitates the documentation of this assessment.

Toolbox 5.1 Research questionnaire for coinnovation cycles

Coinnovation cycles

Independent strategizing

Does the organization sustain and strengthen its competitive position on the market independently?

Does the organization innovate independently?

What are the organizations autonomous innovation projects?

Coinnovative strategizing

Does the organization explore the coinnovation possibilities with others?

Does the organization have a coinnovation strategy with other organizations?

What are the organization's coinnovation projects?

Coinnovative organizing

Do organizations enter into coinnovation contracts with each other?

Which organizational forms are used to coinnovative?

Which coinnovation projects and plans are executed?

Coinnovation realization

Does the coinnovation organization realize and market the planned innovations?

Which coinnovations are realized?

What is the market share of the realized coinnovations?

Toolbox 5.2 Direction assessment form for coinnovation cycles

<p>Coinnovation cycles</p> <p>Independent strategizing The organization's independent competitive market position: _____ The organization's independent innovation portfolio: _____ The organization's independent innovation projects: _____</p> <p>Coinnovative strategizing The organization's explorations of the coinnovation possibilities with others: _____ The organization's coinnovation strategy with other organizations: _____ The organization's coinnovation projects: _____</p> <p>Coinnovative organizing The organization's coinnovation contracts with other organizations: _____ The organizational forms that are used to coinnovate: _____ The organization's coinnovation projects and plans that are executed: _____</p> <p>Coinnovation realization The realization and marketing efforts of the coinnovation organization: _____ The realized coinnovations by the coinnovation organization: _____ The market shares of these realized coinnovations: _____</p> <p>Stage in the coinnovation cycle <input type="radio"/> Independent strategizing <input type="radio"/> Coinnovative strategizing <input type="radio"/> Coinnovative organizing <input type="radio"/> Coinnovation realization</p> <p>Direction of the organization in the coinnovation cycle</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
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5.4 Prospective direction research

In this section the research structure is translated into a prospective direction assessment form (see Toolbox 5.3). The assessment of the future direction of the organization in coinnovation cycles is the last step in this part of the research method. The prospective direction assessment form facilitates the documentation of this step.

Toolbox 5.3 Prospective direction assessment form for coinovation cycles

Coinnovation cycles		
Future direction in the coinovation cycle		
<input type="radio"/> Independent strategizing	<input type="radio"/> Coinnovative strategizing	<input type="radio"/> Coinnovative organizing
Future direction of the organization in the coinovation cycle		

Independent strategizing		
Chosen organization's independent competitive market position: _____		
Chosen organization's independent innovation portfolio: _____		
Chosen organization's independent innovation projects: _____		

Coinnovative strategizing		
Chosen organization's explorations of the coinovation possibilities with others: _____		
Expected organization's coinovation strategy with other organizations: _____		
Expected organization's coinovation projects: _____		

Coinnovative organizing		
Expected organization's coinovation contracts with other organizations: _____		
Expected organizational forms that are used to coinovative: _____		
Expected organization's coinovation projects and plans that are executed: _____		

Coinnovation realization		
Expected realization and marketing efforts of the coinovation organization: _____		
Expected realized coinovations by the coinovation organization: _____		
Expected market shares of these realized coinovations: _____		

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6 Coinnovation research reporting

6.1 Introduction

This final chapter contains guidelines for the use of the research method and the composition of a research report. The next section provides an overview of sources for conducting a coinovation literature study (§7.2). The third section contains guidelines for the use of the research tools while conducting field research (§7.3). The fourth section provides guidelines for a written coinovation report (§7.4). Bibliographical notes are summarized in the last section (§7.5).

6.2 Literature research

Researchers who want to conduct coinovation research must become theoretical experts in this field of research. To broaden the researcher's knowledge on this topic the researcher starts with a review of the relevant literature. Articles about coinovation are often published under titles with the key words like: innovation, inter-organizational, inter-firm, renewal, new product development (NPD), research & development (r&d), networks.

Scientific journals containing articles about innovation are:

- Creativity and Innovation Management
- IEEE Transactions on Engineering Management
- International Journal of Technology Management
- International Journal of Engineering and Technology Management
- Journal of Product Innovation Management
- R&D Management
- Research Policy
- Research-Technology Management
- Technology Analysis & Strategic Management
- Technovation

Journals that are devoted to other topics in business research but sometimes contain articles about innovation are:

- Academy of Management Journal
- Administrative Science Quarterly
- California Management Review
- Journal of Business Research
- Journal of Management Studies
- Long Range Planning
- Organization Studies
- Scandinavian Journal of Management
- Sloan Management Review
- Strategic Management Journal

6.3 Field research

When the researcher has finished the literature research (s)he can start conducting field research. The coinnovative status of an organization is investigated by assessing the current and future direction of the organization's: coinnovation management practices, coinnovation leadership styles, coinnovation drivers, and coinnovation cycles. The current direction is assessed and documented with the help of the accompanying research questionnaires and direction assessment forms. The future direction is assessed and documented with the help of the accompanying research questionnaires and prospective direction assessment forms. The current and future direction is investigated with research methods like: interviews with managers and employees, observations during meetings, observations of the development, design-production-and-marketing processes, and the gathering and analysis of organizational documents¹.

6.4 Structure of the research report

A coinnovation research report contains topics like:

- an introduction
- the research questions
- the researched organization(s)
- the research design
- the research methods used
- an overview of the relevant literature
- an interpretation of the relevant literature
- a description of the results of the field research: current and future coinnotive direction
- an interpretation and analysis of the field results
- conclusions
- references

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Research questionnaire for coinnovation management practices

Coinnovation management practices

Coinnovation design

Has the organization a grand design for coinnovation?
Is the grand design implemented into the organization?
What are the coinnovation results?

Coinnovation planning

Has the organization a time-based coinnovation plan?
Does the coinnovation plan contain coinnovation projects?
What are the coinnovation results?

Coinnovation systems

Has the organization a coinnovation system?
Is the system and its outcomes administrated?
What are the coinnovation results?

Coinnovation goal setting

Does the organization have a coinnovation goal program?
Are the goals translated into targets and are these targets met?
What are the coinnovation results?

Coinnovation positioning

Does the organization position itself in the market as coinnovative?
Is the organization seen as coinnovative by the customers and competitors?
What are the coinnovation results?

Coinnovation interaction

Does the organization promote cross-departmental and –organizational knowledge sharing?
Are all employees responsible for cross-boundary knowledge distribution?
What are the coinnovation results?

Direction assessment form for coinnovation management practices

Coinnovation management practices

Coinnovation design

Elements of the coinnovation design: _____
Implementation results: _____
Coinnovation results: _____

Coinnovation planning

Elements of the coinnovation plan: _____
Coinnovation projects: _____
Coinnovation results: _____

Coinnovation systems

Elements of the coinnovation system: _____
Administration of the system and its outcomes: _____
Coinnovation results: _____

Coinnovation goal setting

Coinnovation goals: _____
Coinnovation targets: _____
Coinnovation results: _____

Coinnovation positioning

Coinnovative position in the market: _____
Coinnovative image in the market: _____
Coinnovation results: _____

Coinnovation interaction

Elements of cross-boundary interaction: _____
Responsibilities for cross-boundary interaction: _____
Coinnovation results: _____

Coinnovation management practice(s)

Design Planning Systems Goal Positioning Interaction

Direction of the coinnovation management practice(s) for coinnovation

Prospective direction assessment form for coinnovation management practices

Coinnovation management practices

- Future coinnovation management practice(s) Design Planning Systems Goal Positioning Interaction

Future direction of the coinnovation management practice(s) for coinnovation

Coinnovation design

Chosen elements of the coinnovation design: _____
Chosen implementation results: _____
Expected coinnovation results: _____

Coinnovation planning

Chosen elements of the coinnovation plan: _____
Chosen coinnovation projects: _____
Expected coinnovation results: _____

Coinnovation systems

Chosen elements of the coinnovation system: _____
Chosen administration of the system and its outcomes: _____
Expected coinnovation results: _____

Coinnovation goal setting

Chosen coinnovation goals: _____
Chosen coinnovation targets: _____
Expected coinnovation results: _____

Coinnovation positioning

Chosen coinnovative position in the market: _____
Chosen coinnovative image in the market: _____
Expected coinnovation results: _____

Coinnovation interaction

Chosen elements of cross-boundary interaction: _____
Chosen responsibilities for cross-boundary interaction: _____
Expected coinnovation results: _____

Research questionnaire for coinnovation leadership styles

Coinnovation leadership styles

Charismatic leadership

- Do the leaders communicate a coinnovative vision?
- Do the leaders commit co-workers to coinnovation?
- Do the co-workers contribute to coinnovation?

Instrumental leadership

- Do the leaders set coinnovative goals and create coinnovative processes?
- Do the leaders assure and control the organizational coinnovation processes?
- Do the co-workers contribute to coinnovation?

Strategic leadership

- Do the leaders initiate strategic coinnovation projects in the organization?
- Do the leaders power organizational coinnovation processes and projects?
- Do the co-workers contribute to coinnovation?

Interactive leadership

- Do the leaders empower co-workers to be innovative?
- Do the leaders develop additional coinnovation leadership in the organization?
- Do the co-workers contribute to coinnovation?

Direction assessment form for coinovation leadership styles

Coinovation leadership styles

Charismatic leadership

The leaders' coinovation vision: _____
The co-workers' commitment to coinovation: _____
The co-workers' contributions to coinovation: _____

Instrumental leadership

The coinovative goals and processes created by the leaders: _____
The coinovation processes assured and controlled by the leaders: _____
The co-workers' contributions to coinovation: _____

Strategic leadership

The strategic coinovation projects initiated by the leaders: _____
The innovation processes powered by the leaders: _____
The co-workers' contributions to coinovation: _____

Interactive leadership

The innovators empowered by the leaders: _____
The additional leaders developed by the leaders: _____
The co-workers' contributions to coinovation: _____

Coinovation leadership style(s)

- Charismatic Instrumental Strategic Interactive

Direction of the coinovation leadership style(s)

Research questionnaire for coinnovation drivers

Coinnovation drivers

Environmental pressure

Does the market stimulate and force organizations to coinnovate?

Do governmental bodies stimulate and force organizations to coinnovate?

What is the organizational coinnovative response to the market and the regulations?

Technological capability

Does the organization have a technology strategy?

Does the organization have technological competencies?

How does the organization develop markets for technology-based coinnovations?

Knowledge exchange

Does the organization participate in knowledge networks?

Does the organization participate in industry-wide collaboration programs?

What is the organization's r&d-function's contribution to coinnovation?

Boundary spanning

Does the organization have alliances for coinnovation?

Does the organization integrate externally developed innovation in its processes and products?

Does the organization intergrate design, production and marketing?

Direction assessment form for coinnovation drivers

Coinnovation drivers
Environmental pressure
Coinnovative market forces: _____
Coinnovative governmental forces: _____
Organizational response to market pressure and governmental pressure: _____
Technological capability
The organization's technology strategy: _____
The organization's technological competencies: _____
The organization's development of markets for technology-based coinnovations: _____
Knowledge exchange
The organization's participation in knowledge networks: _____
The organization's participation in industry-wide collaboration programs: _____
The organization's r&d-function's contribution to coinnovation: _____
Boundary spanning
The organization's alliances for coinnovation: _____
The external innovations adopted by the organization: _____
The organization's integration of design, production and marketing: _____
Coinnovation driver(s)
<input type="radio"/> Environmental pressure <input type="radio"/> Technological capability <input type="radio"/> Knowledge exchange <input type="radio"/> Boundary spanning
Direction of the coinnovation driver(s)

Research questionnaire for coinnovation cycles

Coinnovation cycles

Independent strategizing

Does the organization sustain and strengthen its competitive position on the market independently?

Does the organization innovate independently?

What are the organizations autonomous innovation projects?

Coinnovative strategizing

Does the organization explore the coinnovation possibilities with others?

Does the organization have a coinnovation strategy with other organizations?

What are the organization's coinnovation projects?

Coinnovative organizing

Do organizations enter into coinnovation contracts with each other?

Which organizational forms are used to coinnovative?

Which coinnovation projects and plans are executed?

Coinnovation realization

Does the coinnovation organization realize and market the planned innovations?

Which coinnovations are realized?

What is the market share of the realized coinnovations?

Direction assessment form for coinnovation cycles

<p>Coinnovation cycles</p> <p>Independent strategizing The organization's independent competitive market position: _____ The organization's independent innovation portfolio: _____ The organization's independent innovation projects: _____</p> <p>Coinnovative strategizing The organization's explorations of the coinnovation possibilities with others: _____ The organization's coinnovation strategy with other organizations: _____ The organization's coinnovation projects: _____</p> <p>Coinnovative organizing The organization's coinnovation contracts with other organizations: _____ The organizational forms that are used to coinnovate: _____ The organization's coinnovation projects and plans that are executed: _____</p> <p>Coinnovation realization The realization and marketing efforts of the coinnovation organization: _____ The realized coinnovations by the coinnovation organization: _____ The market shares of these realized coinnovations: _____</p> <p>Stage in the coinnovation cycle <input type="radio"/> Independent strategizing <input type="radio"/> Coinnovative strategizing <input type="radio"/> Coinnovative organizing <input type="radio"/> Coinnovation realization</p> <p>Direction of the organization in the coinnovation cycle</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
