

Crossing Intentions in Participatory Innovation

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ABSTRACT

In this paper we explore the role of crossing intentions in innovation processes with users. We use improvised theatre to investigate what happens in industrial (and other) organizations that embark on participatory activities, and which barriers that hinder such activities. We argue that the meeting of people with crossing intentions relevant to the theme can create new insight as movement of thought and action, and thereby become a driver of innovation. However, such meetings in which crossing intentions come to the surface are experienced as risky to participate in. We uncover a number of themes that show high potential for further research.

Author Keywords

Conflict, complexity, participatory innovation, theatre, improvisation, power

ACM Classification Keywords

INNOVATION THROUGH CROSSING INTENTIONS

In PD literature innovation was originally understood as emerging in conflicts. Kyng (1998) depicted the design process as 'a political one that includes conflicts in almost every step of the way', with the conflicting intentions seen between *classes*. Stacey et al (2000) introduce a different way of understanding innovation: Novelty is understood to emerge in the interactions between *people*. Drawing on the work of Mead (1934) they see the local interactions among humans as central to knowledge and action. These *processes of relating* become complex because we meet each other with different intentions, which together create a complexity none of us can foresee. In this paper we will investigate how this theory can help understand participatory innovation processes.

We will, however need to reconsider the term 'innovation'. Usually innovation implies a goal-oriented effort leading to

radically new product and service ideas. In contrast Stacey (2001) understands innovation as emergence of novelty in the conversation in what can be called *the politics of everyday life*: In the negotiation between different intentions, new intentions emerge that will sometimes develop into significant innovations. In particular we focus on *Participatory Innovation* (Buur and Matthews, 2008), an approach that seeks to combine participatory design and design anthropology with a business orientation.

IMPROVIZATIONAL THEATRE AS RESEARCH METHOD

We use improvisational theatre involving trained actors (Larsen 2005) for exploring the social interactions between stakeholders in a participatory process. The company settings we establish are imaginary, but we take care to ensure that they resemble industrial practice. We then study how alternative acts may change people's relating as they become involved in the play, and how novelty emerges in the process of involvement. This latest version of the play we have run twice, once with PhD students and once with a mixed audience of researchers and industrialists.

The theatre play is constructed around the imaginary company Coins Inc, a manufacturer of coins and modern payment systems. The new CEO brings a strong intent to introduce Participatory Innovation to the company, and he sets the goal for Coins Inc. to complete a pre-study solicited by the tax authorities within 6 months: The development of a new, digital payment system for 'unregulated markets', like flea markets and fairs that still largely use coins – and pay little tax!

SCENE 1: The opening scene provides glimpses of how the business operates. Employees discuss the CEO's speech while struggling with day-to-day issues of manufacturing and quality control. They are skeptic about the new product and how to squeeze yet another project into their busy schedule. We invite the audience to discuss which institutions are at play and which barriers to change they see.

We chose this context for several reasons: The 'user' setting is complex, with lots of stakeholders and 'users' who aren't immediately happy about the product, yet the flea market environment is one that most people can relate to on a personal level. The 'product' in question is a physical IT product, well away from the office machinery experience of most participants, yet entirely realistic. To step up realism we even produced a set of design proposals and product mockups that enter the play in a later scene.

STAKEHOLDER WORKSHOP: WHAT'S AT STAKE?

SCENE II: To get the ball rolling, the CEO proposes to invite all relevant users to a meeting to see which interests and intentions are at play in designing the digital payment system. But who are the 'users'? Who should be invited? We ask the audience to identify participants: The stallholders, the shoppers, the consumer association, the tax authority, the company departments, the American owner, etc.

We then open the 'stakeholder workshop' with some 12 different positions improvised by audience and actors, who have had a few minutes by themselves to prepare for their role (e.g. how would a representative from the stallholder association react to such a proposal? What arguments would he or she bring forward?). The actual scene is fully improvised and runs for about 20 min. The meeting has no tight agenda; first the participants each present their view on the digital payment system, then they move into a general discussion.

In their opening lines the stakeholders state what they have planned and what people would expect them to say: The 'tax authority' finds civil ways of formulating the proposal as a positive opportunity. The 'stallholder association' expresses hesitation about the overall idea, afraid that the new system will destroy the flea market business. The 'company CEO' is forthcoming: *"What is it that you want from this mini-terminal that we will build?"* The 'marketing manager' thinks in USPs (Unique Selling Points): *"We can make your life easier"*. For a while the participants establish their positions in relation to one another.

But as the meeting develops the participants cannot stick to the lines they prepared. They gradually start challenging each other in unexpected ways, and it becomes clear that they indeed participate with very different intentions. The 'chairman of the stallholder association', for instance, gets into an internal argument with one of his 'members' who openly disagrees about their role in the workshop. She maintains that her association should boycott the work. Then the 'shop steward' puts pressure on the management of the company:

- *"We have serious concerns about (how this new technology will influence) the situation of the workers, Mr. Stryker, you should have an idea about this"*
- *"Today we are mainly here to listen ('CEO')"*
- *"Does this mean that you are risking the destiny of the company without having a concept?" ('shop steward')*

In the situation the flow of the conversation feels confusing for everybody, but on hindsight we realize that out of this interplay significant moves happened and powerful themes emerge: At some point, for instance, the 'shopper' is challenged to give her view (*"Who will pay for this? Are the consumers ready to pay extra?"*). She responds with an emotional plea for the delights of visiting flea markets:

- *"Please don't touch the magic of the flea markets"*

This statement constitutes a remarkable change in the conversation. All seem to agree that this metaphor is indeed a good way of capturing the essence of the project challenge, and the expression is taken up by others and gets an influence on the following work. 'Magic' probably rings with people's own flea market experiences, however, we will claim that it is the interplay of several crossing intentions, apparently irrelevant for the development of the product, that suddenly makes room for the 'shopper's' voice to become influential.

A wide range of different intentions are revealed during the stakeholder workshop, and novel themes seem to emerge when intentions conflict. It is impossible to plan or anticipate which direction such a conversation may take, but we may sense what we can call a particular *quality of conversations* that supports such movements, and indeed supports innovation. We suggest that it is possible in future work to study and recognize certain qualities in the flow of the 'innovative' conversation.

After the play, we ask the audience to react on what they have seen: Is this realistic? How can the project progress? One the one hand, several participants agree that it is an advantage to learn about all the different positions right at the outset of the project. On the other hand, part of the audience feels uneasy about the directions the discussion took - *"They are washing their dirty underwear in public..."*. Some argue that one should reduce the number of invited participants, to better control the discussion. We will not go along with this argument. The sheer number of relevant, crossing intentions seems to pave the way for new perspectives. Reducing the breadth of stakeholder voices would possibly streamline the discussion, but also keep some of the stakes hidden. So maybe Participatory Design practitioners might benefit from daring to bring more stakeholders together than in the traditional designer-user workshops, organized without a clear agenda and process plan?

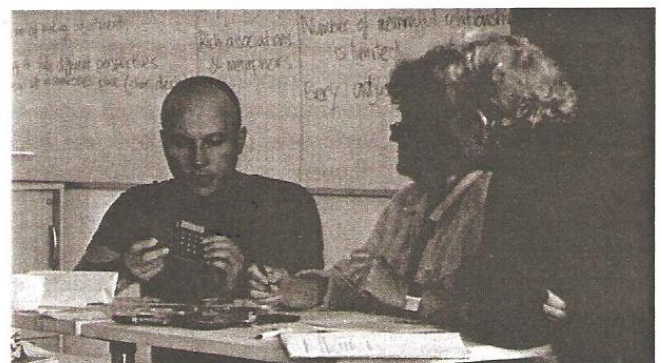


Figure 1. Project startup: The engineer has a proposal for technology already. But shouldn't we study users first?

PROJECT STARTUP: DEPARTMENTAL CONFLICTS

SCENE III: After the large stakeholder workshop Coins Inc management decides to go forward with a pre-study, and three employees from engineering, sales and design are

appointed to organize the project. The team struggles with the CEO's wish to introduce participatory innovation for ensuring an innovative product that really fits user needs. But the meeting with users has had an impact. In their conversation they return to some of the arguments they heard – the magic of the flea markets – and each of them claim that their approach will fulfill the needs of users and vendors. The engineer suggests the reuse of a piece of hardware from an earlier project. The designer contests this:

- “And who says users want something that looks like an old-fashioned calculator?” (‘designer’)
- “Well, of course a bit of styling is necessary – but you can do that, can’t you?” (‘engineer’)
- “I really think we need to check out what people actually want!” (‘designer’)
- “But you heard them: They don’t want anything at all!” (‘sales’)

Scene II is scripted, and ends at a point when the meeting seems stuck. We engage the audience in a traditional forum theatre style: They discuss what they see, come up with proposals for how to move on, and the actors improvise different options.

Although the play showed that the three employees had well-established relations to each other with well-known positions and intentions, trying to deal with the uncertainty of involving user perspectives made their conversation difficult. The audience readily recognizes this as a very realistic conversation. However at the same time it generates a lot of comments:

- “This is a turf war between three different competencies. They don’t really get closer to each other (...) They are fighting about who’s perspective should win.”
- “Everybody is going from their own perspective because they don’t really have a consensus on what the goal is. Where is the project leader, who can say: This is the way we are going?”

Obviously the conflict in the team felt unpleasant to watch. The audience suggests different ideas, all with the aim to dissolve this uneasiness quickly: Call in a manager to represent a goal given from ‘above’, or call in a facilitator to make them agree on a shared goal.

If we employ Stacey et. al.’s concept of ‘the politics of everyday life’ (2000) we inevitably need to accept that also goals are negotiated in such processes; a ‘shared goal’ is a social construct. Rather than see conflict as a hindrance for ‘real’ work, we may want to consider *conflict as a resource* in innovating: Allow team members to improvise when their own contribution appears to themselves as not helpful. The identities of the involved are in play (who are we, what are we doing). Bringing in more intentions, e.g. user voices, can increase the potential for getting stuck, raise the anxiety level and tempt the members to look for quick solutions, like asking management to resolve the conflict. None of this is in itself a problem, however if one does not realize that

these processes are political by nature (in the sense that different intentions are negotiated and dealt with in the ongoing conversation), it can lead to solutions that will not bring forth novelty.

Setting ‘goals’ early in the process can be highly problematic in a project aiming at producing genuinely new solutions. Attempts to suppress the conflictual negotiation of crossing intentions are likely to simply refer the discussions to informal settings and diminish the likelihood of novel solutions emerging within the team.

We notice a movement in Participatory Design from the early days, when conflict between workers and management was understood as an inevitable part of the game, towards a stronger acceptance of consensus as a facilitation ideal. Taking ‘the politics of everyday life’ seriously, one would need to rethink the process facilitator role from neutral outsider to full participant with yet another intention.

FLEAMARKET STUDY: THE USER INFLUENCE

SCENE IV: The CEO puts more pressure on the organization by suggesting that this project should aim at a broader international market. This makes the sales employee reconsider her rejection of the designer’s suggestion that the team should ‘check out what people actually want’. Rather than go with a proposal (from the audience in Scene III) that the team simply visit a local flea market, she now proposes that they step up ambitions and all go to visit a flea market in Amsterdam to study selling and buying at an international venue. We engage the entire audience in recreating this user study experience: One group acts vendors and turns the hall into an impromptu flea market with stalls and merchandise. A second group acts shoppers, and a third group takes the role of design ethnographers, who observe buying and selling. In a rather controlled fashion the audience acts out crossing intentions: Buy, sell, observe.



Figure 2. Flea market study: Crossing intentions of shoppers and vendors help nuance our understanding of the ‘magic’.

It is well known in Participatory Design that shared user studies have a strong impact on how the team relates to the task afterwards. Although the flea market study is entirely

improvised, we recognize the same effect here in the reflections of the audience. The 'design ethnographers' for instance note that:

- *The social interaction is very important, for some more than the money. First social interaction, then buying.*
- *Many shoppers don't like to bargain, but they enjoy observing other buyers' negotiations.*

And the 'shoppers' and 'vendors' relate their personal hands-on experiences "*If they see your money, they set the price, and suddenly the deal is done!*" "*It is more like a carnival than a supermarket.*"

In light of the significant 'flea market magic' theme that came up in Scene II, the participants manage to nuance their perception of the practices at flea markets and it is beyond doubt that it influences their thinking.

THE HAND-OVER MEETING: EXTERNAL IDEAS

SCENE V: After an intense period of Participatory Innovation work, the deadline for the pre-study is drawing close, and decisions need to be made. A consultant has been hired to develop three prototypes based on the product ideas from the flea market study. But bringing new design concepts into the company is not an easy task (Clark 2009). We attend the meeting, when the consultant presents the prototypes and we see how sales, design and engineering react. The team members argue for each their solution grounded in who they believe is the customer ("*We just need to please tax!*"), how much development effort is required ("*Touch screen isn't necessary!*"), what image the company should opt for ("*But this (keyboard terminal) is the past!*"). Although the positions we saw in Scene III are still recognizable, there is a change. There seems to be a shared understanding in the team that change is inevitable, but the uneasiness of improvising in an undetermined space is almost palpable.

We invite the audience to discuss the barriers, and how they manifest in the conversations between the team members.

- "*The (team's) response was: Which one do I like best. Now we need to decide. (...) If we could somehow build into the presentation a different kind of response.*"
- "*We could play with the environment. They are sitting there in an office rather than being in a flea market where it is used.*"
- "*There are no references back to the user research we did. (...) So they can only take their own perspectives.*"

The audience recognizes that the team is struggling with the external perspectives (users, customers) but that it doesn't become very apparent. What remains interesting for further research in between Scenes IV and V is how the crossing intentions of users and company employees manifest themselves in the conversations within the project team. Participatory Design has a very strong focus on the moves happening in the moments of user collaboration, as emphasized in the 'event-driven design' concept (Brandt 2001), to an extent that the importance of 'internal' activity

within the industrial organization has received much less attention.

DISCUSSION

The concept of crossing intentions has much to offer in explaining the value of participation in innovation processes. Based on Stacey's complex responsive processes of relating we have seen how new meaning and new ideas emerge in the interaction of a multitude of crossing intentions. Using theatre as a method we are able to gain insight into the dynamics of how users and other stakeholders may interact with company employees. This is helpful if we want to understand why voices of users sometimes are heard and sometimes disappear in the continued conversations in the organization.

Understanding innovation as a result of the negotiation of crossing intentions brings forward new perspectives on participatory innovation. Attempts to reduce complexity or to control conflicts between perspectives may impede innovation. We see a need for developing new formats of collaboration for large, complex contingents of stakeholders to complement well-known user workshop formats. Also, we suggest rethinking the ideal of process facilitation as neutral consensus forming.

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