

# **Systemic Innovation Model Translated into Public Sector Innovation Practice**

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### **ABSTRACT**

This paper explores a systemic innovation model and its translation into public sector innovation practice in the welfare and health field. This systemic innovation model has been developed in the *Innovillage* project (2009-2013) and it has been incorporated into an open web-based development environment for enabling and enhancing collaborative innovation activity. *Innovillage* is a national innovation community for innovation activities in the welfare and health field in Finland. The paper argues for a systemic and collaborative innovation practice where the “relevant” actors with respect to the object of development co-design, co-develop and co-enact the object through the innovation process. The paper consists of three parts. The first part defines the basic concepts and content of the systemic innovation model. The second part describes the structure of the web-based development environment for enabling and enhancing collaborative innovation activity. The third part analyses the user experiences of collaborating and co-developing in the web-based environment. In the discussion implications are drawn, on the basis of the analysis of user experiences, for the further development of the systemic innovation model, web-based development environment and public sector innovation practice.

**Keywords:** public sector innovation, systemic innovation model, socio-materiality, involvement, co-development.

### **Introduction**

This paper explores a systemic innovation model developed in the *Innovillage* project (2009-2013) and its translation into public sector innovation practice in the welfare and health field. The model has been incorporated into an open web-based development environment for enabling and enhancing collaborative innovation activity. The *Innovillage* project as a whole developed a national innovation community in the social and health field in Finland. *Innovillage* is coordinated by the Ministry of Social Affairs and Health and jointly maintained and further developed by the National Institute for Health and Welfare, the Association of Finnish Local and Regional Authorities, and the Finnish Society for Social and Health.

During the last decade innovation has become the organizing concept that drives almost every research, development and policy agenda. However, the fuzzy discussion about innovations has vitiated the whole concept. People typically identify innovations with ideas, models or inventions, and then every research and development project seems to produce innovations. Innovations are also talked about as if they were objects which could be transferred from site to site as such. Once an innovation has been made, it can be implemented everywhere.

This innovation model shifts the focus of innovation discourse from the blurred concept of innovation to the socio-material constituents of the objects of development and from the user-driven or user-centered innovation process to the co-creation and co-development activities of shared objects of development. It studies any kind of object of development, a product, a technology, a service, etc., as a socio-material system or assemblage. When designing any kind of object of development, it is vital to notice every element that has to be mobilized to translate it into practice, to enact it, and to get it to work.

The innovation model proposes a collaborative innovation activity, where the “relevant” actors or stakeholders with respect to the object of development are recruited and involved in the innovation activity from the very beginning. The argument runs as follows: because any kind of object, such as a technology, a product, a service, and a structure, is studied as a socio-material assemblage and practice that is locally constituted by heterogeneous elements (human actors, artifacts, rules, laws...), it is useful to persuade, recruit and involve the potentially relevant actor groups with respect to the object under development in co-developing and co-designing it. However, it is a negotiable question of and changeable who are the relevant actors during the development process.

The paper consists of three parts. The first part defines the basic concepts and content of the systemic innovation model. The second part describes the structure of the web-based development environment for enabling and enhancing collaborative innovation activity. The third part discusses the user experiences of collaborating and co-developing in the web-based environment. In the discussion implications are drawn, on the basis of the analysis of user experiences, for the further development of the systemic innovation model, web-based development environment and public sector innovation practice.

### **Innovillage’s systemic innovation model**

Innovillage’s innovation model is based on a practice-based approach on innovation. In social theory a shift towards this kind of practice-based approach has taken place during the last two decades (Schatzki, 2002; Nicolini, Gherardi and Yanow, 2003). However, the approaches to studying practice do not form a solid methodological or theoretical foundation for practice research. Rather than being a unified movement, the approaches form an overlapping and partially contradictory collection of theoretical interests with various methodological backgrounds (see Mol and Law, 2005; Pickering, 1995; Hakkarainen, 2009; Hakkarainen et al., 2009; van Egmond and Bal, 2011; Marres, 2012; Miettinen et al, 2009).

#### ***Focus on the socio-material constituents of practices***

Latour (1986) argued for a shift towards a performative and practice-based definition of social in the 1980s. Latour’s approach studies the social and social context as a continuous consequence. The social never precedes human action; it is rather the continuous consequence of collective human activities. In addition, the social is not performed only by humans, but also by

any other kinds of elements that mediate human activities and that humans mobilise in their activities. The social is co-created by human and non-human elements.

This innovation model bases especially on the performative approach and relational ontology emphasized by Latour and the other actor-network theorists (Latour, 2005; Callon, 1991 and 2002; Law, 2004). According to relational ontology, human activity and practices are not studied through dualisms, such as practice versus organization, but as socio-material assemblages and systems that are constituted by humans, technical artefacts, money, architecture, values, goals, norms, etc. (the list of the constitutive elements is open and infinite).

A practice is typically developed for some purpose, e.g. to support older people with coping alone at home. In addition, other goals for a practice are defined in the different sites where it is enacted, e.g. to save on the costs of hospitalization when older people are able to cope with living at home for longer. These goals guide and shape the way a practice is developed and assembled and the way it is enacted and maintained. A practice is constituted by human actors (such as clients, social workers, practitioners, managers), by activities and interactions, and by resources (such as tools, principles, technical artifacts, laws, money), which the human actors mobilize and enact in their purposeful activities

The socio-materiality of practices can be illustrated with an example of a doctor's appointment in a health center. First, the practice is constituted by human actors, such as a general practitioner, a receptionist, a nurse, and a patient. Every actor has his/her own tasks in the practice. A patient books an appointment with the doctor in the internet or by calling the appointment number. The receptionist maintains the booking system and handles the registration of the patients. The patients are required to arrive at the appointment at a fixed time. In the appointment, the general practitioner conducts the diagnosis by interviewing the patient. In doing the diagnosis, the general practitioner can mobilize certain tools and directs the patient to take laboratory tests, which are conducted by the nurses. Second, as we have noticed, the practice is constituted by different artifacts that people mobilize in their activities, such as the telephone, information system, physical architecture and tools. Third, the practice is constituted by the manifold tasks and interactions of the humans that are mediated by the artifacts. The attributes of the different elements are constituted in the interactions; they are not given in the nature of things. A citizen becomes a patient when s/he enters into an interaction with health care personnel. A technical artifact becomes an instrument when a human mobilizes and enacts it in his/her activity. The practice is the totality of the repeated actions and activity of different human actors and the instruments and tools they mobilize in their action.

In an ordinary way, practices can be defined as stable ways of doing things in the same way. They are usually developed for some purpose, i.e., to achieve certain goals. In the course of our daily activities, we enact and re-enact the practices to achieve goals. The existence and continuity of a practice is dependent on the fact that we are acting in the same way in the same kind of situation. However, not every action or activity is a practice. They are characterized particularly by stability, mutuality and repeatability, though practices also change or cease to exist for different reasons. There is always the possibility that activities are performed differently than usually. When people change the ways they act in order to achieve a certain goal, a previous practice may cease to "exist".

When studying services within the welfare and health sector, we can see that welfare and health services, and the ways they are organized, produced and managed, are all practices that are performed daily in the same way. In general terms, an appointment with a general practitioner follows the same structure and phases from patient to patient. The practice of a social worker consists of particular repeated tasks she conducts during meeting with her clients. A nurse working in home health care records information concerning the patient during every home visit in much the same way. In these services, the different practices are linked to each other and serve to structure the whole of the services. In many cases, some practices can be prerequisites for others and usually they are in some way dependent on each other.

It can be said that services and organizations are constituted by practices, and implementation of new ways of providing services is a process of constructing new practices. There is no social structure or organization that would exist independent of practices; the practices and activities rather constitute the structures and organizations as continuous effects. They are constantly made and re-made. By taking practices as the unit of analysis, the focus falls on the continuous activities that constitute services, structures and organizations.

### ***Relational practices***

Practices are something that are repeated in the same way again and again in a site, and the locality of practices means that they are always in some sense relational to the site where they are enacted. The example of a doctor's appointment discussed above should also be understood as relational to the site where it is enacted. Although a specific practice of a doctor's appointment might have strong similarity to appointments in different health centers, it is always relational to the site. The physical architecture partly constitutes the way it is structured. Further, issues such as available personnel, tools and instruments as well as the demographic of patients constitute the activities conducted in the practice. Therefore it is argued that a practice cannot be transferred to another site as a simple technical artifact; it is always tailored in different sites on the basis of various scripts, such as texts, flow charts, and peer experiences, which define the human actors of the practice, their roles and tasks, the resources to be mobilized, etc. (see Akrich, 1992). The idea in adopting and adapting a practice is to build a strong, durable and workable socio-material system of action.

This does not mean that each practice is a totally unique and individual practice. Rather, the same solution can be translated into practice in different sites and the solution typically achieves different variants and modifications, depending on the local conditions, for example, goals, resources, knowledge, abilities, client groups, and the other practices that are preconditions for the new practice. The more complex the adopted solution is, the more probable it is that the practice will have differences and variations in different sites.

When translating the same idea or model into practice in different sites, for example, a preventative model of youth's excessive alcohol use, the goal is usually to translate the core idea into every school: the same basic activities, information packages, process phases, etc. Regardless of the core idea, the practices in the different schools will have their own characteristics. This happens because the schools, their resources, their other practices, and the people are different. A Canadian study (Edmondson et al, 2001) analyzed the dispensary

outpatient clinics in large university hospitals, where the same method of thoracoscopic cardiac surgery was adopted. In principle the measures and tools of the method were the same regardless of the site. However, the study observed that the practices, the enactments of the method, varied between the hospitals. Nearly half of the clinics experienced notable difficulties in implementing the method. A key difference between the successful and unsuccessful clinics was in relation to how the practice was successful in linking to other practices of the clinic and how the resources and measures needed were succeeded in mobilizing and enacting.

The relational character of practices has certain implications for how we understand or should understand the workability of practices. In the policies governing best practices, the aim is typically to find and implement universally effective and best practices. According to the relational approach, on the other hand, a practice does not have such inner attributes as goodness, effectiveness, or workability. Rather, these attributes are relational. This means that a practice can be effective or good only when embedded and implemented in a wider system where the goals to be achieved by the practice are defined. Instead of searching for the ultimate best practices, we need to investigate the applicability and workability of a practice in relation to the site. We have to investigate what kind of human actors, activities and interactions as well as resources have to be mobilized and enacted so that the goals defined can be achieved. The goals can be, for example, the health of a patient, the work welfare of practitioners, and the economy of an organization. Only in relation to these goals and the site can a practice be effective or good.

Pickering (1995: 21) has argued that a central and workable way of communicating and distributing cultural practices is through models and exemplars. This is one of the key suppositions of the *Innovillage* innovation model. The solutions produced in the co-creation processes can be generalized into enactment models that contains the core idea and elements of the practice without any local information. This kind of model can then be adopted and adapted by other developers who produce new applications and exemplars of the model.

This relational, practice-based approach gives us also the basis for defining what innovation is and how innovations should be understood. In this framework innovation is defined as a new idea, invention or model that is successfully translated into practice and it solves or meets the problems or challenges it was developed for. This means that an idea, a model or an invention is not an innovation as such. To be counted as an innovation, it has to be translated successfully into practice, it has to have something new compared to the earlier practice, and it has to meet or solve the challenges or problems it was developed for. (See also Pedersen and Johansen, 2012; Mulgan, 2007; Mulgan et al, 2007; Caulier-Grice, 2012; Akrich et al, 2002a; Akrich et al, 2002b.)

### ***Co-development of practices***

It has been proposed that design and innovation should be understood as practical activity and reasoning where the clients, practitioners, managers, developers and other possible actors participate and collaborate in the process (Pohjola, 2009: 120; Lychnell, 2011). This partially practical perspective to innovations proposes a shift also in the theoretical understanding of innovation processes. Instead of distinguishing the creation and implementation of practices as two separate processes, this framework emphasizes the early involvement of various actors in the co-creation processes. The various actors are then simultaneously creating and enacting the

practice. This means that the end-users and creators are partly the same actors. The involvement of various actors already in the early phases of the creation of a new practice is therefore vital.

Emphasis on the early involvement of various actors extends the traditional idea of how new innovations become implemented and become existent. Until recently, innovation studies and design theories (especially in technological discourse) have investigated the role of users in the innovation processes as an individual area of study. Users have been those who either accept or reject the new practices or technologies, or they are merely utilized in the design and development as a source of information in terms of client satisfaction questionnaires or user testing. It has been proposed that design should rather be understood as practical activity and reasoning where both users (clients, practitioners, managers) and developers participate in the process (Pohjola, 2009: 120; Lychnell, 2011).

This idea of involving the various actors in the innovation processes comes with practical implications. It is a well-known fact that in addition to an innovation process generating a result (such as an actual practice in social care), a novel practice can generate various and probably uncontrollable effects related to different sites, of which some may be unwanted or even harmful (see Goldkuhl, 2005). By including various actors, the possible effects, even unwanted, become more controllable during the different phases of the innovation process. Innovation should be seen as a process of making a hypothesis or a theory of some means to achieve a certain goal (how the home care for older people could be organized effectively, cost-efficiently and still take into account the individual needs of the people in home care) (Pohjola, 2009: 128-134). By having multiple perspectives on the creation of the hypothesis, the reasoning over the means to achieve the goal becomes more efficient and controllable.

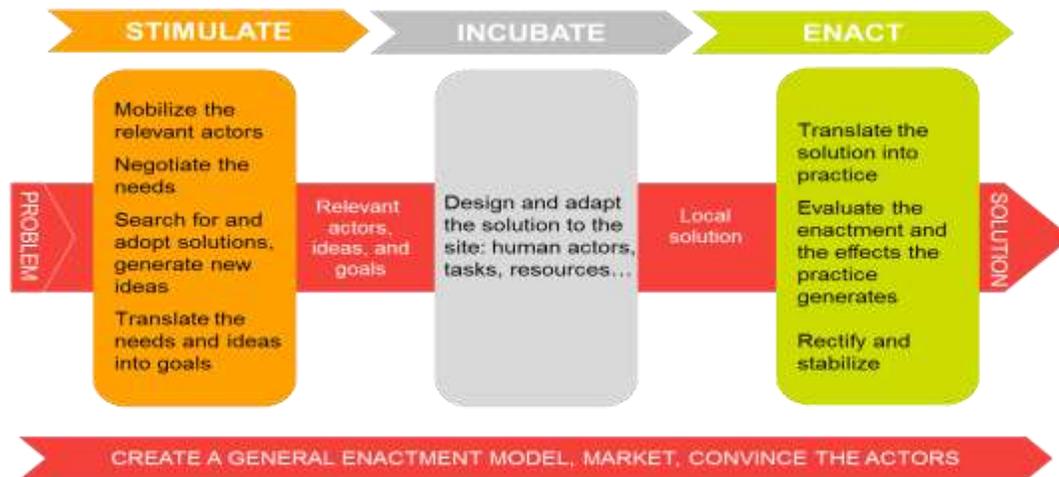
This kind of involvement and co-production of the shared objects of development should then be seen as something more than just a participation of different people and actors. It is not just interaction and dialogue between different participants. Rather, it should be a stronger commitment and co-working on a shared object of activity. Therefore the development and co-creation process of a practice can be understood as a collaborative learning process. In (triological) collaborative learning (Paavola and Hakkarainen, 2009; Pohjola et al, 2011), the process has a shared object of activity and shared goals and aims to which the members of the collaborative are committed. Ideally in such processes, inter-professional co-creation emerges and the expertise of various actors contributes to the development of the shared object.

### ***Three iterative sections***

According to the *Innovillage* innovation model, innovation activity is an open, transparent, and collaborative activity that adopts and adapts ideas or models already developed by someone else or it develops totally new solutions and models. The *Innovillage* innovation model has been developed primarily for the innovation activities of the welfare and health sector, but it can be applied in other sectors and fields and likewise with any type of development object. The model consists of three iterative and mutually constitutive sections: Stimulate, Incubate and Enact (Figure 1) (see also the Innovation Unit's Disciplined innovation model; <http://www.innovationunit.org/>). These sections should be performed to achieve successful solutions and sustainable change in a local site, but not strictly in the order they are presented in

the model. The sections are not phases that should be performed in a linear order, they rather include different development tasks that are performed simultaneously and interactively; a change in one element may generate change in another element. The co-development and co-creation focuses continuously on the shared object of development, that is, on the solution under development. In addition, the innovation model includes a task to generalize a local solution into a general enactment model that can be utilized by any other innovation activity.

**Figure 1: Innovillage's Systemic Innovation Model**



### ***Stimulate***

Innovation activity is always performed to solve or meet some kind of problem(s) or challenge(s). A key task at the beginning of the activity is to identify the various actors who might somehow be relevant in relation to the challenge or problem, that is, they may have some 'unsure' needs or interests concerning the problem or challenge. When identifying the actors, it is useful at the same time to start convincing them of the importance of the activity and recruiting and involving them into the development community.

It is useful when thinking about involvement and engagement to consider four aspects: the client/citizen aspect, the practitioner aspect, the organizational aspect, and the policy community aspect. The clients/citizens are the ones who "use" the services or products. The practitioners are the ones (doctors, social workers...) who are "practicing" the service. The organizational actors are, for example, the managers of the organization(s) (private or public) that is providing the service. The policy community aspect refers for example to the governance of municipalities and districts. These different actor groups may 'have' some interest or need in relation to the challenge that is under focus. These actor groups are possibly the representatives of the actors who will be the actors of the socio-material practice under development.

In innovation activity it is above all a question of negotiating and reconciling the needs of the various actors. This means that the actors involved start to brainstorm a shared solution that meets the different needs, but the needs are also moulded and re-moulded in this kind of process.

The needs should be seen as continuous effects generated and regenerated in the interactions, rather than something that the actors a priori have. Further, it is always reasonable first to check whether somebody else has already developed a solution or a model that meets the challenge and needs of the development community. If there is no suitable solution available, a totally new solution has to be developed. The needs of the different stakeholders are collaboratively translated into development goals. They define what kind of solution should be the outcome of the innovation process. In this process the problem or challenge that was the starting-point of the activity may be re-molded.

### ***Incubate***

When carrying out the more systematic innovation activity the development community should, at the least, have a shared object of development that is being designed as a solution into a site. Only when the community has a shared object of development is it possible to co-design the socio-material constituents of the solution in a way that it will work in the site while meeting the challenges or problems it is developed for. In designing the socio-material constituents, a matrix for designing the socio-materiality of a practice is useful (Table 1). In the matrix, it is possible to co-design the socio-materiality of a solution in a site, i.e., the local elements of the solution including actors, tasks and resources. The matrix consists of the four aspects presented above and of six topics. The topics are human actors, tasks and division of work, knowledge, skills and tools, rules and principles, laws and statutes, and expenses. The design works as a script of the local solution; it defines the socio-material elements of the solution. On the basis of the script, the solution can be translated into a local practice.

### ***Enact***

When testing an idea or a more designed solution in a site, the script is translated into practice. Then the expected and unexpected change the practice generates is evaluated. The evaluation also includes the evaluation of the enactment of the solution. Through evaluating the practice, it is studied whether the practice meets the needs and challenges it was developed for.

The evaluation can be performed in the before, during and after –design. In this design the thing to be evaluated is followed and evaluated before the enactment of the practice, during the enactment and after the enactment. Through this design it is possible to locate the change generated (before – after) and the constituents that generated the change (during).

At its best the evaluation is performed in the contexts of different aspects (client, practitioner, organizational, policy community) and in real time. However, this is not always possible and necessary. Sometimes it is enough to collect the knowledge after the enactment of the practice and only within one aspect. The evaluation is useful to perform by building it into the development process, as a natural part of the enactment of the practice. Then the evaluation knowledge is collected at the same time when enacting the practice – not as a separate process. However, the evaluation design depends a great deal on what kind of practice you are evaluating and what kinds of resources (f. ex. people, time and money) you are able to mobilize in the evaluation.

On the basis of the entire study material collected before, during and after the enactment, evaluation and conclusions will be made of the way the practice under evaluation has generated

the changes and what kinds of other things possibly have generated the changes. In addition, an evaluation will be made about the success and workability of the enactment. On the basis of the evaluations, the improvements that are needed can be made in the practice and the final decision concerning the stabilization of the practice is then made.

**Table 1: A Matrix For Designing the Socio-Materiality of a Practice**

	Client aspect	Practitioner aspect	Organizational aspect	Policy community aspect
Human actors				
Tasks and division of work				
Knowledge, skills and tools				
Rules and principles				
Laws and statutes				
Expenses				

Source: The Authors

### ***Enactment models***

The design made in the matrix for designing the socio-materiality of a practice also helps when a general enactment model of the solution is created. The generalized model is not a model of the local solution developed, it rather defines the core socio-material elements of the solution which should be enacted in every site where the solution is adopted and adapted. It works as a script and a theory of change which is tested when adopting the solution in new sites. This kind of general model can be created during the innovation process and it is typically elaborated after the local enactments of the solution in different sites. The general models work as conceptual artifacts through which the practice developed can be communicated, explicated and marketed.

## **Web-based development environment**

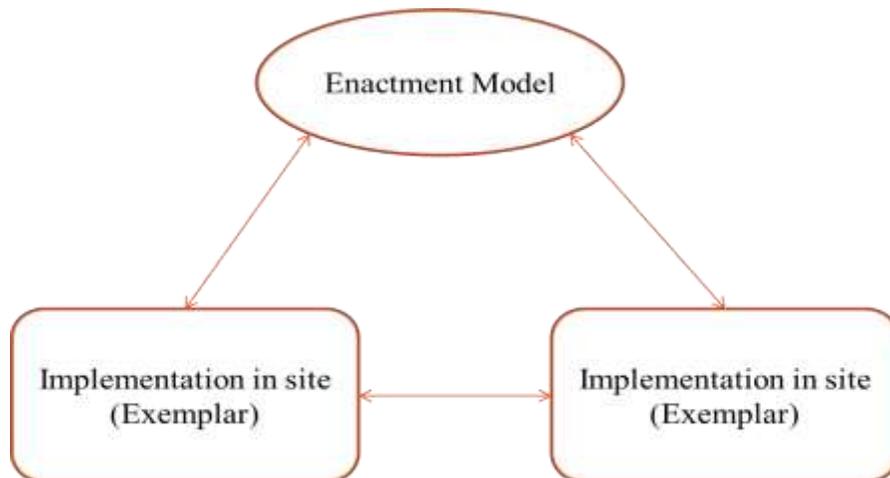
The Development Environment is a platform where practices are collaboratively developed and generalized into enactment models and where information about existing practices and models can be searched for. It has been created primarily for the needs of practice development in the welfare and health sector, but it can also be used in other sectors and hopefully across sectors. All the information entered into and published in the environment is openly available for everyone. The development environment consists of two tools: the Virtual Workspace for the development of practices, as well as the tool for creating an Enactment Model out of a practice.

In the Virtual Workspace the local practices are collaboratively developed, designed and evaluated. In the workspace the developers are able to invite the various actors with respect to the practice under development to participate in the virtual development. The workspace can be utilised for creating totally new local practices and for creating a new local practice out of an already existing enactment model in the environment. It offers the developers also a possibility to discuss and to consult with each other online.

The Virtual Workspace consists of a section that includes the basic information concerning the practice under development and of three other sections that match with the three sections of the innovation model of *Innovillage*: (1) basic information, (2) needs and goals, (3) a matrix for designing the socio-materiality of a practice; and (4) the enactment and evaluation of a practice. The section on basic information names and outlines briefly the practice that is under development in a site and contains e.g. the contact information of the developers. The second section is the place for negotiating and recording the development needs. These needs are translated into development goals. The third section of the workspace consists of the matrix for designing the socio-materiality of the practice. In the fourth section, the realization and evaluation of the enactment is recorded. The evaluation uses a before–during–after design.

In the other part of the Development Environment, the local practices developed in the Virtual Workspace can be generalized into enactment models. An enactment model is a general model that contains the core idea and elements of a practice without any local information. The enactment models in the development environment work as models for communicating the core idea of a practice, while each enactment of a model described in the Virtual Workspace serves as exemplars of the ways the model has been enacted (Figure 2).

**Figure 2: The Conceptual Structure of the Web-Based Collaborative Development Environment**



Source: The Authors

## **User experiences of collaborating in the web-based development environment**

The Development Environment was opened in November 2012. In January 2014 it contained altogether almost 1000 enactment models and their local enactments from varying subjects and themes for development, such as social and health services, service systems, service structures and production, management, training and education, and decision-making.

The environment is utilized especially by the publicly funded development projects in the municipalities and third sector organizations. The Ministry of Social Affairs and Health, the Finnish Funding Agency for Technology and Innovation, and Finland's Slot Machine Association finance annually public and third sector innovation activities in the welfare and health field by over 90 million €, while in Finland there are about 5,5 million inhabitants.

The use of and collaboration in the Development Environment has been followed since its opening. Besides, its use has been trained and facilitated in numerous workshops that has given a rich observational material to study the workability of the environment. This material is utilised in the analysis of user experiences in the following.

The developers who have been working in the environment have found it technically easy to use. Feedback suggests that signing into the service, recording their own information and publishing it has been straightforward and clear, as have the possibilities to study the materials and contents of other developers. Developers have experienced the environment as a clever way to perform and record their own work in real time and to share experiences and expertise among other developers and professionals. It has become evident that it is necessary to have one or two persons responsible for recording and updating the information of a development process into the Virtual Workspace. This is a simple way to guarantee that the job gets done, and ensures every Workspace consists of relevant and current information. It is also important that all the actors involved in a development process allot sufficient time for the co-development process, for example for different kinds of meetings, brainstorming, and commenting on the work of others in the Virtual Workspace.

Some developers have found it somehow embarrassing to record and publish unfinished and therefore incomplete text. They seem to think that all the information that is recorded and shown to others should be completed and qualified. It has been necessary to reassure them that incompleteness is a natural part of a development process, and by publishing also draft texts/outlines of their local solutions, other developers can study how the development process is evolving. To learn to work in the environment takes time and is facilitated by an open development culture in the organizations.

There have been no difficulties to record the needs and goals into the workspace. However, the developers use to perceive principally the client needs, while the needs of the other possible actors in relation to the challenge of the development activity are less identified and negotiated.

The matrix for designing the socio-materiality of a practice has been experienced without exception as a useful tool to think about the local practice and its constitutive elements.

Especially the idea of clients as active actors of practices has opened the eyes of several developers. Citizens and clients are no longer seen as passive users of services, but rather as active actors who have their own vital tasks in the practices.

The least used section in the Virtual Workspace is the enactment and evaluation of practices. The developers are apt to think that someone from outside the development process should come to perform the evaluation. The idea of involving the various actors and voices in the evaluation is still unfamiliar for some. Also the idea of evaluating the enactment of practices in real time is new to many developers. Besides, there is plenty of need for training the basics of evaluation.

The developers are very cautious about utilizing models that someone else has developed. To utilize the work of others in this way has not been ordinary practice in the development activities in Finland. And everyone has not internalized the idea yet that the models in the environment can be freely adopted into their own development work. Developers also often think that they have to show those that fund their development activity that they have developed a new model, and so they develop everything from the beginning themselves. However, to generalize a local practice into an enactment model is not an easy job. The models generalized into the environment are often descriptions of local practices or even descriptions of development projects and activities.

From the point of view of co-development across projects and organizations the environment has obviously generated new collaboration and decreased development work where separate projects around Finland are developing similar solutions and models without knowing of each other. Development activities are seldom performed only in web-based environments, and the idea of the Development Environment is rather to be an aid in the development processes, but the real and workable collaboration across projects and organizations mediated by this environment is just starting.

## **Discussion**

This paper has shown how a systemic innovation model, based especially on the relational ontology emphasized by actor-network theory, has been translated into everyday innovation activities. The paper has presented a systemic innovation model that has also been built as a web-based, open and collaborative development environment which is in everyday use in the welfare and health field in Finland. This is a concrete and unique example of how originally quite theoretical conceptions have been translated into a national innovation environment and innovation practice.

The innovation model of *Innovillage* and its three iterative sections seem to give a workable framework for everyday innovation practices. However, it should not be understood too strictly in the sense that every development task of the model should be performed in every development process. And there are also other development tasks in the innovation activity that are not included in the model. Moreover, the model should certainly not be understood as linear, which has sometimes been the case. Developers can easily fall into the pattern of following the

model task by task, which is not the idea. As with any model, the innovation model is translated into practice and tailored by taking into account the local development needs and conditions.

Developers have encountered the basic ideas of the innovation model – such as socio-materiality, relational character of practices, enactment, and generalized model – in very different ways. On the one hand, there are developers who have strongly adopted the traditional conception of science and development as a linear, rational and objective endeavor and who argue for the strict evidence-based practice movement that bases its studies on randomized controlled trials and who perhaps do not appreciate the role or value of such an open, systemic and collaborative development culture. On the other hand, there are developers who seem to think very much in the same way as the innovation model of *Innovillage*.

The most challenging section of the innovation model is the Stimulate section. The follow-up of collaboration in the Development Environment has evidenced that there is a lot of conceptual work to make to clarify the concepts “relevant or various actors” and “their needs”. The both should be studied ultimately as negotiable things and as consequences generated in the manifold interactions of actors.

The utilization of the Development Environment in development activities during its first years can be characterized as a period of transition in the development culture in the welfare and health field in Finland. Developers have started to operate through the environment, though in much the same way as they did earlier without a web-based environment. There are steps to take so that the development activities would encompass and apply the sections and tasks as defined in the innovation model.

The mobilization and involvement of the various actors in the development activity seems to be a difficult task, which the developers have been conscious of for a long time, but where progress has been achieved only gradually. There is no lack of participatory methods, but to translate them into practice is more difficult. Another insurmountable task is the evaluation of solutions and practices on a site. There are a plethora of evaluation methods that have been developed nowadays to involve the different actors of development in the evaluation. A number of developers still think that someone, an evaluator outside the development community, should perform the evaluation or that there is a kind of order of evaluation methods, and the best method is naturally a randomized controlled trial. On the other hand, the projects often end before the evaluation of the developed practice has been performed. With respect to the development of the Development environment it seems that the technical environment needs no notable changes at the moment, rather the development culture in the field needs to some extent update and change.

One key obstacle for the involvement and co-development practices in the public sector is the organizing of the development activities into projects, which are usually far away from the everyday work practices. This kind of development activity is shaped especially by the funding system for innovation activity in Finland. In these kinds of projects, it is usually difficult to involve the clients/citizens and the other actors. Then the project developers typically develop the practices among themselves and the solutions and practices are developed as a ready-made package, and because of that they are difficult to translate into practice, meaning they are unlikely to work very well. Further, evaluation is often restricted to the voices of a few clients

that are gathered, for example, by surveys and only during the testing period. The development activities should rather be built into everyday practices. Then the development is continuous and the practices and solutions are always developed, tailored and evaluated alongside the actual clients and other actors.

The Development Environment of *Innovillage* is also open to other sectors, such as education, culture, and leisure time, but thus far the other sectors have made use of the environment only occasionally. One of the key tasks of *Innovillage* in the near future is to broaden the use of the *Innovillage*-like development culture to reach also the other sectors. As it is, different sectors develop their solutions and models too much in silos, though often the common element in a good solution at a particular site is the co-development and collaboration between different actors and practitioners across sectors and organizations.

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