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Participatory Design in Consulting

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Johannes Gärtner
Abteilung für CSCW
Institut für Gestaltungs- und Wirkungsforschung
Vienna Technical University
Phone: +43 1 58801-4419
Fax: +43 1 504 24 78
johannes.gaertner@tuwien.ac.at

Abstract:

This article addresses the use of participatory design (PD) techniques in non-research projects from the perspective of consulting. The central categories for analyzing the course of action and the relationship of actors are risks perceived by consultants, customers, and clients. The basis of this article is a large number of consulting projects where participatory techniques were used. Overall it seems feasible to use PD in consulting. Still using PD, especially as a consultant in systems-design, has to be considered risky for both consultants and customers. Therefore techniques that reduce risks are crucial. Several such techniques are well known (steering committee, milestones, prototyping). Some additional, more PD-specific techniques are discussed. The analysis further led to the issues of organizing the technical process and the group process. Both processes are important when using PD in consulting. The technical process assumes responsibility and thereby requires involvement in order to secure contracts. At the same time this conflicts with the group process where neutrality is needed. Therefore, separation of facilitation from design by working in teams of two is considered. This also supports the expertise needed for such projects as it is sometimes difficult to find individuals with both qualifications.

Keywords: Participatory Design, Consulting, Systems Development

1. Introduction

Consultants and consulting companies are important actors in the diffusion and the shaping of organizational and technological change. Thousands of small consulting companies provide technical and organizational advice. Big consulting companies are even able bring up trends (e.g., Davenport, 1993). On closer inspection, a variety of activities are called consulting, for example, training, coaching, technical expertise, managing for a limited period of time, organizational development (Exner, 1987; Nagel, 1992). Consulting plays an important role in systems development too. A survey of the European Federation of Management Consulting Associations shows that 17.2% of consulting in 1993 dealt with information technology and systems. 7.0% dealt with project management (cited in Kubr, 1993).

Often consultants involve employees in their activities. For a detailed, critical discussion of "social techniques" compare Breisig (1990). Even "hard" consultants, like McKinsey, involve people. These issues are not the focus point of this paper, even though it could be worthwhile to take a closer look.

This paper is an attempt to contribute to a better understanding of the relation between consulting and applying methods and techniques of participatory design. There are strong reasons for investigating this relation:

1. Consulting might be one way among others to disseminate methods and techniques of participatory design. Participatory Design (PD) might consequently get more broadly accepted and professionally practiced.
2. The perspective of consulting might help to focus on the organization of non-research

PD projects¹: starting to get in contact, defining the relationship, contracting, and so forth.

In what follows, I first take a closer look at the landscape of consulting: practical consequences of engaging in consulting; two important dimensions where consultants may differ in their focus; the difference between systems development by consultants and “classical” systems development. Second, drawing on experiences in using PD in a number of consulting projects, I reflect on obstacles and specifics of PD in consulting. These reflections concentrate on the relationships between the actors involved (customer, clients, consultant) and risks perceived by each of them.

2. Consulting

2.1. DOING CONSULTING

Like system development, consulting orients towards markets and customers. Consultants have to get in contact with companies and start to define the setting for their work, before the actual work starts. This is a burdensome task. Consultants and potential customers have to identify each other.

The definition of the project starts when consultants and companies get in contact and want to work together. They have to define a new structure and its relationship to already existing ones. The definitions include: scope of activities; members of the project team; typically a steering committee; temporal and resource restrictions; involvement and responsibility of the consultant.

One circumstance that renders things difficult at this level is that those persons who decide whether the project will be funded are typically not in the project team or only a small part of it.

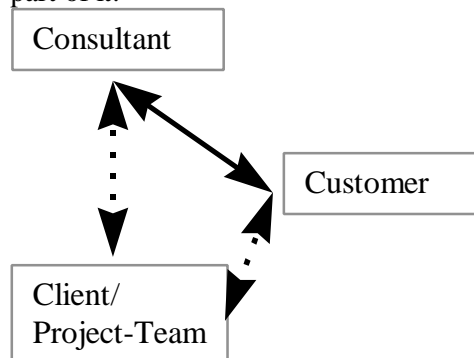


Figure 1: The basic network elements of consulting

For each project, the consultant, together with the customer, has to define the setting (here called client or project-team). Customers will support (and pay) only, if they consider risks involved to be acceptable with respect to expected outcomes. Therefore, customers will be cautious in hiring consultants and will try to influence arrangements and definitions of the future work according to their needs. This might raise problems in getting contracts and in defining the future setting for the project (e.g., the limitations to the scope of activities might be too strong).

The distinction between customers and clients is not unusual but very important. For example, in (Bødker, 1996) a project is described, where management was asked not to participate in a future workshop with employees. The reason was not mistrust, but the experience that employees had been reluctant to criticize when management participated in earlier projects.

2.2. TYPES OF CONSULTING

Even though consulting may evoke images of “Samsonites,” dark suits and first class frequent flyers, differences have to be considered. There are many typologies of consulting, (e.g., Kubr, 1993). For the analysis at hand, I omit consulting that does not deal with organizations and groups, but aims instead at individual support (from coaching to therapy). Given this restriction, the typology given by Titscher (1996) seems to be very useful. He distinguishes two dimensions where consultants may position themselves differently:

- 1) Involvement of the consultant
- 2) Scope of the consulting field

2.2.1 Involvement of the consultant

At one extreme of this dimension there is very little involvement, but at the same time very little directions, competent authority, and responsibility. Typically consultant activity of this type would involve tasks like training, adjusting, and facilitation. At the other extreme are high responsibility and competent authority. Consultants in this area might be a “Manager auf Zeit,” a manager for a very limited period of time or a crisis-manager.

The definition of responsibility for outcomes is critical. Taking responsibility makes

involvement in the organizational actor network necessary. This immediately raises the question of how to deal with existing and potential conflicts within that network.

If one assumed harmony in project teams, this would not be relevant, but this view seems to be rather unrealistic (compare Bjerknes and Bratteteig, 1994). Therefore, consultants have to position themselves either to be involved in the conflict by supporting one group or to stay outside the conflict and be accepted by all parties involved.

2.2.2 Scope of the consulting field

The scope of the consulting field is the second dimension. One may distinguish rather narrow fields of expertise with in-depth knowledge (e.g., technical support in a specific field) from more general concepts like organizational development. The scope of the consulting field influences both the ways in which consultants approach companies and the actual definition of projects.

Figure 2 shows examples for different types of consulting with respect to the two dimensions described above:

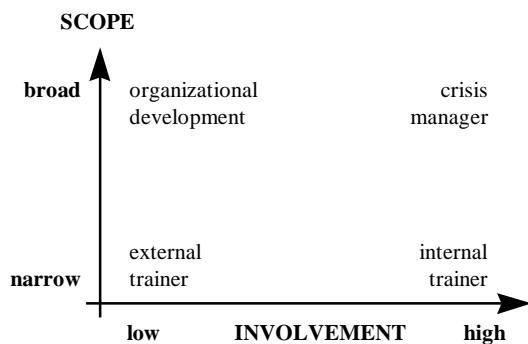


Figure 2: Example of different types of consulting with respect to the dimensions of scope and of involvement, following Titscher (1996)

These dimensions may help to think about the focus of consulting. Still, actual positioning may vary from project to project and also during projects (e.g., a consultant might become more involved in the course of the project than intended at the beginning).

2.3. SYSTEMS DEVELOPMENT AND CONSULTING IN INFORMATION TECHNOLOGY

Consulting in the field of information technology is one important area of consulting. For

example, the Career Guide (Miller, 1997) lists ten big Information technology consulting companies with revenues from 45 to 440 million US dollars in the United States (1995).

Interestingly, among these ten companies there are IBM-Consulting, Unisys, Oracle, AT&T. At the same time, big software companies (e.g., SAP) are not listed, although they have many consultants helping their clients adapt software and work processes. The focus of systems developers (self-definition as primarily system developers) as well as of consultants may vary broadly in both dimensions described above. Systems developers may too have a broad or narrow scope of activity (e.g., general programming, specialized in specific areas). They too may work with low or high involvement (e.g., developing generic products for a large market, maintenance of company specific programs).

The difference between consultants and system developers might lie in the organizational level at which they typically act and in their focus of activities. Consultants tend to work at hierarchically higher levels of the organization and concentrate more strongly on organizational issues, on project management and on how and which type of systems should be developed. For consultants, systems development on this level is an additional issue if not their field of specialization. They may go into actual development but it is not their primary focus. System developers, on the other hand, typically focus more strongly on the actual development. Figure 3 illustrates this third dimension where consultants typically differ from system developers.

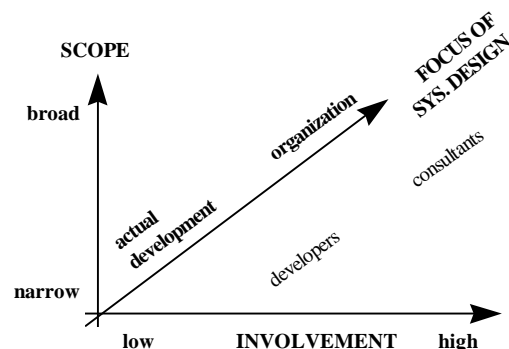


Figure 3: An important difference between consultants and system developers with respect to their focus in systems development

Again actual positioning of consultants and system developers may vary from project to project and within projects. Additionally, actors may understand themselves differently to this suggestion.

2.4. POSITIONING PD IN CONSULTING

Given that PD is used in different ways, one can identify a number of corresponding consulting activities. Three examples of positioning PD in consulting are given in Figure 4:

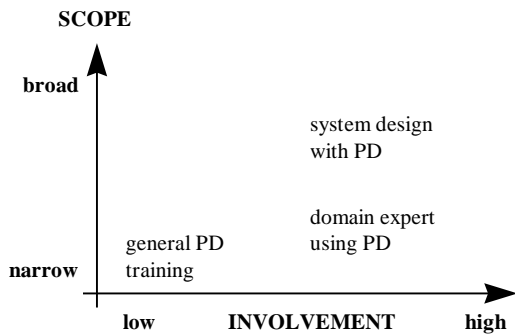


Figure 4: Three examples of PD in consulting with respect to dimensions scope and involvement.

General PD training is somehow similar to general facilitation training. It has a very narrow scope and very little involvement. Consultants need not bother much about internal consequences.

Another way to work is as a domain expert who uses participatory techniques. For example, one group I work with uses and develops software for the analysis of reward systems. Here the primary focus is on this specific field of expertise. To use PD techniques for this tasks is just the way we work. While such an approach is rather narrow in scope, consultants are at least somehow responsible for the outcome.

The same responsibility holds for system design where PD techniques play a central role. Here the scope of issues confronted is (at least potentially) much broader. PD techniques are then central in positioning oneself with respect to other consultants.

The consequences of different ways of positioning oneself as a consultant will be discussed in the next sections.

Regarding the third dimension discussed above, namely whether the focus is more on the actual development or on the organization of such processes, there is also a big difference between these approaches. General PD training

focuses primarily on actual development issues. Domain experts using PD, and even more consultants using PD in systems design, have to consider organizational issues. From this point of view, using PD in systems-design is somewhere between classical systems design and consulting.

3. PD in consulting

3.1. BACKGROUND

Five years working as a consultant are the basis for the following reflections on PD in consulting. Part of my work as an assistant at the technical university of Vienna was to engage in projects with a nearly commercial background in order to finance a working group. Today, these projects finance two full-time and one part time positions on our team at the university.

Each single project focuses primarily on the needs of customers and clients and not on research questions. Nevertheless, the overall direction of the consulting activities concentrates on two main fields: First, our group develops systems for very specific tasks using participatory design techniques. For example, our group developed the system, Shift-Plan-Assistant, to ease the design of shift-rotas. In this project the focus was on the specific field - shift-scheduling - and less on bringing PD-techniques to the fore within the organization. Second, our group uses techniques of participatory design in two rather narrow fields: computer supported design of new work hour arrangements and computer supported design of reward systems. We use the specific software mentioned above, Shift-Plan-Assistant, to support these design activities and work with particular working groups. Figure 5 gives an overview over these levels of participatory design:

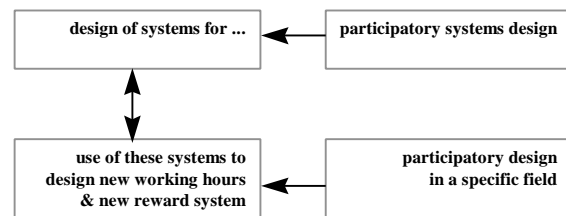


Figure 5: Two levels of participatory design

Consequently, the reflections here are based on both types of participatory design and hopefully are useful for other ways of using PD in consulting as well.

The consulting projects without a system development component were typically small, ranging from a few days to a few weeks of consulting. The number of such projects undertaken was rather high with respect to the small number of consultants involved. For example, last year there were about 20 projects in designing new working hours and 6 projects dealing with reward systems.

The projects that included substantial systems development were larger, ranging from a few weeks to a year and a half. Overall in these five years there were 6 participatory systems development projects.

Customers were mostly managers from very small to very large companies, mainly from the production industry and a few from the service industry. A smaller but still substantial part of the customers were shop stewards or trade unions. Concerning the success of our projects, I can say that recommendations by customers led to a number of new projects and that customers called our group in repeatedly for new tasks.

In nearly all the projects we worked in working groups of 5 to 10 persons. Our guidelines for selecting members were two questions: Who is critical for the success of the development or later uses? Who is affected strongly? In nearly all cases the customer had similar guidelines already, accepted these guidelines, or asked us how to select participants. In my experience such selections typically are considered to be part of the consultant's task. The actual selection involved a compromise between involving people and keeping the group size small. A typical working group consisted of the plant manager, the personnel manager, two foremen/forewomen and two shop-stewards. In a few cases, customers resisted establishing such a working group. Then the project tended to become more an issue of personal support than of organizational consulting. Such projects are therefore omitted in the analysis below.

Groups were typically small as our experience was that working with larger groups presented more difficulties due to our facilitation technique, the difficulty of scheduling meetings, and the desire to avoid people dropping in and out of the group. Cost was another factor in the decision to keep the group size relatively small.

The PD techniques used were practically the same in all cases. Our group used typical facilitation techniques (compare Klebert,

Schrader et al., 1987) in a very flexible way. Furthermore, at the beginning of each meeting we spent quite a lot of time refreshing the general ideas and results of earlier meetings. In systems development we additionally devoted meetings to clarification of notions and to gaining a common understanding of the problem area. We spent time at the workplace if feasible. We worked with many scenarios and used mock-ups and prototyping. For the most part our systems were developed using Visual Basic. For smaller projects Excel turned out to be an extremely useful tool due its flexibility.

3.2. APPROACH

The reflections below describe the landscape of consulting, from the tasks of consulting (marketing, defining relationships to customer and clients, and contracting) to the dimensions of involvement and scope. The author was involved in all of these cases. The reflections are based on personal experience and a careful documentation of the processes.

The examples will concentrate on the definition and development of relationships and organizational issues. This reflects the fact that consulting works primarily on the organizational level (as argued in the section above). Consequently systems development is not covered in detail. The analysis is strongly influenced by transaction cost theory (Williamson, 1996, p.12) "... *transaction cost economics is an effort to identify, explicate and mitigate contractual hazards. In general, all hazards can be attributed to the twin behavioral assumptions from which transaction cost economics work: bounded rationality and opportunism.*" In the following analysis I concentrate primarily on the issue of bounded rationality shaping the definition of relationships. Actors have to act with incomplete knowledge (e.g., outcomes of a project can not completely be known in advance). Actors know this. Therefore, perceived risks and expected outcomes are a central category of analysis.

3.3. DOING CONSULTING

3.3.1 *Relationship to the customer - marketing and risks*

Customers may look for consultants for a number of reasons (Titscher, 1997). Some of them are well known (e.g., getting information or learning new methods; helping the clients to

see things differently; getting an external view on topics where conflicting positions exist within the organization; outsourcing of seldom needed tasks with high expertise). Less discussed reasons play an important role as well (e.g., to propose things like cutting jobs when managers are reluctant to propose it; to get good reasons for not changing things). It is difficult to assess the reasons customers choose to establish a consulting relationship. I use two approaches for discovering customers' motivations. First, what were the reasons expressed and what questions did they ask. Second, how did they react to the presentation I made.

Customers expressed a variety of reasons for engaging in a project. A high number pointed towards the technical and organizational complexity of the issues at hand. Expected savings were also a very important reason. The same holds for acceptance of solutions by employees. Managers tried to avoid conflicts. Furthermore, quite a number of managers were interested in improving working conditions if this would not raise costs too much. Sometimes this was related to costs of health, productivity, or finding employees on the labor market. Other reasons expressed pointed towards broader issues. In Gärtner and Wagner (1996) three arenas of systems design are distinguished. The first arena is the arena where systems are actually designed and new organizational forms are created. In consulting, project teams are such an arena. The second arena is the location in which arenas of the first type are designed, "breakdowns" or violations of agreements are diagnosed and hitherto stable patterns of organizational functioning are questioned and redesigned. The definition of the project between customer and client is an arena of this type.

In the third arena the general legal and political frameworks are negotiated which define the relations between the various industrial partners and set norms for a whole range of work-related issues. This general legal and political framework had a threefold substantial influence in our projects. Some customers engaged to ensure being on legal ground (especially in working hours projects). Some customers referred to the legal obligation of involving shop stewards or to the resistance of shop steward to consent, which again reflects the specific legal framework. They considered it easier to work with a neutral third party. A third group considered it to be useful to have an

external consultant with respect to higher legitimization concerning the broad public opinion. Summing up, although the specific legal and political framework of Austria and Germany that supports participation was indirectly an important reason for many customers, customers in a high number of projects stressed other reasons.

Introducing participatory techniques in the presentation of our group led to mixed results. In some cases I got the impression that customers accepted it but were not really enthusiastic about it. For example, in three systems development cases they were rather resistant. These customers hesitated to spend their time (or the time of their subordinates) in development projects. Two reasons surely were time and costs (as they especially hesitated to take the time of their most qualified subordinates). The third reason was that they were torn between two aims. On the one hand, they wanted to be involved so they could influence outcomes. On the other hand, they were reluctant to be involved for fear of possible failures or undesired outcomes.

In a number of other cases, it was self-evident to the customers that they, the shop-stewards, and/or representatives of workers should be in the working group. This especially holds in bigger companies with well established shop-stewards. It was their typical way of handling the issues of working hours and reward systems.

Finally, there was a substantial number of cases, where our approach of using participatory techniques actually was an advantage. This especially holds true for customers that had conflicts in the company over future working time arrangements. In one systems development case, using participatory techniques was crucial for getting the contract. That customer had just experienced working with another software company that did not spend enough time in understanding the notions and concepts of the tasks at hand. They had delivered several useless software versions. This customer reacted extremely positive to our concept of spending substantial time on developing a common understanding.

Unfortunately I know little about the reasons why our group was not hired by some potential customers with whom we had made contact. Neither do I know the reasons potential customers who read about us did not contact us. There is some evidence that a few might not

have liked the approach. In most cases, however, our group got the project once there was a meeting with the potential customer. So the approach seems to work out.

Given these experiences, there seem to be opportunities for using PD in consulting. Under specific circumstances it even can be a substantial advantage. From a marketing point of view, PD should be quite easy to use if one presents oneself as a specialist in a specific field using PD. This especially holds for fields with potentially a high levels of conflict. When hiring an accepted specialist in such a field, the risks for customers are typically no higher if the specialist uses PD. In fact, the risks might be higher if PD was not used.

Regarding marketing for PD trainers, similar considerations apply. Risks should be low as involvement is low. Still, the attractiveness of PD training depends strongly on the perception of PD in systems development.

System developers who use PD as a “unique selling proposition” (to use marketing slang) probably have more difficulties in approaching companies. Because PD cares about the results and is open to a broad range of outcomes (including organizational change) this may cause higher perceived risk and uncertainty for the customer as well as for the consultant. Similarly, it is difficult to take responsibility for outcomes of such PD-projects. This again raises uncertainties for both sides, the consultant and the customer. Furthermore, the approach is not well known. Therefore it is more difficult to get access to companies and alternatively for companies to find appropriate consultants. Setting personal or scientific networks aside (e.g., unions or research grants), it is difficult for both consultants using PD and potential customers to identify each other. This is on top of an already high level of risk and uncertainty. Project costs and responsibilities, therefore, must be clearly defined which is difficult in general and no less so when using PD.

3.3.2 *Risks for the clients*

PD brings up risks for the clients too. It is difficult to assess possible outcomes and even more difficult to guarantee positive outcomes for all involved. Therefore it can not be taken for granted that people will engage. For sure, the relationship to the consultant (that was at least partially shaped by the customer and the consultant) plays a crucial role. But more gen-

eral issues have to be considered as well, like job-security, career-opportunities, income; and the conditions for participation (time, resources, etc.). A great deal of effort should be spend by the consultant establishing a good working relationship and the environment required. The basis for this is defined between customer and consultant. Therefore the consultant has to look out for possible future pitfalls there.

In the projects at hand the relationships to clients differed greatly. In most cases, clients were skeptical at the beginning but accepted the approach after some time and then actively engaged in the project. In a small number of cases this did not work out, because the other side (manager or shop-steward) did not really accept the participatory approach. Because our group approaches all companies in a similar way, this may reflect existing prescribed internal relationships.

There is a further interesting thing to note: In quite a number of cases, clients took a very active role in reshaping projects concerning working hours. They could do this by asking for additional meetings to work on specific issues not included in the original plans. A further way to influence the project was to stop working in the project group and at the same time starting bargaining in other settings.

Typically consensus could be found in the working group. The number of conflicts that could not be solved was small. If different solutions were proposed in the working group, we worked on analyzing their consequences. In many cases a single solution turned out to be clearly better. If issues turned up that could not be solved in the working group, we actively proposed an escalation to other settings; the steering committee setting (e.g. in systems design) or a different bargaining setting (management, shop-steward). This strategy was made explicit by us at the very beginning which made consulting easier for us as well as the clients. Clients understood that they were not forced into decisions.

3.3.3 *Risks for the consultants*

Setting profitability aside, it is not risky to offer simple PD training or work as a specialist who uses PD. But systems design with PD is a high risk area. First, it is difficult to get customers. Second, it is difficult to define responsibility and the relationships.

Small projects are particularly difficult because consultants can not spend a great deal of time learning about problems and the relevant actors in an organization before they must write an offer. Given that a substantial number of offers do not lead to contracts, it quickly becomes too expensive to bid for the jobs. At the same time there are few possibilities creating buffers within the project proposal to cover overseen costs as the overall budget is small.

3.3.4 *Contract & risk reduction*

Given that PD in consulting is a somewhat risky area, techniques to reduce risks for the actors involved are useful. Our group used well-established techniques (e.g., steering committee, defining phases and milestones of a project) to reduce risks, along with a number of other techniques. These techniques turned out to be useful in our work.

The contract between the customer and the consultant is tricky because customers typically perceive high risk. In one case of systems design, the company forced us into a success dependent reward scheme. As outcomes are not prescribed in PD projects (at least not in detail), mainly procedural issues can be fixed. In all our cases of system development, contracts were extremely short and concentrated on time and responsibilities. Although the actual specification of the aims of systems development were about a page for each contract, they were thoroughly discussed with the customer before the offer was written. Still, in my impression, this kind of contracting was only possible when a relationship of trust already existed or when risks to the customer were minimized. For example, one risk reduction technique was a stepwise procedure (e.g., doing a first workshop, fixing another two). Such a stepwise approach to systems-design works fine with PD. It also may incorporate some elements of early delivery (see Gilb, 1988).

Still, a good judgment of the time necessary for each phase of the development process is necessary. The temporal planning and the resource planning seem to be the most important, and the most difficult, responsibility for consultants who use PD (similar to organizational development consultants). What makes things difficult is that customers prefer flat fees while consultants have difficulties in estimating the effort needed. A cooperating consulting company found an interesting approach to this problem. While they accepted flat fees for sys-

tems that had not been precisely described, they established deadlines and scheduled meetings in advance. If additional meetings were needed, they were willing to negotiate. They found enough flexibility in this to adapt to new issues, but at the same time they did not experience too many changes in project goals. This allowed them to stay within the budgeted costs.

In consulting on new working hours, our group uses a so called "Schnuppertag" (customers, clients and consultants sniff at each other for one day). This is a paid consulting day designed to establish a common understanding of the working group's problem and, if possible, identify some basic alternatives. At the end of this day or later, the consultant develops a short proposal describing how the working group might proceed and what the costs would be.

This Schnuppertag has advantages for all concerned. The customer learns how the consultant works and whether he/she can work with the clients. The clients see how the consultant works and which topics are within the scope of the working group and which are outside. The consultant learns a great deal before writing the final offer.

We have used this approach for a year and a half and it has been very successful. Previously our group spent many days in unpaid presentations or working on offers that did not lead to contracts. Because the Schnuppertag requires a rather limited engagement of the customer, it is much easier for them agree to. In nearly all of the cases, the projects continued after this day of getting to know one another.

When beginning a new project, we spend some time defining the way we work. Specifically our group introduces itself as interested in solutions that help all actors involved. While admitting that such solutions may be difficult to attain or that some groups may experience unfavorable outcomes, it is useful to make these things explicit. Kensing et al. (1996) had a similar experience. They found that it is possible to work in an environment where job cuts are occurring, if things are open at the beginning. In addition, in critical settings our group proposes a few general rules for working together: Discussion of an issue does not mean that it is accepted not that it will be proposed. At the end of each meeting the group decides what should be kept internal and what can be discussed outside the group.

At the end of each working group session and sometimes during sessions, we ask two questions: First, how satisfied was each participant with the content? Second, how satisfied was each participant with the course of the workshop? These questions and a grading scale for each question are drawn on a flip chart. The consultant leaves the room and participants indicate their evaluation of the workshop. Afterwards we ask, for an explanation of the grading. The overall grading is influenced by internal relationships (e.g., sometimes all crosses are exactly at the same place, or there are two distinct and completely sharp clusters). Still it is a very useful tool because one gets substantial information what worked and what did not. I can not remember a case where people were silent. Additionally, consultants learn if the client is pleased with their performance or if there are any dissatisfactions due to factors outside the consultant's control or responsibility. Perhaps more importantly, the consultant shows that he/she is interested in the opinion of the working group members. After the first grading, people know that they will have dedicated opportunities to communicate their thoughts about course and session content.

Critical for the success of PD in systems development is establishing risk reduction techniques in developing offers, in project organization, and in project management. Still, contracting is difficult and legal conflicts can be difficult to handle.

3.4. INVOLVEMENT - TWO COLLIDING AIMS

When using PD in consulting, one often must promote two aims at the same time.

- 1) The organization and facilitation of the design process (group process).
- 2) The actual technical development (technical process).

These two aims do not always compliment each other. Neutrality is needed for the group process and responsibility is needed for the development process. One has to be neutral with respect to group interests and with respect to conflicting aims in order to organize effective group processes and to be accepted by all persons involved. Furthermore, one should not be responsible for the outcome, because in order to be neutral one can not have competent authority (which is, at least for risk averse persons, necessary to take responsibility).

Neutrality in the view of the clients was achieved in most but not all cases as described above.

At the same time the consultant has to take some responsibility in order to get the contract. Customers would hardly accept a contract with no responsibility on the side of the consultant. This responsibility may be restricted in some domains, like participatory shift-scheduling, where everybody accepts there that the final design decisions must be made by the persons involved. But it is more difficult to limit responsibility in systems development.

It is tricky to deal with this issue and there is no single best way. One way to deal with this dilemma is to separate the two functions: one persons takes responsibility for the group process and the other for the technical process. This might ease both processes. At the same time there are critical arguments for not separating the group process from the design process. In Titscher (1997) two main reasons are given. First, Titscher considers it to be an artificial separation that confuses participants. Second, it is a very expensive. He thinks there is a trend towards an integration of both aspects. A third risk might be conflicts between the consultants caused by their different perspectives and responsibilities.

Still, in three system design projects, we successfully used such a structure. We established a well-defined division of labor and it was relatively easy to manage the processes. At the same time the good personal relations and the shared background (in technical and facilitation issues) allowed us to bridge the gap created by the different perspectives. Doing consulting in teams of two is more expensive and unusual (which makes contracting more difficult). Still it seems to offer interesting and productive possibilities.

3.5. SCOPE AND DEPTH OF CONSULTING

Using PD in system development also raises problems for consultants with respect to the content. Again, the two areas introduced above must be addressed.

- 1) The organization and facilitation of the design process (group process).
- 2) The actual technical development (technical process).

Both areas are very complex on their own. To be competent in one area requires a number of years in school and training. This gets even

worse when using PD in systems development. The complexity of each area on its own has to be covered, along with building bridges between the two. The flexibility needed in PD projects requires that the expertise of the systems developers be very high. Developers have to be able to change design, techniques, and platforms depending on the needs at hand, and to understand what is going on in the group. At the same time the "normal techniques" and skills of facilitation have to be adapted to the mixture of technological and organizational issues.

Again the question arises, whether this is too much for a single person. A possible solution is to divide the tasks among a two person team. This team should have a well established personal relationship and a well defined division of labor similar to the ideas described above. An interesting alternative approach in this area might be to educate computer professionals in both areas of expertise. Kautz (1996) presents a course program for teaching participatory design where effort is spent to widen the horizon of students beyond technical aspects and to teach them different systems design models and theories. One course described using role plays, but the actual training in managing group processes was not covered.

4. Resume

In this paper I reflect on PD from the perspective of consulting. This brings the relationship of actors (consultant, customer, clients) in the fore. The reflection is based on a number of consulting projects, both in systems development and in specialized fields of expertise where PD is one but not the central technique employed.

Using PD in consulting has to be considered difficult, from the point of view of the consulting process as well as from a marketing standpoint. We have found that it is somewhat easier to us PD when one works as a domain expert or as a PD trainer, than in systems development projects.

The relationships between the actors (consultant, customer, clients) are critical in consulting. Future work and outcomes are predetermined by the relationship established between consultant and customer. The risks perceived strongly shape the relationships between the actors. Risk reduction techniques are useful in the organization of such projects, in contracting, and during the projects. Several risk

reduction techniques were discussed. Still this is a wide area for future research.

Additionally, when using PD in consulting one has to cope with two conflicting aims. On the one hand, low involvement in the organization and little responsibility for possible outcomes supports work with the group. On the other, high involvement in systems design is needed to get the contract. Therefore consulting in high risk areas (like systems design) can be more productive when teams of two persons are used. This separation of group process from technical process supports the high qualification needed in the two areas. In three projects drawn upon for this analysis, this separation worked well, however, continued research is needed to explore possible strategies for handling the situation better.

5. References

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¹ There is a close proximity between research in many PD-projects and consulting. In a retrospective analysis of PD-Projects, Clement and Van den Besselaar (1993) show that all of the projects at hand adopted an „action research“ approach. This approach includes as an essential goal practical or political improvements in the participants' lives. Given the broad range of consulting activities, the role of researchers in PD-projects can be understood as a specific way of consulting. Even though some researchers might not like to be named consultants, others are aware of the proximity e.g., Simonsen and Kensing (1994) compare the number of weeks they worked, with an estimate for real life consulting).