Participatory design in PALETTE project

Building a collective methodological approach

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Abstract

The objective of this paper is to report on the preliminary results concerning the building of the participatory design methodology which is being developed using a participatory approach and supported by the implementation of participatory management in the context of the European project PALETTE. PALETTE integrates computer scientists, educational scientists and members of Communities of Practice with the objective to improve and facilitate the living and functioning of CoPs by developing integrated technological services as well as online learning services. The paper builds upon key elements which were crucial for implementing Participatory Design in PALETTE.

Keywords

European Project, Participatory Design

Context

PALETTE is an integrated European project which aims at facilitating and augmenting individual and organisational learning in Communities of Practice (CoPs). Its purpose is to improve and facilitate the living and functioning of CoPs by developing integrated technological services as well as online learning services. PALETTE researchers are concerned in the first place by the social and practical acceptability of these services. Social acceptability refers to "whether the product will be used in the real world". Practical acceptability includes usability, but also reliability, compatibility, utility (Nielsen 1993). Social acceptability is namely related to the transformation of the activity induced by the uses of the new tools and services. This means that computer artefacts interact with and change people practice and mind. In return people adapt the artefact according to their practice or transform the artefact and develop their schemata and competence to fit their activity. Through theses processes, artefacts then become instruments (Rabardel, 1995). In order to

support the acceptability and the adoption of the PALETTE services by the CoPs, an iterative and participative methodology had to be imagined. Similarly, from the researchers' point of view, this methodology is envisaged as an artefact. It had to be acceptable and adopted by PALETTE researchers in order to become a real instrument for them. Their challenge is in that case not only to come up with a methodology for the co-development of the services with CoPs, but also to apply a participatory design approach to build this same methodology. To foster participation between researchers as well as with CoPs, Palette scientific coordinators, consequently and naturally, decided to implement participative management following Branch (2002). Thus, participatory design is central to the PALETTE project. It complies with the iterative nature of the project embedded in its non-sequential/parallel development approach and the reflexive processes supporting its evaluation and its evolution. It is reinforced by a participative management approach through the integration of all project participants and the alignment of their aspirations and their practices in the project. As Branch (2002) explains:

"One of the main social and organizational utilities of participation is that it offers the possibility of resolving contradictory interests through individual negotiation and/or collective bargaining rather than imposition of authority)".

The objective of this paper is to report on the preliminary results concerning the building of the participatory design methodology (PDM)[1] which is being developed using a participatory approach and supported by the implementation of participatory management (figure 1). More precisely, it describes the efforts developed to support the emergence of a common vision of the PDM among Palette researchers, and the persisting discrepancy in their representations of participatory design. It uses data (on-line questionnaires, interviews) procured in three sweeps of data collection for project evaluation during the first 18 month of the project[2].

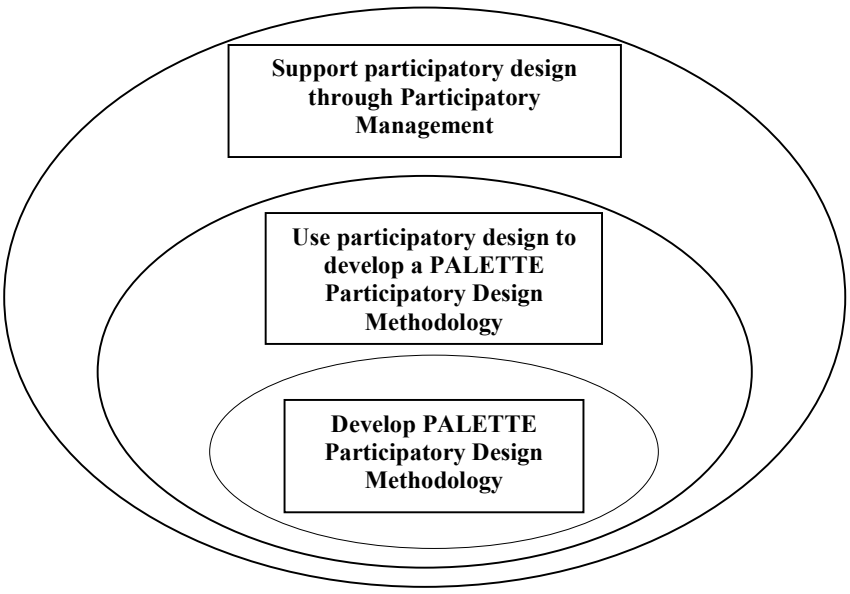

Figure 1: Articulation of PALETTE objectives related to participatory design

[1] The field of Participatory Design is broad and diverse and there is a huge bibliography about this. For an interesting review, see for example Kensing 1998, Muller 2003 or the PDC proceedings available from the CPSR website http://www.cpsr.org

[2] Complete results and methods for data collection are presented in Charlier, B.& Sanders, M. (2007*). D. EVA. 03. Report on the first evaluation of the PALETTE project*. Unpublished report of the PALETTE project.

Developing a common vision of the PDM: its iterative, interdisciplinary and collaborative nature

Building a common vision of the PDM was a critical activity for the good functioning of the project. At the beginning, partners' vision of PALETTE was mainly focused on the intended results of the project for their own activities. It evolved progressively over the first half of the project through a steady and active participation of partners in the planned common activities of the project. But two main events had a decisive impact on the shaping of a common vision: the first PALETTE Summer School that was organized soon after the launching of the project, and the creation of Teams, transversal to the organisation in Work Packages (WP), each of them reproducing at a microcosmic level the composition of the PALETTE partnership.

As it was expressed by one of the participant, "summer school was the cement of the work together in the project". With regard to other projects most of the participants had been participating in, a first joint activity is generally organized one year after the starting of the project. PALETTE first Summer School took place only fours month after the beginning of the project, at an appropriate moment, before partners had time to develop strong individual representations of the project; thus the process the building a collective vision was facilitated and enabled the strengthening of the collaboration and the interaction within the project. It was the first opportunity given to partners from different disciplines to learn from one another, to take collective decisions about methodological instruments and to use a common modelling language. The outcome of this important event was the proposal of the first version of the PALETTE Participatory Design Methodology (PDM) and the decision to base its implementation on the notion of Teams.

PALETTE is composed of more than sixty researchers coming from two main fields: computer scientists and educational scientist; PALETTE integrates also a third kind of actors who are the Communities of Practice. CoPs are not full members of PALETTE, but are represented within PALETTE by what is called a CoP mediator (a person who is a PALETTE researcher and most of the times also a CoP member, or at least a person having a good knowledge of the CoP and a good access to its members and activities). The computer scientists are composed of several research labs presenting different collaborative tools called PALETTE services; initially there were about eight different PALETTE services (in their initial state) included in the project. It was thus rather difficult to have all the actors work together with all the services and all the CoPs. The WPs were organised taking into account both the background of participants and the final outcomes of the project (three WP were dedicated to the three types of expected integrated services, one was dedicated to methodological aspects, one was set up to develop scenarios of use sustaining and implementing the interoperability of services; there was also three supplementary WP, one for evaluation, another for dissemination and the last one dealing with training issues). As such it appeared difficult to fully implement PDM at this "macro" level; this was the reason for building Teams.

Teams are collaborative interdisciplinary groups composed of services developers, educational scientists, and CoPs mediators.. They facilitate the sharing of crucial information, the coordination of activities, and exchanges between the all the partners involved in each Team. They play a major role in the PDM because they gather the various categories of actors and coordinate actions of the PD at a level which is manageable from the technical, human, organisational point of views; they operate at an acceptable level of complexity. They have frequent virtual and face to face meetings to decide on methodological instruments and procedures, mediation and negotiation approaches, and the coordination of actions. Evaluation data gathered show how this initiative has been important for the implementation of the methodology. It makes clear how PDM could work. The Teams approach is at the same time difficult to apply and highly rewarding. Above all, it ensures "real" collaboration between members of different WPs. It is a means by which the project can integrate learning and development possibilities.

Participatory design partners representations

PALETTE project partners have an active and evolving understanding of PDM. It varies from the succinct expression "It means asking people who developed something 'do you think you did a good job?" to the more complex representations involving close collaboration between all actors: researchers and CoPs members, mediation and negotiation through boundary objects and alignment of interests[3]. Both conceptions however refer to the need for cross partnership work and understanding. It implies not only open feedback mechanisms but also a collaborative joint ownership of development. In other words, it is not simply a matter of checking whether or not requirements have been met.

A more limited notion of participatory design could also be found among PALETTE partners. It is more or less a model that all good development would employ i.e. as long as end users are "consulted", participatory design is taking place. This raises issues concerning the direct and indirect participation of different stakeholders within this project, the involvement of end users in the development process, and the importance of their opinions and needs. In fact, it is the "positioning" of the different partners in the process that is at stake.

Various representations of participatory design imply also a set of values concerning collaboration. For some members, collaboration is associated with working efforts to understand new vocabulary and concepts of negotiation, adaptation and new ways of doing things. For other members at the fringe, up to now, the implementation of participatory design has been limited. They have doubt about the participation of the CoPs in the actual design of the method, and they have difficulties to see how this collaboration is fruitful for them in terms of learning.

At this stage of the project, issues of a complex nature, like participatory design, have moved to the centre stage. For project participants' preoccupations, it is not only a matter of implementation but on more profound considerations concerning the way in which different stakeholders might work together to create services and tools for learning.

Conclusion

Living a European project with its own precise and planned management rules (DOW, objectives, deliverables, milestones, etc.) developing and adopting a methodology which by nature implies iteration, evolution and collaboration, implies important efforts towards alignment of interests between all the actors. After 18 months a core vision of the project and its organisation is shared among the involved partners. However, two main issues are still opened that is to involve more PALETTE researchers in the collaboration with CoPs and to give them adequate support (technological and learning ones) and to document the PDM process they live through.

The data collected on the possibility of developing some interesting distinctions between participation, consultation, collaboration and 'taking into account' when project members are attempting to conceptualise participatory design. Developers, for example, seem more likely to see participatory design as 'taking into account' users' needs. The researchers on the other hand, have a more collaborative understanding of the term. The mediations of CoPs practice through scenarios and depictions constructed by mediators and researchers are certainly forms of 'indirect' participation by the CoPs themselves. The authenticities of this kind of involvement will depend on the extent to which the depictions reflect the complexities of the CoPs working practices. Mediations in these cases produce 'boundary objects' which are intended to support the development of tools and services.

[3] In PALETTE, PDM was developed according to a point of view based on ANT (see for example Law 1999 for an overview and Monteiro 2000)

In the PALETTE project, participatory design methodology is a central question. It is not only a matter of implementing it but an issue concerning the way in which different stakeholders might together to create services and tools for learning.

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