Critical success factors in developing ProMES: Will the end be an 'accepted control loop'?

Critical success factors in developing ProMES: will the end result be an "accepted control loop"?

Harrie van Tuijl
Eindhoven University of Technology, Eindhoven, The Netherlands

States that ProMES (Productivity Measurement and Enhancement System) can be interpreted as a method for the development of control loops for self-management: "accepted control loops". Whether practical applications of the ProMES method will lead to "accepted control loops" is believed to depend on the course of the development process. Describes the stages of this process, together with possible sources of resistance that may arise during each phase. Formulates the hypothesis that behind these sources could be a common factor, viz. that the people involved in the development process adhere to diverging patterns of values. Notes that the ProMES method requires the explication of values. At the same time, the development process offers possibilities to test to what extent actual behaviours reflect these values in a consistent way. Depending on the results of these tests, one of three reactions to the ProMES method is more likely to occur: "acceptance", "compliance", or "rejection".

Introduction

Elsewhere (van Tuijl, 1997) the ProMES method (Pritchard, 1990; 1995) is described as a method for the development of control loops for self-management: "accepted control loops". The model of the accepted control loop (see Figure 1 for a schematic representation) incorporates some ideas recently developed by Bandura (1991) and Locke (1991). In a way, the model is an attempt to bridge the gap between proponents and adversaries of the the control loop model for human motivation (borrowed from cybernetics), by incorporating Bandura's idea of "discrepancy production".

Locke (1991), and Locke and Latham (1990) formulate, as the most basic argument against the control loop as a model for human motivation its prediction of a total absence of activity when there are no discrepancies signalled between goal values and actual values. Balance models, like the control loop model, clearly lack a provision for the one thing felt to be characteristic of human movation: the quality to create discrepancies by setting goals (Bandura, 1991). Human beings apparently have the ability to continuously reset the goal values in the control loop. According to Locke (1991) this happens because we have a basic need to demonstrate our competence. This need is turned into a hierarchy of values that in turn are transformed into concrete goals. Feedback tells us to what extent these concrete goals are being realized. After the realization of a concrete goal, the value in question from the hierarchy mentioned above remains active and is transformed into a new, more difficult goal. The next step, as it were, from a possibly endless series of steps. In this way reduction of discrepancy leads to the production of discrepancy.

This seems to be an elegant description of what is sometimes observed in human beings. However, in everyday practice we also come across situations in organizations where discrepancy reduction leads to inactivity. And on top of that, it is sometimes seen that feedback that proves more has been achieved than the goals initially set, leads to a reduction, rather than an increase, in performance. Besides that, we see control loops that are deliberately sabotaged. Phenomena like beating the system, looking good in the figures, faking and such are just as frequent as the phenomenon of what you measure is what you get. It is best to assume that people can react very differently to systems with which their performance is measured. What has to be explained are the reasons for those different reactions. The reactions we have described can be summarized under the headings of "acceptance", "compliance", and "rejection". In the first case, "acceptance", we can speak of a completely accepted control loop. That is to say, we have a control loop that gives a full representation of what the individual or group in question are striving for in the context of the satisfaction of their competence need (White, 1959). Here, the organizational context is used as a playing field, where the group and organization form an organic whole. In the second case, "compliance", we can see the group conforming to the wishes of the organization, but no more than that. The control loop works as an instrument to guard agreements that the group has made with the organization, within the framework of an exchange relation. The group is not committed to the larger whole of the organization of which it is a part. The relation is instrumental though there is mutual respect for each party's interests and position. In the third case, "rejection", respect is absent and one can even speak of distrust. Although there is a formal contract, the contractual partners both believe their partner will try to use situations to gain some kind of advantage at their expense. The relation is antagonistic. The control loop is no more than the operationalization of a contract down to the word, but not to the spirit of the word. There is an overwhelming fear of being cheated by the other party. Resistance to the control loop is typical of such situations.

ProMES and "accepted control loops"

The ProMES method provides opportunities for the design of measurement systems that

Figure 1
The accepted control loop for self-management
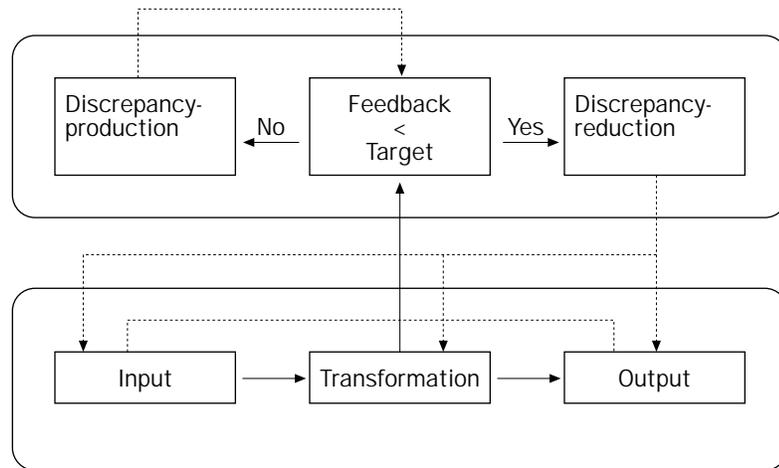
can work as accepted control loops in the fashion described by Bandura (1991) and Locke (1991). The fields of responsibility fill the role of values postulated in the values hierarchy of Locke (1991) with White's (1959) competence placed at the top. If we consider the fields of responsibility mentioned in various ProMES projects, we find things like "quality", "security", "care" (care for personnel means, material means and the environment), "efficiency" (economical use of means, preventing waste), "co-operation" (work ought to be geared to that of colleagues or other departments, and a working atmosphere should be created in which co-operation is facilitated), "communication" (both oral and written information exchange should be carefully dealt with) and "proper behaviour" (treat other people respectfully). The more these responsibilities, formulated on the basis of the work situation, are in line with the pattern of values of individual group members, the more they will be accepted and lived by. Without any difficulty Locke's (1991) concrete goals can be equated with concrete values of the performance indicators. The performance valuation curves take into account the hierarchical nature of his value system. Bandura's (1991) discrepancy reduction process occurs in cases where the comparison between feedback (actual performance) and goal values reveal the latter will not be reached. If the goals are reached, then the performance valuation curves offer a handy framework for discrepancy production as mentioned above. The scheme given in Figure 1 can be used to explain this. The bottom half of the figure is the input-transformation-output model, in which the responsibilities of any group can

be located. For these are always related to the goods or services, the way in which they are realized, and the means that have to be implemented to do so. Information on the degree to which these responsibilities are realized (feedback) is passed on to a regulatory mechanism (upper half of the figure), which compares the feedback with the actual goal values. Should these be realized or surpassed, discrepancy production will occur. Thus, the goal values are raised. Next, the process of discrepancy reduction starts to work, as is the case if the comparison reveals that the goal values have not been reached.

A ProMES measurement system has the potential to create a situation where energy and creativity can be aimed at the realization of personal values without reservation. In the case of routine tasks, this means that feedback leads directly to performance improvement. This occurs through the focusing of the group effort on known effective task strategies (and through the intensification and maintenance of this effort for the requisite time (Campbell and Pritchard, 1976). For less routine jobs, feedback stimulates the development of new strategies that will eventually lead to performance improvement after some trial and error. Depending on the type of task, the control loop will act as a mechanism for the optimization of known methods or as a learning mechanism to gain control of matters that lack necessary background information. In both cases the foundation is a statement from the group answering the question: What is our purpose? In Locke's words: How can we demonstrate our competence? Discrepancies between goals and feedback will result in creative tension, instead of being a source of insecurity, resistance or fear.

However, the ProMES method does not automatically lead to accepted control loops. Depending on the circumstances, the way in which the development process is completed, and the characteristics of the control loop designed, the result can equally be no more than a control loop that is complied with as a measurement instrument in an instrumental relation. In such a case the discrepancy production part of the control loop is missing, which means that people behave according to the cybernetic control loop model (Klein, 1989). In the worst case the control loop may even be seen as a threat to personal interests, resulting in political handling of the instrument. Discrepancy reduction activities in such cases will be more focused on what appears to be the reduction of discrepancies than actual reduction. An entire arsenal of strategies, described by Lawler (1976), is at people's disposal, ranging from the formal fulfilment of obligations to the falsifying of feedback.

Acceptance, compliance, rejection?

Since a ProMES measurement system can be the basis for three models ("accepted control loop", "control loop complied with" and "rejected control loop"), the question arises as to which factors determine which of the three models will become dominant. Van Tuijl (1997) raises the hypothesis that the ProMES development process is primarily a process of value clarification. The parties involved explicate what they see as their primary responsibilities (the values they strive for). If these values turn out to have considerable overlap, that will lead to the acceptance of a collectively designed univocal value system. In addition, a growth in mutual trust is one of the possible consequences. However, it is equally plausible that there is little overlap but nevertheless complementary values. The people involved can do business with one another and enter into a stable relation of exchange. There is no reason, however, to do more than has been agreed on within the context of the exchange relation. Compliance is typical of the reaction to the proposed system, if it is made clear that it is consistent with a complementary value system. The third possible result is that the values of the people involved cannot be brought together. In cases where people are condemned to work together, a relation arises that is characterized by a great deal of distrust. The fear that the one party will undertake something that endangers the other party's values is always present. Any system

that brings such a diagnosis to the surface, thereby depriving the parties of any space in which to play their games, will be met with resistance.

The position described above can be briefly summarized as follows. Resistance arises when central needs are jeopardized. The "competence need" is considered the most central human need. This need is translated into values and value-related goals. The ProMES method leads to explication of work values and related goals. In addition consensus regarding those values and goals is strived for. In so doing, the development process used by ProMES clarifies to what degree one's own values are congruent with those of colleagues and the management, i.e. to which degree values and goals agreed on correspond with one's own way of "being competent". The larger the correspondence, the more a control loop intended to steer the process of goal attainment in the right direction will gain acceptance (or the less it will be resisted). A participative development process, aimed at the design of a measurement system for what really counts in work situations, provides many occasions in which one can find out about the congruence of other people's values. The same is true when, after system implementation, feedback reports are discussed to generate possible ways to improve performance. The actual realization of improvement initiatives again is a touchstone for value congruence. As long as those tests turn out to be positive, there is ample room for the mechanism of the "accepted control loop".

In the remainder of this article, we will try to illustrate the above reasoning by means of examples taken from each of the four phases of a ProMES project.

Project phases and sources of resistance per phase

The description of the ProMES method, given above, is restricted to the essential characteristics of the resulting measurement system and the way in which it has been developed by the design team. This development can be divided into four phases: a preliminary phase, a development phase, an implementation phase, and a final phase.

The preliminary phase
We group all events and decisions preceding the actual start of the activities of the design team as the preliminary phase. It includes the first contact between the enterprise and the facilitator, a number of introductory meetings for various parties, providing

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information on the work method and the points of departure and a feasibility study if required (Algera and van den Hurk, 1995). As a result of the feasibility study and the willingness to provide the necessary means and give the required guarantees a go/no go decision is made. Next, a steering committee is established that is composed in such a way that the project is firmly anchored in the hierarchy, the unit(s) in which the system will be developed is selected (determination of system boundaries is a point of special attention), the composition of the design team(s) is decided, a temporary plan for the design team(s) is made including agreements on the way in which the design team(s) will work (roles, techniques, homework, reports).

Sources of resistance in the preliminary phase

In the preliminary phase an attempt is made to gain insight into the degree to which a number of conditions are met, which, according to Pritchard (1990), determine the chance of success. Resistance can be expected where these conditions are not met. These include the following: everyone involved recognizes the importance of performance improvement, those involved realize that performance improvement is not easy and that it is a long-term process, there is mutual trust between employees and the management, the management is committed to the project and is willing to lend concrete support to it, there is a stable management, the management is prepared to invest in performance measurement, the points of departure for the ProMES method are accepted, the personnel are regarded as a critical factor for success. In summary, people have to be aware of the problem, they have to believe they can work things out together, and finally that the method proposed is suitable to work things out to everyone's satisfaction.

At the beginning of the project the points of departure are readily endorsed by the people involved. However, later on when these points of departure have to be lived up to, matters prove to be a lot less simple. The idea that things can and should be done better is often taken to be an accusation by the management and employees alike (Cascio (1991) and van der Vlist (1989) mention the same phenomenon). Both groups feel responsible for what is happening in the company and the conclusion that matters could be improved quickly leads to the notion that they are not doing well. In some companies such a conclusion has far-reaching consequences and even the word problem has to be avoided. There also are companies where the necessity to improve performance has led to heated internal discussions (and accusations) prior to the preliminary phase. Using ProMES to demonstrate that performance improvement is possible may prove one party wrong, resulting in a lack of co-operation with the party involved. Generally, one can state that there are few matters in a company that are as sensitive as making performance measurable, particularly when the method used makes excuses and alibis practically impossible. Therefore, willingness to deal with performance data in a constructive, problem-solving manner is an essential condition.

The participative, bottom-up approach followed in the ProMES project, with decision making on the basis of discussion, until consensus is reached, may go against the grain of the work method of a company. The picture people have of how to approach the improvement of work methods and procedures may be turned upside down. This too leads to resistance. The classic image of the hierarchical power structure cherished by some managers and employees has to be replaced by an image of organic interaction between groups that operate on the basis of their own and collective responsibility. The possible resulting field of tension can be sketched by means of Hofstede's (1991) cultural dimensions. The norms and values behind ProMES can be typified as "minimal power distance", "collectivist", "feminine role patterns", "being in search of insecurity", and "having a long-term orientation". The stronger the norms and value patterns of a company (or division of a company) differ from these, the more resistance there is to the ProMES method, from people acting as defenders of the company culture (van der Vlist, 1989). Here, too, the facilitator has a difficult task: to estimate whether the differences are insuperable or whether the first step can be taken towards a change of culture.

Another important point is the stability of the company. If all sorts of changes are scheduled, the company's strategy and structure are up for discussion, people are being transferred, etc., it is not a favourable starting point for a ProMES project. Anything developed in the context of such a project may be outdated the minute it is finished. This can only lead to discouragement of the development teams, which are required to have a lot of stamina in the first place. An equally unfavourable situation is one in which everybody is so busy all the time with solving important problems and finishing off extra jobs that there is no time for contemplation. In such situations, the request to stop and think about what you are really doing only results in irritation.

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One of the most important functions of the preliminary phase is the mapping of sources of resistance that can lead to serious problems during the course of the project. An inventory can be made during introductory meetings when essential points of the approach are described and the people present are challenged to make a reply. The inventory can also be a part of a systematic feasibility study. It is vital that opportunities and threats that arise become open to debate. In addition, clear agreements have to be made about points where one or more of the groups involved have doubts, are insecure, are reluctant, or are clearly frightened. It is not easy to indicate at which level of discrepancy between desirable and actual starting conditions it is better to make a no go rather than a go decision. This is all the more so because unfavourable starting conditions may become more favourable through the learning process involved in the collective development of control loops.

Of all the points of attention mentioned, the attitude of management is one of the most important. Research (Rodgers and Hunter, 1991) and more popular literature (Whitman, 1990) are in agreement: management commitment is a crucial condition. Hence it is necessary at the beginning of the project to determine what the management intends by introducing ProMES. Guarantees by management for the proper use of the information being made available are important, and we should also not underestimate the chances of a defensive use of the system by employees. Discussion of the expected level of performance, represented by the performance valuation curves, provides the opportunity to guide matters out of the danger zone. (In connection with this, it is interesting to see what the different meanings of the "expected" level are in different cultures. US students stated they never wanted to be seen performing at the expected level, but always wanted to be higher. The expected level was not a safe level for them to be on.) If the people involved show signs that indicate the use of manipulative or defensive objectives, it is time to ask whether the investment in a ProMES is really worthwhile: a system that will be at most complied with is only an extra weapon in a fruitless struggle.

The development phase
The development phase includes the processes through which the core elements of the system (fields of responsibility, performance indicators, performance valuation curves, and the feedback report) are designed. The activities during these steps consist of explanation, development, tuning,

testing, and support. Explanation is related to informing the design team about specifications of the system to be designed, and about the heart of the approach that will be used during design. In the actual development of the various core elements different group decision-making models can be used (interactive group discussion, nominal group technique (Fox, 1988), Delphi method). In essence these methods come down to successive "defining", "generating" and "evaluating". Particularly in the last phase ("evaluating"), discussion until consensus is reached, is crucial. The suitability of such a work method to create commitment to group decisions is supported in much literature (Sniezek and Henry, 1990). An important aspect of such consensus is clarification and agreement with management. The review and approval sessions with management regularly have elements of "creative negotiation" (responsibility is accepted in exchange for the availability of means that can be reasonably expected to support the responsibility in question).

Sources of resistance in the development phase
In the development phase potential sources of resistance can become a reality. It is hard to imagine what performance indicators look like for your own work situation in the preliminary phase. During development it becomes clearer, so that questions and doubts that were glossed over at the start now become clear. The question who will have access to performance data and what can be done with these data takes on a new meaning. Will these data be taken into account for performance appraisal and financial rewards? In what way will we be dealing with production rates and the level to which these are being achieved? Much can suddenly be made clearly visible using performance valuation curves. What will happen to the number of jobs in a group or department if a substantial improvement in production is realized? What exactly will be done with the profit? Why was our group selected for this? When will other departments (that always cause trouble for us) have a turn?

The scepticism expressed in the preliminary phase ("ProMES simply will not work for us") is vented again when people pass through a difficult phase in the development process (this often is the case when indicators have to be defined in operational terms; this is recognized as a difficult problem). Objections raised in such a phase are often used to mask underlying feelings of resistance (resistance to "being measured", resistance to a loss of room to manoeuvre, doubts

concerning the honesty of the management, a fear that one's positive self-image will be tarnished). The facilitator who starts to invalidate the objections raised has a long way to go, because as soon as one objection has been disposed of another arises. When the list has nearly been exhausted, the old objections are brought forward again. Practically the only aid a facilitator can use in such situations is to make the real points of resistance debatable. If a distrust of the management is the underlying problem, an interim discussion of the first results together with the management may solve things. One can also test the management support that was promised at the beginning of the project. In both cases the intensification of communication and proofs of good faith can slowly help to clear the air.

Sometimes resistance builds up because there is too little insight into the intended final results, the possibilities for their use and their value. It takes too long for the efforts to be turned into a usable result. Experience teaches us that people only become enthusiastic once they have seen the system they have designed being implemented. This experience can be achieved faster by designing partial systems (one module for each field of responsibility) rather than one complete system. Certainly in complex work situations the option of modules should be considered. At a later stage these modules can be combined into one system.

The facilitator can become a source of resistance. This definitely occurs in situations where there is a lot of tension between the parties involved in the company. It is an absolute condition that the facilitator maintains a neutral position among these parties in order to continue to function. At the same time the process that takes place in the design team leads to a strengthening of the group's cohesion. If a facilitator allows him/herself to become involved with matters of content in the design of a system, this can easily lead to a reduction in the interest shown by the group and to the loss of a sense of ownership. The loss of ownership caused by an overly dominant facilitator can also be caused by dominant input from staff departments that contribute to essential parts of the system. In both cases someone else has forced a values system on the group instead of giving the group a chance to define its own reality.

In summary, the truth comes out bit by bit during the development phase. Discussions are usually focused on what a group can reasonably be expected to influence. What is reasonable is an important point. If the development team and the management can reach a compromise about this, it gives the development team some faith in the idea that

impossibilities are not required of them. Agreements that are felt to be equitable and reasonable result in a feeling of communality, unreasonable agreements enhance feelings of opposition. The first feeling promotes acceptance, while the second leads to compliance or rejection depending on how unreasonable the demands are felt to be.

The implementation phase
In the implementation phase the support processes are an important activity. One aspect of this is related to the implementation of the necessary changes in the information system of the company. On the basis of the ProMES project requests are made with regard to the kind of information that is desired. These requests cannot always be fulfilled within the existing facilities: information is not provided at the level of a specific unit, or is simply not available in the way the design team wishes to operationalize it.

The production, distribution and discussion of feedback reports, being main activities in this phase, require support, to ensure that production and distribution are done correctly. It is recommended that someone have special responsibility for this, so taking on the role of system manager. The facilitator has to make sure that the system manager knows all aspects of the system he/she manages. The way the feedback report is dealt with requires special care. Guarding agreements as to who has access to the report is a point of importance. More important still is how the people involved deal with the feedback. Sometimes separate training for this is necessary. Another question that is always raised is related to the extent to which the designed control loop fits within the context of other control systems. Often attention will have been paid to this question at an earlier stage, but now it is of particular interest as the new control loop may compete with other control systems. Obvious examples of competing systems are the assessment and reward systems (for an elaboration on this question see Kleingeld (1994), and van Tuijl *et al.* (1995)).

Sources of resistance during the implementation phase
A system may be ready on paper, but that does not make it an implemented system. A test feedback report can be made by hand a number of times, so that everybody can see what it eventually will look like. Later this is all done by computer, which requires the necessary facilities. It is hard for a design team to understand that the realization of these facilities cannot be the number one

priority of a computer department at all times. In the context of data collection rather a lot of time and money also has to be invested. Indicators that were thought to be valid may prove invalid. Non-valid feedback is immediately rejected as unusable. The same applies to feedback that is not understood. A design team consisting of representatives from a larger group may have decided upon a particular indicator only to find that colleagues have a lot of questions about it.

The best indication that one or more of the above factors is present is the lack of performance improvement after the release of the first feedback reports. A whole series of sources of resistance can be the explanation for this. For example, resistance related to a lack of expertise: people do not know what to do with the feedback report. This can be caused by a lack of problem-solving skills or a lack of insight into relations between work strategies and performance ("You tell us how well we performed, but you don't tell us how we can do better!"). Resistance can be related to a denial of the feedback information, but also to disbelief in the sense that people feel they are not performing that badly so the information has to be incorrect. "Why should we?" is a remark often heard that points to the lack of a coupling between performance improvement and intrinsic or extrinsic reward. If a relation between performance improvement and reward in a material sense is lacking, we speak of inconsistent control: the one control system demands behaviour *x*, but *x* is not rewarded through the other (and possibly behaviour *y* is more attractive). Here, we have a poorly developed exchange relation in a situation where the measurement system is merely complied with.

Resistance can be caused by presumed or actual reactions of the management to feedback information. Negative reactions from a supervisor to parts of a feedback report, which indicate that expectations were not met regarding some points, are destructive to motivation. A management that has introduced the project with a lot of fuss, but has suddenly gone quiet, is sending the message that there is not much need for the project after all.

What can be done to remove resistance? Naturally, the first requirement is to find out which of the above causes is the most important in a particular case. Next, one has to work out whether it is possible to remove the causes. It is important to recognize and correct mistakes that have been made. This way invalid indicators can be removed from the system to be returned when their validity can be guaranteed. Skills that are lacking can be acquired through training. Whatever insight

into behaviour, strategies or processes leading to the feedback results is lacking, can be compensated for by providing additional information (e.g. Pareto analyses of sources of interference, types of mistakes, etc.). Sometimes it helps to make explicit room for experimentation: "We expect equivalent or even decreasing results for the coming period, because we are trying to establish a better way to work through trial and error". All these activities fit within the framework of this method and they determine the answer to the question whether the group will accept, comply with or reject the control loop. Now it becomes clear what the promises made at the beginning and during development are really worth.

The final phase
In the final phase the following matters are dealt with: the evaluation of the project, the maintenance of the system, repercussions regarding the use of the system, the question whether the project should be extended to other parts of the organization. A framework for evaluation of ProMES projects was set up by Schoonen (1993). She systematically focuses on the initial conditions prior to the beginning of the project, the development process, the resulting system, and the effects of the use of the system concerning performance and other relevant dependent variables. The important question in the maintenance of a system is whether the system will continue to be valid as time passes. All sorts of changes may make larger or smaller adjustments desirable. Thus, performance characteristics of machines may change over time under the influence of wear, which may result in an alteration in the performance valuation curves. Changes of policy may also make alterations of the performance valuation curves necessary. All changes can lead to the addition or subtraction of performance indicators. Experience teaches us that maintenance is necessary to prevent a system from ageing and therefore losing its relevance to the people involved. Working with the system (i.e. trying to improve performance) leads to a heightening of awareness of performance restrictions. The system was designed within the context of a given situation and takes into account the restrictions that the context places on the group. The development process often leads to the removal of frictions built up over time, so that responsibilities and authority (means for control) are kept in reasonable balance. As time goes by one can ask oneself whether the room for perfor-mance improvement has not already been used up within the constraints of the given situation, and whether further

improvement requires a rethinking of these constraints.

Sources of resistance in the final phase
The first need for maintenance can often occur quite quickly, depending on the speed with which conditions change. These can be changes in the tasks of a group, changes in priorities, changes in the environment of a group, or changes in the composition of a group. These changes require alterations to the system. If these are not implemented in time the system loses its relevance and resistance to its use will be the consequence. By contrast, the use of the system may lead to a cry for change: a group that sets out with enthusiasm but cannot gain any improvement in performance after a period of time, within the conditions of a given situation, will look for new ways to do so. In many cases, however, these will fall outside their authority. Encouragement will have to be given to the initiatives of the group, if one wants to prevent the group from giving up completely after a while. Much can be learned from the development phases that many quality loops have gone through before dying out (Lawler and Mohrman, 1985). As applied to all the former phases, it is crucial in the final phase to live up to the promises one has made. If a design team starts out with the assumption that a number of their neighbouring departments will follow and they notice this is not happening, they will be quick to lose their enthusiasm. If an agreement was made that the group would share (at least in some way) in the gains caused by its performance improvement (e.g. through investments in improvements in the working conditions, equipment, etc.) and this does not happen, this will soon lead to the feeling that a confidence has been breached and they have been used. In response the initial attitude of acceptance of the system can turn into one of compliance or rejection.

A thorough evaluation of the system and the results that have been achieved up to that point is necessary, including the degree to which original agreements have been kept during development. Audits for this based on the evaluation framework of Schoonen (1993) are being developed.

Conclusions

The description of potential sources of resistance in the various phases of a ProMES project indicate that it is not easy to predict whether the reaction to a ProMES measurement system will be one of acceptance, compliance or rejection. A ProMES project is a dynamic event within the dynamics of the

company in question. What may seem to be a project with little prospects at the beginning can turn into something positive during development. However, the reverse can happen too. What is an accepted control loop for self management one moment can turn into a system that is simply complied with to guard certain agreements the next. All factors that determine whether collaborative relations can be characterized as co-operative or (unproductively) competitive are relevant in this context. The main advantage of the ProMES method is that the complexity and uncertainty of collaborative relations is made clear and a common frame of reference is developed so that communication about what is happening is greatly simplified and improved.

The ProMES method offers the means to develop accepted control loops for self-management. In other words, instruments are provided that flesh out core concepts from recent motivation theories. Whether or not this potential is realized, however, depends very much on the dynamics of the development process. The people involved, and the value systems they adhere to, which may be similar, complementary or at odds with each other, determine what the end result will be.

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