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## Potential-oriented strategic planning: business development and human resource development as an iterative process

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**Abstract:** Traditional patterns of planning frequently cause delays and inadequacies in corporate training provision. As long as qualified personnel are not viewed as the basis for business development strategies, the implementation of innovations will be retarded, or, worse, innovations will fail due to a shortage of qualified manpower. However, aside from market development, qualification potential is the most important strategic resource for the planning and organization of corporate processes. Strategy formulation is based on this resource, involving an iterative process which occurs between market targets and human resource development goals. Implications of a potential-oriented approach to planning (such as self-regulation and decentralization) are also discussed in this paper.

**Keywords:** human resource development; business development; corporate training; personnel development; strategic planning.

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### 1 Introduction

Employee qualifications are a crucial determinant of the innovative strength of the individual business and of the economy as a whole. Owing to the dynamic nature of technological change and the increasing complexity of technological and organizational

configurations, traditional patterns of planning, under which personnel development is oriented towards the requirements of market, business and technological development, frequently cause delays and inadequacies in corporate training provision. As long as qualified personnel are viewed as an end goal (rather than a basis) of business development strategies, there will occur a delay in the implementation of innovations, or, worse, innovations will fail due to a shortage of qualified manpower.

This paper makes a case for the conscious establishment, maintenance and development of qualification potential in the business environment. Apart from market development, it is the most important strategic resource of the firm. Under the analysis proposed here, strategy formulation becomes an iterative process that occurs between the market situation and the available human resource potential. In the everyday running of a business, potential-oriented strategic planning involves decentralizing personnel development functions, extending workplace regulation and utilizing individual effort on the part of employees.

## 2 The role of personnel development in traditional planning patterns

### 2.1 The technocratic paradigm of planning

The prevailing paradigm [1] of business planning [2] and human resource development follows, in its logical structure, a sequential pattern [3].

The sequence begins with an identification of specific market situations and an assessment of marketing opportunities, followed by decisions about products (goods and services) and sales volume. The next step involves determining the methods of production and the technology to be used, which in turn determine the necessary organizational structures and processes. This results in specific jobs having to be filled, i.e. there is a particular level of qualitative and quantitative demand for human resources. Especially in the case of innovations, a comparison of proposed personnel placement with the current workforce will reveal a gap which must be filled by means of recruitment for external sources or by specific personnel development policies. Thus the factors of market, technology and organizational structure contingently determine human resource requirements or qualification requirements as the case may be (see Figure 1).

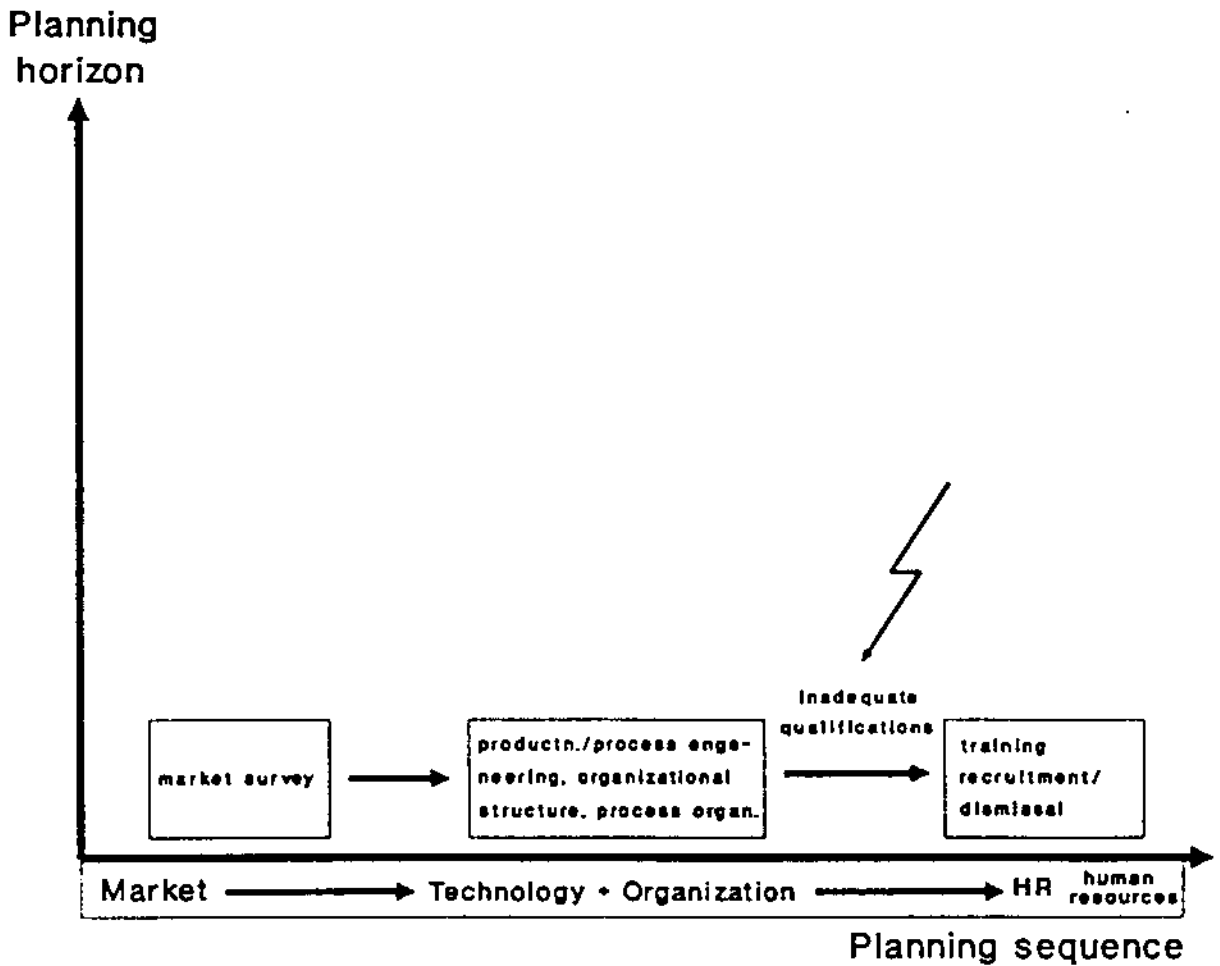
Personnel development generally operates on the assumption that qualification requirements derive from the requirements of technology, the degree and type of division of labour, the lines of authority and the definition of task fulfilment processes.

Qualification requirements are therefore measured against the existing qualification potential [4,5]. The gap between these two factors determines training needs, which must be met by appropriate training schemes. The only way to achieve a high degree of adequacy in mapping future qualification requirements and current employee qualifications is by employing maximally accurate and formalized methods of comparison.

This process of identifying training needs results in the arrangement of training schemes. It involves the following *transformational steps* [6]:

- 1 On the basis of an individual's work results, it is necessary to determine essential tasks or work activities and the various situational demands placed on the worker.

Figure 1 The technocratic model of planning I (sequential market, investment and HR planning).  
 Source: Staudt (1989) p.378.



- 2 From these demands, it is necessary to crystallize and describe those capabilities that a worker must have as comparatively permanent dispositions [7], i.e. the qualification requirements.
- 3 These qualification requirements must be translated into curricular categories. For this purpose, it is necessary to formulate teaching and learning goals as well as strategies for improving qualifications [8].
- 4 Decisions about teaching methods and forms of learning organization (seminars, small groups or self-study) must be supplemented by decisions concerning matters of training organization, such as where and when to hold courses and how to coordinate training activities.
- 5 Much like his or her qualification requirements, an employee's *capabilities* must be assessed, i.e. educational and professional background, experience, motivation and needs.
- 6 At least at the lowest level of description, curricular categories must be phrased in terms of readily comparable dimensions, so that achievement tests can be conducted [9,10,11].

## 2.2 Limitations of linear approaches to planning

There is a whole set of problems in determining training needs. The mapping of current needs presents an initial difficulty (see Section 2.2.1). Problems escalate when it comes to forecasting future requirements (Section 2.2.2). The growing complexity and the increasingly rapid pace of change in the corporate environment – due to technological and organizational innovation – further compound the situation.

### 2.2.1 Problems in mapping current qualifications

Even a static determination of training needs – meaning a comparison of staff capability with qualification requirements – raises fundamental problems:

- (a) One way of *identifying existing qualifications* is by looking at formal qualifications [12] (general educational background, college courses, university degrees and certified training courses). In addition, qualifications gained by actual professional practice need to be taken into account [13]. This kind of procedure will provide a fairly sound basis for planning provided that there is slow and continuous change in work areas. In proportion as developments occur at a faster, discontinuous pace, the relevance of formal qualifications as a guide to existing qualifications decreases. As employees progress on their career paths, actual use of qualifications acquired in initial training diminishes, with subsequent intentional and functional learning assuming greater significance. One of the main reasons for this is the fact that a large number of employees change jobs (or status). Moreover, there is a danger that professional knowledge, abilities and skills will be forgotten if they are not utilized. The completion of advanced training courses is often insufficient evidence of actual qualifications, as training schemes tend to be certified in diverse, unreliable and even incorrect ways, making comparisons impossible in some cases [14].

Thus, any attempt to determine current employee qualifications directly, i.e. without recourse to such factors as formal qualifications, poses severe problems [15]:

- Qualifications, being psychologically-determined dispositions, are not directly observable; they are not, and cannot always be, verbalized.
  - One way of identifying qualifications is via appraisal by superiors. This approach is constrained by limits to employees' ability and willingness to disclose their qualifications. By the same token, superiors are often unable and unwilling to determine and assess the qualifications of their subordinates.
  - Methods of determining existing qualifications or qualification potential [16] tend to rely too heavily on past experience and frequently have an inadequate theoretical foundation, thus sometimes giving rise to arbitrary interpretations of particular employee characteristics as well as to methodological deficiencies.
- (b) The *derivation of qualification requirements* from the work tasks or work activities associated with a particular job is also beset by considerable difficulties:
- The one-to-one mapping of particular work activities and anticipated performance levels is extremely difficult to realize; often there is a certain degree of discretion involved in the way a particular task is realized, and therefore the desired performance is not always clearly defined.

- It is not sufficient to describe jobs in a more or less appropriate fashion and then to infer what can plausibly be considered as the qualifications required for a particular job. There is no adequate set of tools, based on a "theoretically and empirically sound *model*" [17], for applying methods of labour psychology to the analysis of the logical structure of tasks and the associated deep structure underlying the psychological regulation of work [18].
- Specific problems arise in the description of rather complex requirements at a high level of psychological regulation as well as for what are known as 'key', 'extrafunctional', 'non-process-related' or similarly labelled qualifications [19].

As a result of the above mapping problems, an identification of training needs which is based on the currently available methods for gathering information on requirements and potentials can be correct only in a limited number of cases.

### 2.2.2 *Forecasting problems*

A detailed description of qualification *requirements* can only be obtained on the strength of information relating to actual work activities. The collection of such information must be based on existing jobs, i.e. it takes place at a time when the training policies to be planned, formulated and implemented as a result of the analysis should already have taken effect. For logical reasons alone, such a procedure causes a *structural delay* [20], especially since the arrangement and implementation of training schemes also required time.

Given these difficulties, there have been attempts to anticipate future requirements by forecasting future fields of activity [21] or by studying pilot jobs [22,23]. However, this kind of investigation is not as subtly differentiated as studies of particular jobs involving a wealth of detail and, hence, information on psychological phenomena to which access is difficult. Thus there exists a dangerous trade-off between the current and the future degrees of adequacy in mapping [24].

By focusing rather too narrowly on pilot jobs, such an approach overlooks a number of things: the great variety of options available to individual businesses even in the case of identical technical applications, and the fact that the choice of options to be implemented in the future depends on employees' qualification profiles [25], which are difficult to project, and are influenced by individual circumstances. As a result of forecasting problems, the utility of a deductive chain

technology → (organization → ) job → qualification requirements

is seriously challenged even if efficiency criteria are invoked. With job layout and choice of technology becoming increasingly decoupled, the identification of future qualifications is fraught with uncertainties [26].

### 2.2.3 *Problems created by growing complexity*

In the context of dynamic change in market conditions, accelerating technological and organizational transformations, variable, partly business-specific forms of technology and organization, and the flexible utilization of work systems, the uncertainties associated with human resource forecasting are further compounded by the possibility of unforeseen

intervention and unexpected external disruption. It is becoming increasingly difficult to obtain reliable information on future corporate trends [27].

The growing *complexity* of corporate processes has meant that there is an increasing scope in task fulfilment processes [28].

With growing complexity, it is necessary to take account of a larger number of determinants of the factors to be planned, as well as of their interdependencies. This means that, *ceteris paribus*, planning will require more time.

Both aspects (more rapid change and growing complexity) taken together will create greater uncertainty with regard to action to be taken by the personnel development function, as well as causing a further delay in activities, with the result of additional sources of error.

Overall, then, we are left with the following conclusion. The traditional approach sees the identification of qualification requirements as the end result of a planning chain whose starting point is the market. For logical reasons alone, this model is problematic and can only be applied under certain (static) conditions. In periods of rapid technological and structural change, its structural inadequacies cause long delays in corporate activities, the effectiveness of which is by no means certain. As a result, "many negative effects can no longer be averted, causing manpower shortages and socially unacceptable hardship [29].

For this reason, the ways in which economists and managers perceive personnel development within the planning context need to change.

### **3 New approaches to the planning of human resource development**

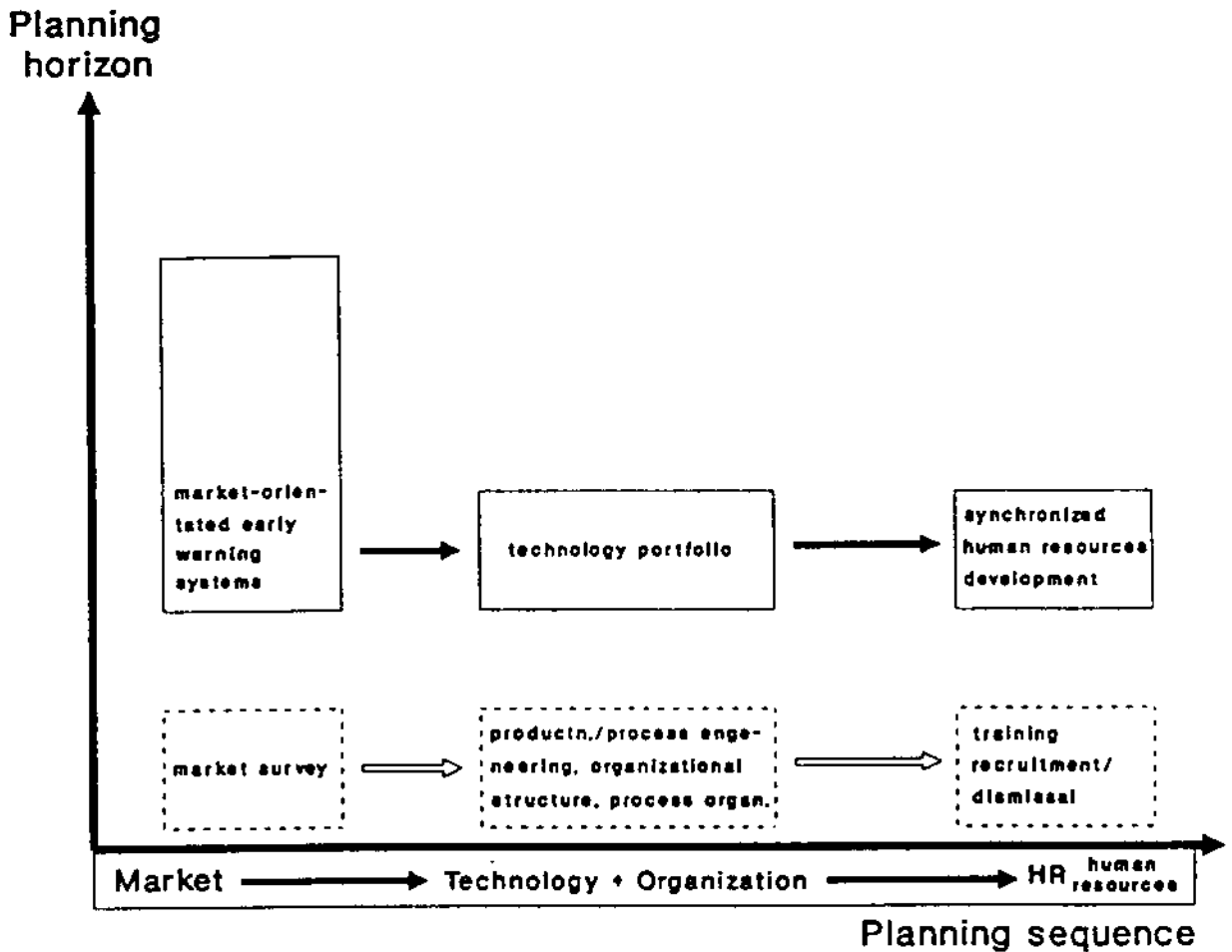
#### *3.1 Earlier start of human resource planning*

For some time now, attempts have been made to counteract the undesirable implications of traditional planning patterns by including human resources at an earlier point in corporate planning and decision-making [30]. Apart from forecasts of (personnel) planning-related determinants of future developments (markets, technologies), the focus of such attempts has been on increased cooperation between human resource planning and other planning functions, "taking into account the firm's overall development and those factors of production technology which affect labour" [31]. This has been accompanied by calls for human resource functions to be placed at top management level.

Early analyses of capital expenditure programs ('investment analyses') [32] are designed to ensure timely diagnosis of skill gaps, thus allowing appropriate training policies to be initiated and implemented at the earliest possible moment [33] (see Figure 2).

The implication is that the path of a delayed and purely reactive adjustment to changed circumstances is abandoned. That kind of approach has meant that those who have successfully completed time-consuming training courses designed to improve their qualifications find that they have to apply their newly acquired knowledge to production methods which have become obsolescent during the planning and implementation of human resource development. Thus, abandoning sequential planning patterns for a more synchronized fit between investment planning and human resource planning will at least mean a saving of time. It will also permit timely utilization of capacity newly created by investment plans.

Figure 2 The technocratic model of planning II (synchronization of investment planning and human resource planning), Source: modified version, Staudt (1989) p.378



### 3.2 Remaining deficiencies

Unfortunately, the procedure outlined above is still limited in its effectiveness. This is partly because the forecast is inevitably fraught with uncertainties, and partly because it is possible to deviate more or less sharply from an intended investment path due to innovations in technology and flexible applications [34].

Put another way, the forecast yields training needs based on *assumptions* concerning *future* fields of activity, *future* qualification requirements and *future* skill potentials. The very methods employed in job analysis and potential determination make the information obtained in this way very problematic. The relevance of the data will decrease if the bases for analysis take the form of mere constructs which present considerable inaccuracies with regard to future technological and organizational development. Moreover, the jobs concerned may partly result from the attainment of a particular qualification level, especially in the case of innovations. Another problem is that an elaborate set of tools, designed to make accurate predictions and hence able to map the full complexity of present and future factors [35], is too costly, complicated and, thus, hardly manageable for the individual business.

Despite the benefits of these methods, commonly referred to as 'strategic' [36], 'proactive' [37] or 'anticipative' [38], for the timely and not merely reactive acquisition of qualifications, it becomes evident that, basically, human resource development is here regarded as a plannable dependent variable [39].



*Cum grano salis*, the goal remains to achieve an optimal match [40] between job specifications and qualification profiles. Following a forecast of future needs, an assumed lack of qualifications results in the arrangement of appropriate training schemes. Existing or potential qualifications that are not immediately required are regarded as over-qualifications. In the prevailing view, these are at best redundant, but are often a potential source of conflict within the firm [41], the inevitable outcome being their elimination. While this is probably not a conscious process, it is reflected in such negative consequences of dormant qualifications as demotivation, possibly leading to employee apathy or the resignation of the staff members concerned [42].

Even when planning is accurate, such qualifications are no longer available when required because actual developments differ from those forecast. The consequence of this is that, as planning becomes more successful, the flexibility of the relevant systems decreases [43].

Overall, then, even an extension of traditional planning patterns (which nonetheless continue to be technocratic) inevitably leads to regular crises in adjustment due to chronically delayed activities. In the process, the human resource function causes recurrent delays in corporate innovations, sometimes even thwarting innovative ventures.

## 4 Potential-orientation – a new guiding principle for strategic planning

### 4.1 Potential-orientation as a means of ensuring flexibility

The technocratic theory of planning contrasts somewhat strangely with practitioners' widespread confidence in the ability of employees to adapt 'one way or another', i.e. their confidence in an obviously existing flexibility reserve [44]. Even though managers fail to ensure the *purposive* utilization and promotion of such reserves, they do have a fundamental trust in their efficiency. The significance of such reserves for the smooth functioning of corporate processes becomes most clearly noticeable when employees, consciously restricting the use of these reserves, resort to what is generally called a 'work-to-rule' as an effective form of industrial action [45].

The tendency to take a short-sighted view of these reserves by eliminating them through rationalization conflicts with the fact that they are tacitly being used. The consequence of this is that a lack of reserves, with the corollary of dormant technological potentials, is only perceived at critical moments, so that resultant adjustment processes are limited in their effectiveness because problems escalate.

In the case of innovative developments, the attempt to generate greater flexibility by resorting to externally-oriented one-off measures (fresh recruitment, dismissals) is affected by institutional constraints, as circumscribed in dismissal protection and industrial constitution law, or in collective pay agreements and corporate agreements [46]. Moreover, in a situation of this kind, hardly any employees with the relevant qualifications will be available on the employment market [47], with the result that a considerable amount of time, effort and expense will need to go into familiarizing fresh recruits with business-specific tasks.

As a result, there is an increasing number of calls being made for strategic human resource planning to meet 'the situational flexibility needs of the firm' [48]. It follows that human resource development should be *potential-oriented* [49]. What this means is, first of all, that qualifications should be enhanced "for a more or less large number

of jobs" [50]. (Other interpretations suggest a refinement of the tools for analysing potential [51].)

#### 4.2 *The iterative process between human resources and the market*

Let us take the logic of potential orientation further, thus making qualification potential an *additional starting point* for planning rather than something to be planned by the human resource manager. This will mean *reversing* the traditional planning chain [52]:

market → technology / organization → human resources

The question raised by this diametrically opposed viewpoint can be phrased in terms of "what organizational alternatives and technological options are feasible using current and potential qualifications?" [53]. The question about how (and what) a particular firm is *able* to produce results in appropriate replanning. The obvious next step is to ask what (and how) *other* goods and services can be produced. In other words, not only do existing qualification potentials prevent certain organizational structures and production methods, but they also make them possible [54]. Such amendments to technical and organizational options result in fruitful opportunities for changes in the range of goods and services offered, which thus become modifiable [55].

The procedure just outlined is based on the following questions:

- What are employees' tapped and untapped qualifications?
- What dispositions, interests, and needs to acquire skills do employees have?
- What are the configurations and processes that can usefully be organized using existing potentials?
- What production methods are feasible, effective and efficient using existing potentials?

And, in the final analysis:

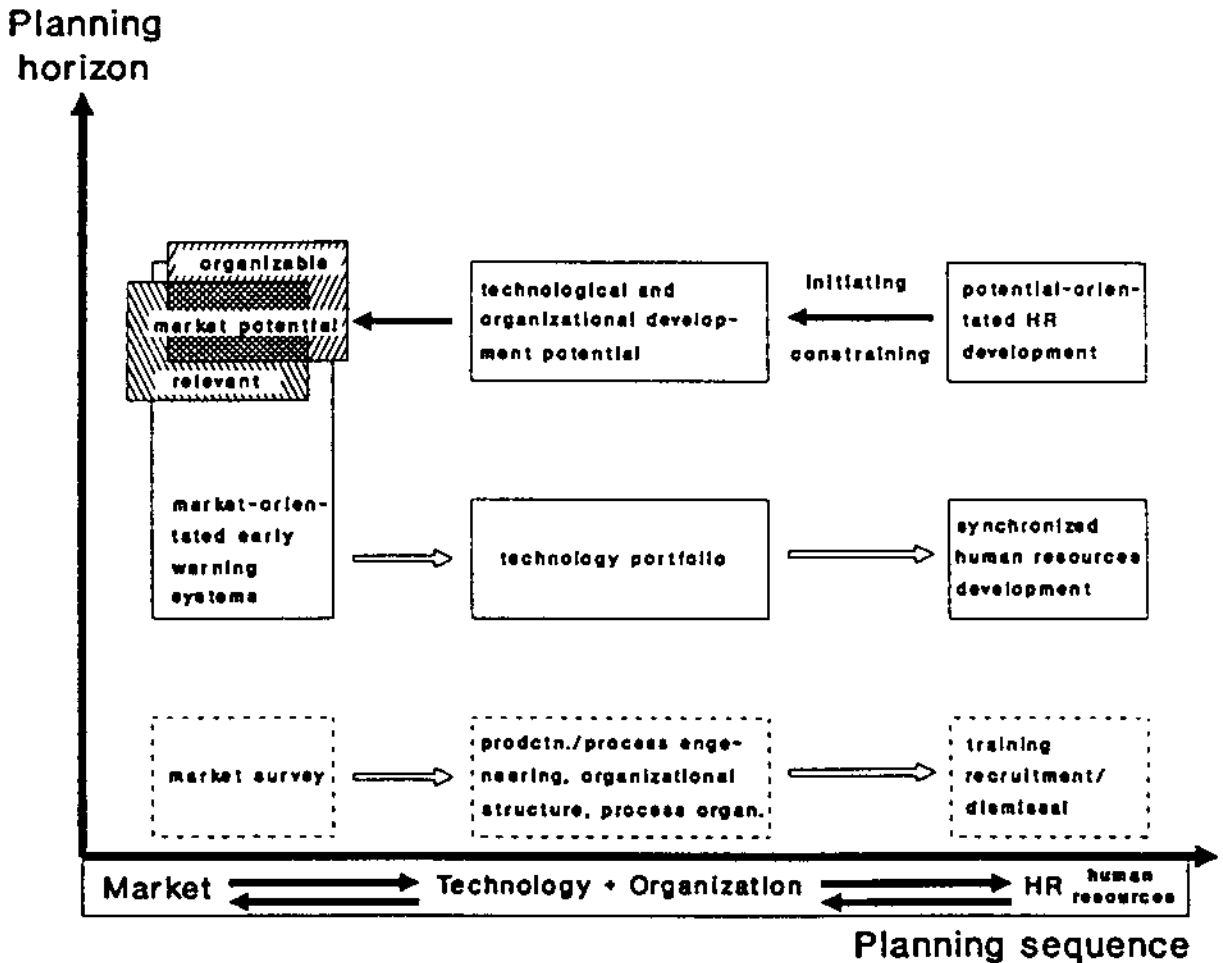
- What goods and services can be produced by the firm using existing potential as well as potential that can be developed by means of human resource development and changes in organizational structures?

The answers to these questions will allow the *business-specific* market potential to be actively re-organized.

Far from *replacing* traditional, market-driven planning, this approach complements and modifies conventional forms of strategic planning, relativizing the *viewpoints* and *procedure* of the technocratic model of planning.

Once decisions concerning products and services have been revised appropriately and formulated in concrete terms, they form the starting point for a replanning of production methods, organizational structures, human resources and qualifications. A procedure of this kind results in an *iterative planning process* [56] and in changes in corporate variables – substantive goals (product decisions based on market surveys) on the one hand, human resource potentials (qualifications, personal dispositions, life and career plans) on the other. Figure 3 illustrates this process, which will be dealt with more extensively in what follows.

**Figure 3** Potential-oriented human resource planning: feedback from human resources and personal development potential to choice of technology organizational options and market development. *Source:* modified version, Staudt (1989) p.380



This iterative process modifies the linear planning model in two ways [57]:

- 1 As a *mental model*, it requires planning [58] in which the inter-relationships of all business activities, including those undertaken by human resource management, are analysed and determined [59]. This means:
  - timely recognition of the targets and constraints of individual departments,
  - which can then guide corporate action,
  - that goals which are unattainable or too costly may be altered [60],
  - that the problem-solving potential of individual departments can be determined,
  - which can then influence the revision of (sub-)goals.
- 2 The *actual process* follows a temporal progression. New impulses from one particular area must first filter through to another, where new possibilities (or constraints) may then be discovered and utilized (or mastered). Time passes before new impulses really affect jobs. The following example may serve to show this. Having introduced new machinery, a manufacturing firm arranges further training for its employees. Workers need to become experienced at operating the new equipment, combining hands-on experience and newly acquired knowledge. Once this has been achieved, they can detect the deficiencies of the new machinery and suggest ways of altering it as well as alternative technological and organizational processes, which can then be incorporated into product development and the planning of other jobs.

Accordingly, it is necessary, for purposes of analysis, to distinguish between two different patterns in which human resource potential becomes a determinant of strategic planning:

- a pattern which *constrains* initial planning and leads to replanning (thus modifying goals [61]) – the constraining role of human resources;
- a pattern which *creates* new possibilities (thus generating goals) – the initiating role of human resources.

#### *4.2.1 The constraining role of human resources*

When a qualified manpower shortage impedes or prevents the diffusion of new technology, it becomes a barrier to innovation that *constrains* corporate planning. Employee qualifications that are not available and cannot be acquired, or would take too long to acquire, prevent the realization of technologically feasible options [62].

The experience of firms in the services sector, banks and insurance companies in particular, offers an example of the ways in which a skills shortage can affect business planning [63], leading to adjustments in technological options or organizational decisions [64].

During the expansion of the 1960s and 1970s, the job market could not provide these firms with a sufficient number of qualified employees [65]. To make good some of the shortfall, the content of jobs was designed in such a way as to enable less qualified personnel to master them after a short induction period. This also had an effect on the design of the relevant user software. The resultant organizational forms showed a tendency to persist until long after their original cause had disappeared.

#### *4.2.2 The initiating role of human resources*

The above example also shows that signals originating through human resource potentials do not invariably lead to the abandonment of a project that is felt to be unfeasible; they may also cause corporate action outside the immediate human resource area to be modified.

A good example is provided by the diffusion of micro-electronics [66], where it was initially expected that skill-intensive activities in the areas of services and repair would expand on a large scale, causing skill requirements to rise. However, neither external nor internal sources of recruitment were able to fully meet this demand for qualifications. The effect was that progressive suppliers shifted their production towards goods that required little maintenance and servicing. These goods, however, necessitated skill enhancement schemes that were entirely different from those devised for the technologies originally forecast. But it was the latter that had formed the initial basis for training [67].

A causal inter-relationship of this kind (which is initially spontaneous and primarily reactive) becomes even more evident when, in addition to pursuing alternative strategies, one attempts to *positively* resolve the issue of what types of organizational solutions [68], production methods and product choices can be adopted using existing qualification potentials. It is thus vitally necessary to obtain any kind of information on such potentials even when methods of investigation yielding results of only limited relevance are used,

and to put the potentials to effective use in the firm. This means that the planning of human resources and organization and other, amendable, sub-plans should include data on employees' knowledge, abilities and skills. This will involve employees *describing personal dispositions, interests and plans (including career plans)*.

We are here referring to existing, but untapped qualifications as well as to opportunities for developing future qualifications, i.e. *to the current and the latent future qualification potential* [69].

Efforts in this direction do exist, but have so far been limited in scope. When it comes to determining the range of goods or services to be offered, it is common and self-evident practice for handicraft enterprises or promoters of small businesses to take account of their own competencies and interests, as well as of employees' current and potential qualifications. For example, a carpenter's workshop, faced with the choice of making either windows or exclusive store fittings, decided in favour of the latter, more sophisticated product, in spite of strong demand for windows and although this required a higher level of creative and constructive effort. The reason for this was that employees' skills appeared to be more suited to this task and could be more fully utilized. In addition, the business started producing small batches of exhibition equipment for large industrial firms, taking care of assembly work as well. A highly qualified worker was not willing to undertake such work; small batch production would have been experienced as deskilling by him and he would soon have left the enterprise under those circumstances. His ability and independence of mind prompted the firm to *incorporate* into their spectrum special orders for sophisticated customized products, with the employee in question working exclusively in this area.

A certain number of large enterprises have adopted participative approaches to management and tools for human resource development that incorporate personal plans into appraisal interviews [70]. These firms make an implicit attempt to utilize potential-oriented approaches in solving problems that cannot be dealt with centrally [71]. Such approaches as quality circles, semi-autonomous work groups, or shop-floor participation are intended to reduce lack of information on the part of the workers (which is particularly severe when new technology is being implemented), utilizing their knowledge and experience. Under this mode of management, the problems of those work areas which cannot be influenced via the corporate hierarchy may be resolved [72]. (Japanese experience of these modes of management has recently been shaping the debate on 'lean production' [73].)

However, such approaches as employee suggestion schemes [74] or quality circles tend to be mere adjuncts to otherwise largely unchanged management and control mechanisms and organizational forms [75]. Their effect is thus rather limited; they may even be a source of conflict because expectations have not been, or cannot be, fulfilled [76].

The contradiction between current slogans such as 'participation', 'business culture' or 'employees as human capital' and the technocratic approach to planning should now be obvious. Businesses will need to design an iterative process of adjustment between development potentials and targets involving a conscious, organized search. This is an essential prerequisite for exploiting new resources for corporate development and creating new bases for corporate planning.

### 4.3 Human resource development – a continuous process

Once the idea that the human resource factor can be fully and reliably planned has been abandoned, it will be the task of 'human resource development' [77] to translate the notion of an iterative process into action. The end result will no longer be 'requirement-specific', 'successful' human resource development or qualifications; rather, there will emerge changes in qualification potential which will provide the basis for mastering and designing innovations.

The idea of organizing personnel development as a continuous process may seem to be rather more complicated than are conventional notions in the human resource area. Its realization needs to be integrated into corporate processes and structures in such a way as not to hamper production. Since there are limits on the quality of the information that is available on the many issues surrounding potential formation, potential evaluation and potential utilization, further *loss of information must be kept to a minimum*. If it is the case that the availability of action-guiding information is severely restricted, the actual realization of tasks becomes even riskier. That is why tasks must be delegated to, and performed in, an environment in which they can have a *maximally immediate effect*. This can only be achieved by abandoning the ideal of centralized control, made possible by comprehensive information and forecasting, in favour of *small and decentralized control loops*.

## 5 Implications for the organization of human resource development

If small and decentralized control loops are the only way to achieve potential-oriented corporate development, then this has important implications for human resource development and organizational development [78]. The development and utilization of self-regulation and individual effort as well as a new understanding of the preparation and implementation of human resource and organisational policies will have to be achieved. As a result, the old centralized control mode will at best perform a service function, with actual responsibility for development being delegated to decentralized departments.

### 5.1 Self-regulation and initiative

Employees themselves are the starting point for this extension of traditional planning patterns. Rigid hierarchical relationships, supported by centralized planning and organization, will exist alongside *self-regulation* [79] based on individual effort. Central control of a certain number of tasks is either impossible or involves too much time, effort and expense. Self-regulation is the only way to master such tasks using existing or potential decentralized capacities for problem-solving, thereby reducing complexity [80,81].

Self-regulating processes of work realization presuppose *self-motivated* action on the part of employees. At the core of attempts to utilize employees' initiative [82] are those personal interests, dispositions and aspirations of employees that relate to job content and qualification. Growing numbers of employees feel an ever greater need for self-realization [83] in a satisfying job [84]. Scope for action in task realization is a further basis for self-regulation.

In order for employees to be able to master non-routine jobs, *job structures* have to be designed in such a way as to generate, promote and maintain [85] individual effort, self-

regulating abilities and the requisite potentials for human resource flexibility, thus ensuring their practical effectiveness. This involves creating sufficient scope for independent action as well as opportunities for learning and development. In this respect, it will be necessary to critically assess organizational forms and to encourage cooperative processes, as found in group-oriented work forms.

## 5.2 Potential-orientation and decentralization of human resource development

Large enterprises in which human resource development practices are highly sophisticated are increasingly making attempts to counteract the negative effects of bureaucratic structures [86] by re-integrating human resource development and training into the various departments [87]. Partly inspired by Japanese experience [88] of human resource development, managers are calling for a transfer of personnel development tasks to the line, i.e. closer to the jobs concerned, using the existing or potential capacities for problem-solving available at this level through 'indirect control' [89]. The most important responsibilities are delegated to line managers [90].

Line managers are given responsibility [91] for improving qualifications, such as succession planning or training off, near or on the job [92]; in particular, they are directly involved in on-the-job training [93]. This means that they must identify training needs and qualification requirements, as well as arranging career paths and skill enhancement on the basis of appraisal interviews and organizing small groups, such as quality circles, orientated towards job content and structures, specific problems and skill enhancement. These small groups integrate skill enhancement and task realization. Line managers are responsible for coordinating near-the-job and off-the-job training and for passing on knowledge newly acquired in each individual work area [94].

Seen from the perspective of decentralized regulation, potential formation and potential utilization, *near-the-job* training, apart from making job-related learning processes more efficient and limiting costs, assumes further significance [95]; forms of on-the-job or near-the-job learning make it possible to take immediate account of signals relevant to the process of skill enhancement. Training needs arising from the rapid deterioration of employees' original expertise are reflected in the fact that employees undertake training on their own initiative during their spare time. In proportion as the activities of learning and working overlap, technical applications and work processes, whether individual or specific to a department, work group or some other organizational division, can be altered [96].

Delegating responsibility for human resource development to the various departments does not mean dispensing with *centralized human resource development or training departments*. For one thing, it will be necessary to ensure company-wide coordinating processes, especially as far as strategic goals and past decisions on products and processes are concerned. For another, departments will have to be given special support in those areas where information (e.g. information on external training provision and recent developments) or competencies (e.g. in matters of teaching methodology) are not necessarily available. What is required is a change in the way in which human resource departments see themselves (or are seen by others). They become *service facilities* performing a consulting function for human resource development in other departments. This involves such activities as selecting, preparing and evaluating training schemes or on-the-job training [97,98].

## 6 Conclusion

The aforementioned changes in the nature of human resource development tasks provide the organizational basis for more successful production and training processes. They allow a new type of strategic planning, under which existing potentials constitute an additional starting point for business development. However, new issues are raised for the planning, organization and control of all corporate operations.

When, in addition to performing their 'requirement-related' tasks, production workers come to influence processes and product ranges, they are not merely involved in decision-making, or 'co-determining', but '*co-organizing*'. The traditional, highly regulated work environment involving an extreme specialization of tasks has made it difficult to tie employees to their company in the long term, thus losing their qualification and innovative potential. It follows that, if corporate qualification potential is really to be utilized for innovative developments, then this cannot be achieved by creating mere *cosmetic adjuncts* to the technocratic style of management with the help of superficial motivation techniques or behaviour training for managers. While some initial successes may well be achieved in this way, the limitations of the requirement-oriented paradigm of planning remain untouched and will not be long in making themselves felt.

While the fact that the regulation of task performance is now closer to the actual job has a certain number of implications for middle management, it is the involvement of the production level in development and organization that is more severely affected by such changes [99]. The debate on whether to create less rigid command structures or on approaches such as 'lean production' [100] reflects only part of the problem [101]. Once management abandons its naively technocratic orientation towards 'requirements', this will be a source of much conflict. In order to exploit dormant or quasi-dormant qualitative business potential, action needs to be taken at all levels with regard to both managers and structures. This will not only allow such qualitative potential to become effective in a bottom-up process across hierarchical levels, but it will also make possible a reversal of the prevailing logic of planning. Furthermore, it will be possible to derive feasible and functional organizational forms, production methods and markets from the human resource potential available.

The issues we have discussed suggest that, if business planning becomes more orientated towards qualification potential, then this does not only have far-reaching implications for strategic control. In addition, the new approach needs to be integrated into a model of organizational development, the framework of which we did no more than sketch in this paper. Creating a linkage between corporate, organizational and human resource development will place new demands on both economists and practitioners. The aim is to create a mode of management that, rather than seeking to optimize static conditions, is able to handle dynamic change.

## Notes

- 1 This is a broader notion of paradigm than that used in Kuhn (1963). Kuhn focuses on constructs of ideas guiding *scientists* in their activities, whereas our concern is not only with the development of business administration theory, but also with corporate practice, for which we demand 'paradigmatic change'. See also Dosi (1982) p.152.
- 2 For a critical discussion of market-oriented approaches to management, see Lender (1991) *et seq.*



- 3 See, for example: RKW (1990) p.25; Ketteringham and White (1984) p.518 *et seq.*
- 4 See Drumm (1982) p.51; Olesch (1988) p.234.
- 5 Employers' organizations keep making calls for *requirement-specific* advanced training; see Zwischenbericht (1989) p.83.
- 6 See, for example Berthel (1989) p.112; Flohr and Niederfeichtner (1982) p.19 *et seq.*; Gatewood and Gatewood (1990) p.54.
- 7 Brandes (1980) speaks of "habitual dispositions" as being part of the psychological regulation of action; see also Hacker (1986), Volpert (1983).
- 8 In a fairly wide sense, including e.g. on-the-job learning and job layout.
- 9 See Heid (1979) p.400 *et seq.*
- 10 Drumm (1989) p.224 goes so far as to demand identical categories.
- 11 It is a moot point whether this correspondence of categories is also required for the higher levels, or whether correspondence at the level of the actual learning processes is sufficient, since the comparison between teaching and learning goals on the one hand, and performance on the other, can only be operationalized at this level, anyway.
- 12 See Flohr and Niederfeichtner (1982) p.22.
- 13 See Bundesminister (1990) p.36.
- 14 Schlussbericht (1990) p.90.
- 15 Here and in what follows, see Becker (1991); Becker (1992) p.1923 *et seq.*
- 16 Becker's (1991) criticism is directed against methods of determining qualification potential, but his criticism is equally valid for the determination of existing qualifications as a subset of qualification potentials.
- 17 Berthel (1989) p.112.
- 18 See, for example, the approach utilized by Hacker (1986), following Miller, Gallanter and Pribram (1960), and other authors belonging to this school of thought, e.g. Volpert.
- 19 For a discussion of the problems involved in systematizing, operationalizing and providing a psychological basis for 'key qualifications', see Zabeck (1989) and Reetz (1990).
- 20 See Spur (1989) p.9; Staudt (1989) p.379.
- 21 See Drumm (1982) pp.52, 55 *et seq.*; Drumm (1989) p.224.
- 22 See Schepanski (1986) p.115 *et seq.*
- 23 In the context of human resource recruitment, assessment and promotion, the "assessment centre is an attempt to simulate future work situations as accurately as possible", Kitzmann and Zimmer (1982) p.87.
- 24 See Drumm (1982) p.56.
- 25 For a more complete discussion of this aspect, we refer the reader to subsection 3.2.1.
- 26 See Malcher (1990) p.30.
- 27 To compensate for or counteract such problems, group work, as found in semi-autonomous flexible production systems (*cf.* approaches such as 'lean production'), is substituted for the detailed preparation of work processes.
- 28 See Staudt (1989) p.380 *et seq.*
- 29 Meiser *et al.* (1991) p.89.
- 30 See, for example, Staudt (1984), p.404.
- 31 Meiser *et al.* (1991) p.89.
- 32 See, for example, Hoff (1983).
- 33 See Kitzmann and Zimmer (1982) p.30 *et seq.*
- 34 See Hoff (1983) p.307.

- 35 An attempt made by for example, the 'Leitfaden zur qualitativen Personalplanung, bei technisch-organisatorischen Innovationen' ('Introduction to qualitative human resource planning for technological and organizational innovations'), see Sonntag (1991).
- 36 Thielenhaus (1981); Riekhof (1986); and others.
- 37 Ridder (1988); and others.
- 38 Thom (1990) p.183; Gaugler (1989a) p.36.
- 39 See Hölterhoff (1989) p.29.
- 40 For a critical discussion of this, see Malik (1989).
- 41 Such as fluctuation or tension between the various hierarchical levels; see Domsch and Haugrund (1989) pp.17 *et seq.*, 20 *et seq.*, 22 *et seq.*
- 42 See Domsch and Haugrund (1989) p.20.
- 43 "[...] because flexibility is an economic good and hence causes costs. Within the framework of constructivist theories, such costs appear as rationalisation potentials, not as resources. Thus, in proportion as one approaches the goal of optimal utilization, flexibility decreases." (Malik, 1989). Staudt 1978 demonstrates how elastic technologies such as micro-electronics, as a result of economic calculations, supersede systems in which labour created elasticity.
- 44 See Flohr and Niederfeichtner (1983) p.30.
- 45 See Porras (1987) p.42.
- 46 For the significance of dismissal protection for human resource policy, see Büchtemann (1990).
- 47 The DFG's Senate commission for research into vocational training regards this fact as a justification of calls for greater research policy efforts see DFG (1990) p.3.
- 48 Ackermann (1989) p.133.
- 49 See, for example, RKW (1990) p.299 *et seq.*
- 50 Studies relating to a pilot scheme on the use of microcomputer technology in training skilled labour suggested using an 'elastic modular system' of training relevant to 'various fields of application in the area of micro-electronics' (Staudt and Schepanski, 1983b, p.315); for different views on subjects like modularity and manageability, see DFG (1990) p.64.
- 51 See, for example, Ackermann (1989) p.134.
- 52 For an impulse chain proceeding from *technological* potential to requirements, see Pfeiffer (1971) p.99 *et seq.* For Butler, human resource management serves "to develop managerial action profiles capable of exploiting market opportunities" (Butler, 1988, p.96).
- 53 See Dyer (1985) p.15.
- 54 For a discussion of the involvement of employees in the goal-setting process, see Staudt (1979) p.138 *et seq.*, especially p.141.
- 55 For a marketing approach proceeding from technological potential to marketable technical applications (products), see Lender (1991) especially p.50 *et seq.*, p.262 *et seq.*
- 56 See Kröll (1989) p.506 *et seq.*, who, using the example of didactic planning, interprets planning as an evolutionary process of adjustment.
- 57 See Pfeiffer (1971) p.52. *et seq.*, especially p.54.
- 58 'Simultaneous planning' in the sense of Staehle (1991) p.6 *et seq.*; for simultaneous organizational and human resource planning see Mag (1991), p.15 *et seq.*
- 59 See, for example: Domsch (1970); Ridder (1988) p.122; and many others.
- 60 See Staudt (1974) pp.51, 62 *et seq.*
- 61 For a discussion of goal-finding and goal-relativization, see Staudt (1979) p.86 *et seq.*
- 62 For a discussion of such personnel-related impediments to innovation, see Staudt (1983) p.84 *et seq.* According to Gaugler, a labour market squeeze turns human resource planning into a "minimum sector, constraining more or less severely the scope for organization in the other planning sectors" (Gaugler, 1989b, p.1361).

- 63 See also Mag (1991) pp.15, 20.
- 64 Here and in what follows, see Baethge and Oberbeck (1986) p.29.
- 65 This was one of the reasons why the organization of VDU-based office work evolved along Tayloristic lines.
- 66 Here and in what follows, see Staudt and Schepanski (1983a) p.179 *et seq.*
- 67 See Kröll and Jockers (1992).
- 68 For Mag (1991) "large-scale qualification overshoot results in the restructuring of tasks" (p.24).
- 69 See Becker (1991) p.65.
- 70 See, for example, Greifenstein *et al.* (1989) p.153 *et seq.*
- 71 Rosner (1991) terms this "exclusive production knowledge" (p.40).
- 72 See Greifenstein *et al.* (1989) pp.150, 155; and Staudt and Hinderwäller (1982) p.1029.
- 73 See Womack *et al.* (1990), and Clark and Fujimoto (1991).
- 74 According to Thom (1987) p.351, only a very small number of firms *consciously* exploit the potential for suggestion schemes in human resource development.
- 75 See Staudt (1985) p.757. Such "corrective participation", as it is termed by Greifenstein *et al.* (1990) p.607 *et seq.*, following Laville (1990) p.141, in quality circles is "readily compatible with Taylorism or Fordism. Stated tersely, quality circles assist in day-to-day troubleshooting under such systems" (Greifenstein, *et al.* (1990) p.608).
- 76 See Domsch and Reinecke (1982) p.73.
- 77 It is debatable whether this term is still appropriate given our extension of traditional planning patterns.
- 78 In what follows, we shall take up some of the suggestions made in the relevant literature, suggestions that may contribute to reducing the complexity of procedures which cannot be planned centrally. We shall put such ideas into a new perspective. In a few isolated cases, they have already been partly translated into action (especially in a number of large firms), but sometimes they have merely been announced as programs.
- 79 See Staudt (1989) p.380; Jürgens (1990), p.35; Wunderer (1989) p.246 speaks of "self-controlling", Staudt (1986) of "self-determination" in the context of growing technological elasticity potentials (p.428 *et seq.*).
- 80 We are by no means advocating the dissolution of corporate structures; quite the contrary: "Organisation is decisive in coping with very rapidly rising complexity." (Malik, 1989, p.77).
- 81 The principle of "self-regulation" for tasks that cannot be centrally regulated does not mean abandoning strategic orientation; this is why we repeatedly refer to the role of managers, centralized human resource development and training departments in Section 4.2.
- 82 See also Staudt (1993).
- 83 See, for example, Schlussbericht (1990) p.19.
- 84 See Famulla (1990) p.71.
- 85 As a demand in the context of corporate policy on quality, see Staudt and Hinderwäller (1982) p.1029.
- 86 See Gerhard (1989) p.34.
- 87 See, for example, the accounts given by Gentz (1989) p.945, and Andresen (1990) p.23.
- 88 See the account given by Staudt and Rehbein (1988) esp. p.99 *et seq.*
- 89 Neuberger (1990) p.7.
- 90 See Wächter (1990) p.57; Flohr and Niederfeichtner (1982) p.15; Carnevale (1990) p.278.
- 91 See Haase (1988) p.18 *et seq.*; Meyer-Dohm (1992) p.1450.
- 92 For these terms, see Conrad (1983).

- 93 See Haase (1988) p.18; Posth (1990) p.15; Marsick and Watkins (1990) pp.156 *et seq.*, 203 *et seq.*
- 94 On this 'transfer approach' and 'snowball effect', see Staudt (1989) p.386.
- 95 See Mentzel (1985) p.177; Weiss (1990) p.161; also the discussion in the reports by Institut der deutschen Wirtschaft and Soziologisches Forschungsinstitut Göttingen in Bundesminster (1990) pp.139 *et seq.*, 418 *et seq.*
- 96 "Modern technology in particular is increasingly characterized by the fact that its development is not finished until it is applied and utilized." (Herz *et al.*, 1990, p.12)
- 97 See Haase (1988) p.19; Hölterhoff and Becker (1986) p.121 *et seq.*
- 98 One feasible and promising form of skill enhancement is via *HR development consultants* (see Hölterhoff and Becker, 1989, p.30 *et seq.*) or HR coordinators (see Hölterhoff and Becker, 1986, p.120 *et seq.*) in individual departments and plants, as practised by a number of large firms. The term "Prozessberater Bildung und Organisationsentwicklung" (process consultant for training and organizational development) as used by Hölterhoff (1989) p.30 indicates the integrative view taken of this function; it need not take up all of an employee's time. To facilitate an easy flow of information and an adequate awareness of problems, a combination of the HR coordinator's tasks with central HR development tasks or the tasks of individual departments is a good solution.
- 99 If a company fails to create a new awareness of power and conflictual behaviour, systematic potential promotion will create more problems than it solves. With regard to the consequences of potential promotion that are now emerging (Good, 1991, p.67), Good adds: "Some managers tend to constrain the activities of their subordinates and are hesitant about changing structures or responsibilities." (Good, 1991 p.70)
- 100 For a discussion of the transfer of tasks and responsibilities to the shop floor in the 'lean factory', see Womack *et al.* (1990).
- 101 For Greifenstein *et al.* (1989) p.158, middle management is a barrier to innovation, since, they argue, direct participation reveals the innovative strength possessed by middle managers themselves.

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