From 'the good work' to 'the good life': a Perspective on Labor Union Visions Regarding Information Technology

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ABSTRACT

During several decades Participatory Design has been applied in Scandinavian labor union projects aimed at empowering workers and realizing 'the good work'. Recently, information technology has made it necessary to pose new questions at the workplace, which has resulted in new union strategies. In this study, participatory methods involving union representatives are applied in a new generation project within the union movement itself. The visions and strategies of the Swedish Trade Union Confederation (LO) as regards information technology have been studied and compared with needs that have been felt in union work. It has been found that LO's information technology strategies have a hierarchic structure and that the organization has fewer incorporated inquiries about users' needs. It is concluded that Participatory Design is as relevant for the new generation of union information technology projects as it was in earlier projects involving unions, workers and technology.

Keywords
Participatory Design, information technology, labor unions, work on change

INTRODUCTION
Organized participation in design and development was introduced within Scandinavian labor unions as a means to empower workers and involve them in processes concerning the design and implementation of new workplace technology [1, 2, 3]. In the 1970s the Collective Resource Approach emerged from a project sponsored by the Norwegian Iron and Metal Workers Union in which unions collaborated with a governmental research institute, the Norwegian Computing Center, in

the development of computer-based planning and control systems [4, 5]. The approach was further developed in other labor union initiated projects of which Swedish Demos (1975) and Utopia (1981) received much international attention [2, 4]. The aims of the projects were to increase workplace democracy and realize 'the good work'. Designers and workers were to participate in a process of mutual learning and together develop technology which increased the workers' skill, variety of work duties, independence and responsibility instead of degrading jobs [1, 2]. In the 1990s, information technology has provided new opportunities, but also new challenges, for labor unions. In the case of the Swedish Trade Union Confederation (LO), this has resulted in the initiation of a new generation of projects in which the object is to provide training in information technology for labor union representatives as well as members [6].

The aim of this study is to re-evaluate labor union strategies for information technology when facing the post-industrial society with changing workplace relations. LO is used as an example and a basis for a case study. In the study, a policy review has been combined with empirical methods in the form of a Future Workshop. The policy review concentrates on visions and expectations on information technology stated by the union leadership; the Future Workshop focuses on actual problems in union work, possible future solutions, and information technology applications. The Future Workshop Technique was originally used in projects involving citizen groups who wanted to take part in decision-making processes in public planning, but was modified by Kensing and Halskov Madsen for system development [7, 8]. The reason for the choice of this combination is the objective of evaluating, comparing and contrasting LO's information technology strategies with needs felt within the organization and the fact that such a comparison is valuable in that it highlights discrepancies between visions and actual needs, and accordingly motivates a systems design approach where users are involved.

METHODS

The study was undertaken in the DLK project (Distance education for Local Knowledge needs) which was initiated by LO in 1997 and involves union representatives, teachers from a union folk high-school and researchers from Linköping University [6]. The project has similarities with earlier Swedish Participatory Design projects involving labor unions, but while the focus in earlier projects has traditionally been on workers and workplaces [1, 2, 3], the focus in this project is on union representatives and work on change which takes place within the labor union movement itself. In the empirical part of the study, data from a survey on the union representatives' work situation were used as input to a Future Workshop. The results from the Future Workshop were then compared with information technology strategies and visions defined in a policy review.

Policy Review

The policy review compiles literature and other written material on education, technology and information technology in a historical perspective, published for the most part by LO but also by other labor unions or union experts. The review contains about 50 publications in the form of books, LO reports, accounts and union working material and news magazines. The object of the policy review within the framework of the project was to examine union policy in the above areas and to relate the project to potential information technology strategies initiated by LO, i.e. to create a platform for the projects' continuous work. In the study, the policy review serves as such a platform, as a background against which the empirical result is compared.

Future Workshop

The Future Workshop is used to let the participants concentrate on frequent problems occurring within an organization or in a particular situation, to let them generate visions about potential future solutions to the problems, and eventually to let them discuss and create solutions which will be feasible in reality. Accordingly, a Future Workshop is usually divided into three phases: a Critique Phase, a Fantasy Phase and an Implementation Phase [8]. The Implementation Phase is, however, seldom part of the workshop as such in projects involving systems design because of the fact that in general less time is spent than in traditional Future Workshops [9]. In this study the purpose of the Future Workshop was to let union representatives formulate visionary solutions to problems inherent in union work and to examine the need for information technology support that could facilitate this. In the study a modified form of Future Workshops was applied as it was not the union representatives who participated in the workshop who defined the problems. Instead, examples of recurrent problems in union work, drawn from a survey which had been sent to 395 union representatives including the future workshop participants, were used (see Appendix 1.). This somewhat different approach to the workshop was due to the ambition of selecting problems which seemed relevant to union representatives in general, something that the survey could provide. In the Future Workshop, 37 representatives were divided into two groups. Each group had one and a half hours at its disposal. During this time, the participants were confronted with five examples of problem descriptions defined in the survey. Each description contained more than one problem, but they were all related to the same issue. For about half an hour the participants individually scrutinized the problems and on notepads wrote down needs and suggestions about what could be done to solve them in the future. During the remaining time, each individual was allowed to present his or her solutions to the others. A whiteboard was used where the representatives attached their needs or solutions and where they themselves classified them into different categories. The Future Workshop was recorded on video tape. After the workshop sessions, the researchers involved completed the classification of the needs since some representatives did not categorize their notes. The categories presented in the study are accordingly a combination of the classification made by union representatives and researchers.

RESULT

Policy Review

In an international perspective the Swedish union movement appear in a leading position as regards technology and computers (see Table 1., Appendix 2.). During recent years LO has taken a progressive stand in issues on information technology and has initiated a number of projects in which the ambition is to provide training in information technology for its representatives and members [6, 10, 11]. Compared to the 70s and 80s these projects seldom explicitly discuss information technology in relation to 'the good work' and neither does the material in which LO presents its information technology strategies [see for example 6, 10, 11, 12]. Instead LO seems to have extended information technology strategies to include more aspects of the regular day-to-day life of their members. Today LO claims that information technology is a question of equity and democracy in society in general. Access to information technology and information technology training is seen as a necessity for unions and their members to be able to take part in the information society on equal terms with other individuals and organizations [12]. Information technology accordingly becomes a question of power and a tool to increase the positions of unions. Above all, LO stresses the

issue of knowledge. Access to information technology is equated with access to the knowledge available in the information society [see for example 6, 10, 13]. In a LO report where the use of computers among the organization's members is compiled and statistically presented, it is stated that:

> *In the knowledge society which we are entering at full speed, access to information is very important. Knowledge provides power and opportunities. But there is an obvious risk that we will get a new division within society - "an information gap" - a situation where the strong grab everything while others are excluded* [12, p. 3]. [1]

Knowledge for 'the good life'

One aspect of LO's information technology strategies seems to be the aim of helping its members to realize 'the good life', through giving them access to information, knowledge and culture which is available in the information society. A functional objective is to increase representatives' and members' abilities to independently search for and assimilate knowledge [6, 10]. In one nationwide information technology project the aim is to reach all the organization's members with an advantageous offer of renting computers, which after three years can be purchased for a small sum. The computer set is specifically designed so that information technology will support the knowledge needs of a whole family. Information technology includes connection to the Internet, CD-ROM, different kinds of games and educational programs, and a color printer which can be used for school work. LO explicitly states that the computer offer is aimed at reducing the connection between class and information technology usage, to decrease the risk that union members and their children will lag behind in the information society [14].

Communication for Power and Democracy

Another objective of the computer purchase is the hope that the organization in the future, will be able to communicate with its members to an increased extent and maintain a continuous dialogue on the net [15, 16]. There is a belief within LO that increased communication within the labor union movement, among members, unions and union representatives will lead to extended democracy and increased power of the organization as such as well as of its members [11, 15]. The DLK project, where one objective is to extend communication and collaboration between union

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[1] Authors' translation.

representatives, can partly be seen as an example of an endeavor to increase the power of the union collective [6]. Another project aims more specifically to transfer power from the collective to the individual union members. It is called "Dialogue Democracy". Its purpose is to create a forum on the Internet where members can communicate, exchange experience and participate in discussions. The idea underlying the forum is that members themselves should be able to influence political decisions, since the ability to navigate among huge quantities of papers or to write resolutions is no longer needed. The forum will contain direct lines to public authorities and political decision-makers [15, 17].

Future Workshop

The user representative survey used as input for the Future Workshop showed that problems in relations with employers or members, lack of information/knowledge or insufficient communication/distribution of information, and stress or insecurity in union work were the main problems among union representatives (see Appendix 1.). In the Future Workshop, the main needs concerned training/competence, support networks and information/information technology.

Training and Competence

The representatives saw increased training and development of competence as necessary in the future, in particular if problematic relations between union representatives and their environment should be overcome. The need for training/development could be divided into aspects of pure factual knowledge and into issues of more personally-related development. In the case of the former, training was seen as desirable for both union representatives, members and employers. As for themselves, the representatives stated their need for increased knowledge about laws and agreements, in particular the Work Environment Act and the 'Representative Law'. [2] They wanted their employers to receive similar training and in addition to learn about workers' rights and personnel management/leadership. It was also noted that the representatives considered joint training for employers and representatives to be a desirable alternative which could result in mutual understanding and fewer conflicts. As for members, the representatives wanted basic working environment training, and also courses in

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[2] Laws regulating working conditions and the rights of union representatives. See Sandberg (1992) for more information about Swedish laws regulating worker and union rights.

which the former could learn about union principles and the need for union work.

Somewhat surprisingly the representatives considered the development of their personal competence to be as important as more traditional forms of further education. They suggested that in order to reduce feelings of insufficiency in various situations involving union commissions, union representatives would need training in argumentation technique, conflict solving, presentation technique, personal planning and how to handle stress. In addition, they considered a course devoted to the topic of 'increasing your self-esteem' as something desirable. Courses which provided insight into the subject of psychology were also requested.

Support Networks
Today the representatives lack an extensive network which they can turn to for help in problematic situations. This principally concerned relation problems, stress and insecurity in union work. Many concluded that access to the knowledge, competence and experience of others would be very valuable on occasions where they feel that their own is insufficient, or that the mere support of others would be enough to increase their own self-esteem and confidence in their abilities as union representatives. It was argued that this could be achieved through contact networks and communication with fellow-representatives within and across union boundaries. On the subject of incorrect treatment by the employer, the representatives proposed among other things that union representatives contact and seek support from members, and in certain cases call for negotiations. More specifically, some representatives thought that it would be useful for each representative to have a mentor or personal supervisor to whom they could turn for help when necessary. Besides the need for increased communication and exchange of knowledge and experiences within the union movement, requests for external expert support, for instance from wage-earner consultants, were put forward. As regards stress in general, the representatives suggested further delegation of responsibility and working duties.

Information and Information Technology
The representatives considered it important that the employer had information about existing rights and duties regulating relations between employers, workers and the unions. As to a problematic relation with skeptical or indifferent co-workers, the representatives deemed 'feedback' and continuous information as particularly important. The feedback could involve the content of courses a representative has attended, the result of negotiations or a representative's duties. Moreover, just explaining to the members how one feels could sometimes suffice. In connection to the need for feedback/information, the representatives requested more effective channels of information.

As for information technology, the representatives wanted a kind of general 'repository' where they could search for general information. The repository should contain traditional union information on common laws and agreements, for instance in the form of questions and answers. Insurance questions were also mentioned. However, the representatives also wished for general civic information, for example on laws regulating immigration and social allowances. Further, they mentioned different sources of information/knowledge which could be valuable at the prospect of negotiations and other decisive points in union work. This would include data that have formed the basis for different decisions, experiences of similar cases and examples of successful and failed negotiations. The information should be provided across union boundaries in order to optimize mutual learning. Another request from the representatives was that the repository provide services which facilitate information search and which would enable them to quickly download compressed, relevant information.

The representatives felt that information technology was something which could facilitate communication and the distribution of information. For instance, they thought that increased communication between different workplaces could result in fruitful collaboration where important issues could be driven across union boundaries. As regards negotiations, the representatives requested contact with other negotiators and support from the central union. As far as members were concerned, they saw information technology as something that could assist them in having these taking an interest in union questions. It could be used for influencing public opinion through communication with members. Finally, some union representatives expressed the need for a bulletin board with national coverage, where everything which could not be classified as a common problem or be said to belong to a certain site, everything that otherwise would run the risk of being dismissed as "idiotic", could be communicated.

Tensions between Visions and Needs: a Synthesis

Information Technology as a Confusing Element in Union Strategies

From the policy review, information technology issues seem to have the potential of causing tensions and sometimes contradictions within union strategies. In substance, these tensions revolve around partly conflicting interests in connection with individual and collective aspects of knowledge respectively (Table 2.). LO sometimes stresses individual aspects of the concept, such as an independent search for information in databases and distance education, and sometimes instead emphasizes collective issues such as communication, collaboration and distribution of information among members and representatives. In this regard it is possible to distinguish a tendency within LO to strive for a centralization and reinforcement of the union collective on the one hand, and on the other hand to transfer power and responsibility to its individual members and representatives. The DLK project illustrates these tendencies since the aims of the projects are two: to encourage representatives to individually search for information and thus become increasingly independent upon their union environment and, quite the reverse, to encourage communication and collaboration over union boundaries and thus strengthen the collective as a whole [6].

Knowledge for 'the good work' or 'the good life'

Although LO emphasizes the technology as a tool for increased knowledge among representatives and members in its information technology strategies, its definition of the concept is rather vague. Apart from the conflicting interests of independent search for knowledge, and communication and distribution of information, it is seldom clear what kind of knowledge is desired. When LO discusses access to knowledge as a prerequisite for equity in society and for 'the good life', it does not include what is deemed as knowledge in the discussion, as for example when it states that: "These machines increase our access to the information we need to be able to participate in democracy"[10, p. 2].[3] In these few cases where there exist definitions, they apply to traditional union information of workers' rights, as in one of the planned future projects aimed at creating common databases where information on laws, agreements and project resources could be stored [6]. All in all, in the material on information technology published by LO, there seem to be uncertainty and contradictory statements about what the technology provided should contain. In addition, the review revealed that the information technology strategies initiated by LO do not extend to the separate

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[3] Authors' translation.

federations of unions. These have seldom strategies or projects of their own. Those few which exist still revolve around 'the good work' [18, 19, 20, 21]. From the policy review, it is clear that LO concentrates its information technology strategies around the concept of knowledge, but that the organization has not taken any action to see how its unions, representatives and members understand the concept, nor what kind of knowledge they actually need.

TABLE 2. LABOR UNION VISIONS AND SHOP-FLOOR NEEDS

LO Visions:
- information technology for 'the good life'
- information technology for democracy
- information technology equity in knowledge

Union Representative Needs:
- training, factual (representatives, employers, members)
- training, personal (representatives)
- support networks (knowledge and support)
- effective management of union information

Critical Issues:
- information technology for centralization or decentralization
- concept of knowledge undefined

DISCUSSION

In the case of LO the impact of information technology in society has resulted in new information technology strategies. This study implies that Participatory Design is as relevant for these new union strategies and projects as it was in more traditional Participatory Design projects involving workers and workplaces. It has been claimed that recent decades have seen an overall trend where users' real involvement in systems design processes, notwithstanding participatory approaches, has decreased, and that users provided with limited opportunities to make own requirements, are contributing to goals set up by others. Thus, Participatory Design should once again be brought up-front within labor unions to explore new and complementary paths [22]. This view can be examplified by the case of LO. From the study it is concluded that LO´s information technology strategies have a hierarchic structure where comparatively little effort has been devoted to examining the actual need for information technology within the union movement. Hence design processes in which the users are more involved are required in order to

develop information technology support which facilitates union work and strengthens the union movement's abilities to meet the demands of information society. LO's general strategies and projects were found to be characterized by partly conflicting interests in the form of a tension between striving for individualization and collectivism, interests which the organization need to further reflect upon. Above all, LO's concepts of knowledge, around which the organization's information technology strategies revolve, are vague. These concepts, when applied in different projects, need to be made clearer in order to provide union members and representatives with useful information technology support. As indicated in this study, this can be achieved by involving them in the design process and focus on their actual need for information and knowledge.

Similarities were also found between LO's information technology visions and the actual need for information technology support in union work. At both high and low organizational levels communication issues are emphasized, but it seems as if there exists a greater and above all different need for communication among union representatives than has been perceived by LO, which should be taken into consideration in future information technology applications. LO views information technology communication as a means to increase democracy and strengthen on the one hand the union collective, on the other hand the individual members. In both cases, information technology communication is equated with ideology and power. The representatives' requests are more often related to everyday life and work. They need support from others that can help them handle their practical matters in daily union work, reduce feelings of insufficiency and simply make them feel better.

Further education was deemed by the representatives as important if their problems with relations to others were to be overcome. This is in agreement with LO's bid for increased and extended computer-supported training of union representatives. But while LO concentrates exclusively on representatives, these want to extend courses to reach employers as well. What is more, the representatives expressed a request for more personal forms of training, such as argumentation technique, conflict solving and courses on how to handle stress and increase one's self-esteem, as a complement to more traditional, fact-oriented education. This is an issue which LO has not given attention to. As regards pure factual information/knowledge, the representatives wished for information technology applications which could provide traditional information about laws and agreements, in accordance with some intentions stated by LO. But they also want access to more experience-oriented knowledge, such as failed and successful negotiation cases. In addition, access to civic information in general is by several

representaitves perceived as being equally valuable as information concentrating exclusively on union matters. This being so, not only traditional union information, but a wider perspective, should be taken into account in future IT-applications.

However, a systems design approach which exclusively deals with the representatives and members, leaving out the leadership, will not suffice. As recognized in Participatory Design, there seldom exists complete consensus within an organization; it is normally characterized by oppositions and conflicting interests [see for example 7, 23]. Within Participatory Design projects involving labor unions, the conflict perspective has traditionally focused on worker' versus managerial interests, or different groups of workers [2, 4]. Studies have shown that union projects lacking central support often tend to fail [2]. Further, it has been argued that implementation of information systems which lack management support is restricted, as for instance by Scheepers and Damsgaard [24]. They use Gidden's structuration theory to distinguish structures of signification, domination and legitimization as factors influencing the outcome of a system implementation. The study showed that in the cases where there existed no signification, as to the system's function, management used its domination and through arguments of legitimization, i.e. conformance to organizational norms, counteracted the system, whose implementation accordingly failed. Similar results have been reached by Emspak [25], who concludes that American Participatory Design projects are often hampered from the lack of institutional commitment which facilitates a successful implementation. Consequently, if future labor union information technology projects are to succeed, it is important to adopt a double perspective where union leadership visions as well as the actual needs of users are taken into consideration. Visions alone cannot account for a satisfactory information system, nor can they be excluded from a system which requires extensive application. Only by adopting a perspective which tries to mediate between these interests, can a compromise and a solution which as far as it is possible supports unions needs be reached.

The study was undertaken within the framework of one of LO's information technology projects in which a sample of union representatives participated. It is possible that these were not typical for union representatives in general or that other unions have other needs. On the other hand, the survey counted for that the experienced problems were of fairly general character. Nevertheless, future studies aiming at providing unions with information technology support need to take institutional characteristics and differences of unions into account. Further, systems need to be built and tested in reality. Hopefully, this study can provide valuable

experience that can be used in future research on labor unions and information technology.

CONCLUSION
Information technology has provided new opportunities, but also new challenges, for labor unions. The Swedish labor union movement, which has a strong tradition of involvement in issues concerning technology, is today comparatively progressive as regards information technology. Its experience can provide valuable information and guiding principles for other unions wishing to implement information technology as a tool for union work and a reinforcement of the organization. However, if LO is to succeed in its extensive investments in information technology, a systems approach which includes users' perspectives is needed.

In the study, LO´s information technology strategies were scrutinized and compared with actual needs in union work, as expressed by union representatives in a Future Workshop. The comparison revealed that there exist discrepancies between visions and reality. Above all, LO´s vague concept of 'information technology for knowledge' leaves a gap which has to be filled in implementations of real systems.   For this purpose, Participatory Design methods may well be used. However, visions and institutional support are needed as well. This being so, a systems approach which takes both visions and actual needs of users into consideration and tries to reconcile potential conflicts is proposed in order to arrive at a system which is both used and useful for its members. Even if a solution can never be optimal for everyone, aiming in this direction is desirable.

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APPENDIX 1.

In a survey, problems experienced by union representatives were classified according to the Critical Incident Technique [26]. It appeared from the questionnaire that problematic relations between the union representative and the employer or between the union representative and his/her colleagues and members constituted a substantial part of the problems experienced and together actually counted for about 65% of them. The union representative, for instance, feels that he/she is counteracted by the employer who has no sympathy for union commitments or that colleagues view union work with suspicion and jealousy:

My biggest problem is that my employer has not been able to see the difference between my role as chairman of the local union and my role as an employee. When problems arose, and I used my position as chairman to solve it and we did not agree, it almost always caused trouble for me as an employee, which led to me having difficulties to assert myself in different work situations.

In general, people have insufficient knowledge about the democratic process i.e. a representative democracy. Many prejudices against union representatives are due to ignorance. Sometimes we become objects of misdirected or incorrect criticism.

The other categories together counted for about 35% of the problems which were relatively evenly distributed between them. A category of lack of information/knowledge concerned the difficulties of union representatives in receiving the information they needed in their work, a category of insufficient communication/distribution of information their difficulties to communicate with and distribute the information they possess to members and colleagues:

Within the union we have no access to information on wage negotiations in progress, but have to rely on the mass media.

At my workplace, I have difficulties in making people read information or come to the club's annual meeting (and all other union meetings). It takes time but does not give the desired result. I realize that the information is wrong, the meetings are wrong, potentially the whole union is wrong.

The category of stress refers to problems that have been experienced of a stressful work situation where the representatives have to sacrifice leisure time in order to be able to combine ordinary and union work, and where union commissions come into conflict with family life:

Union work takes much time. The family suffers. I am married and have two children. It does not make it any easier when studying and having union commissions at the same time. But it does not matter if you have a job, family life suffers anyway. The marriage can be negatively affected.

A final category, insecurity in union work, refers to the fact that many representatives feel that they do not suffice. They sense that they do not possess enough knowledge to be able to reach a satisfactory achievement or they hesitate when it comes to decision-making and afterwards spend much time pondering whether they did the right or wrong thing:

I have a feeling that I do not suffice. If I make major mistakes, for instance in an insurance matter concerning an industrial injury, the member risks losing the compensation they are entitled to, which can take time to correct.

APPENDIX 2, TABLE 1. INTERNATIONAL OVERVIEW.

Union strategies	Sweden	Germany	France	Italy	Great Britain	U.S.A	Canada
Commitment to education in technology	strong	strong	weak	average	weak	weak	average
Commitment to labor unions' use of the Internet	yes	NA[4]	NA	yes	yes	yes	yes
Explicit information technology strategies	yes	NA	NA	no	no	no	yes

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[4] Not available.