
20th EGOS Colloquium, July 1-3, 2004 in Ljubljana, Slovenia
Sub Theme 8: The Individualization of the Employment Relationships

THE INDIVIDUALISATION OF THE EMPLOYMENT RELATION ON-LINE:
THE BENEFITS AND LIMITATIONS OF INFORMATION TECHNOLOGIES

Tanya Bondarouk and Maarten van Riemsdijk
Twente University, P.O. box 217, 7500 AE, Enschede, The Netherlands
{t.bondarouk; m.j.vanriemsdijk}@utwente.nl

One of the latest tendencies in the organisational change theory and practice is implementing e- ideas: e-business, e-commerce, e-library, e-learning, and since not long ago – e-HRM. Software engineers design information technologies (IT) to support HR processes, marketing specialists insist that those ITs provide a wonderful opportunity for the individualisation of the employment relationship, suppliers sell them to companies, management starts to believe that technology will liberate HRM by delegating much of the administrative work to the line and to the employees. Finally, the project teams are busy with piloting and converting the data. And at the end there are individual employees, line managers and HR professionals who will use such information technologies and hope that it provides them with technical support for, for example, choices their career development paths, participating in on-line forums, dividing and administrating their office-private time, or even working at distance. In this paper we explore practices of a digitally-supported individualisation of the employment relation in a large industrial company.

1 INTRODUCTION

In the literature, there is a large terminological ‘game’ that tries to catch interrelations between IT and HRM. Very popular terms are e-HR and e-HRM, virtual HR(M), HR intranet, web-based HR, computer-based human resource management systems (CHRIS), and HR portals.

In this discussion we are excluding HR information systems (HRIS), which have been discussed extensively (e.g. DeSanctis, 1986; Kavanagh et al., 1990; Cascio and Awad, 1981; Haines and Petit, 1997), since there is a fundamental difference between HRIS and e-HR in that basically HRIS are directed towards the HR department itself. Users of these systems are mainly HR staff. These types of systems aim to improve the processes within the HR departments itself, albeit in order to improve the service towards the business.

We talk about a technological help for the individualisation of the employment relation, when the target group is not the HR staff but people outside this department: the employees and management. HRM services are being offered through an intranet for use by employees.
We take a closer look at the digital individualisation of the employment relation in order to answer the question, what can information technologies and cannot do for that?

This paper elaborates on answering that question by looking at the following related issues: the 1/ goals of introducing IT in the HR field in companies, 2/ types of the individualisation the technology offers, 3/ outcomes and benefits for the individual employees and for the HR departments.

We will look for answers to these questions by reviewing the literature and by presenting one case study that was conducted at Dow Chemicals Benelux. The organisation has been chosen on the basis of its long experience on the digital road for the individualisation of the employment relation.

2 GOALS OF THE DIGITAL INDIVIDUALISATION

What goals drive stakeholders when deciding about technological advances for the individualisation of the employment relation? All the reasons mentioned so far in professionally-oriented sources (for example *Personnel Journal*, June 1995; *Information Systems Management*, autumn 2000; *Internetweek*, 12 March, 2001) are ‘confirmed’ in a scientific article entitled *Human Resource Management Review* by Lepak and Snell (1998). They refer to the four ‘pressures’. First of all, HRM departments are asked to focus on strategic questions. Secondly, these departments need to be flexible in terms of policymaking and practices. Thirdly, HRM departments should work efficiently and be aware of costs (“…a hard line on costs”). Fourthly, HRM departments should be service-oriented towards management and employees. In short, HRM departments must be strategy-focused, flexible, efficient, and client oriented; and all at the same time (Lepak and Snell, 1998).

Ruël et al (2002) highlight an aspect that is fairly well covered by the above but that is nevertheless interesting to spell out, namely the changing nature of the employment relation. With the supply shortage in the labor market (during the economic upturn of the 1990s), the individualisation of society, and the increased educational level of citizens (and thus of employees), the power balance in the employment relation has shifted in the direction of the employees: they want to steer their own career paths. In the view of Ruël et al. (2002), IT can provide the tools to support this development. This aspect fits into earlier-mentioned drivers such as improving service towards internal clients, but has an external societal drive.

Based upon the above, we can draw conclusions about the reasons or goals of organisations making steps towards digitalisation of the HRM processes. The four ‘pressures’ from Lepak and Snell (1998) were a good start, but we think that they can be reduced to three types of goals, namely:

1. Improving the strategic orientation of HRM
2. Cost reduction/efficiency gains
3. Client service improvement/facilitating management and employees.

This division of objectives is in line with the conclusion of the annual study on e-HRM in the United States conducted by the consultancy firm of Watson Wyatt. The results from their 2002 study show that companies that had invested in e-HRM, and there were many, were driven by the aim of improving the strategic role of HRM, reducing administrative HR work, and improving employees’ satisfaction with HRM services.

3 TYPES OF THE DIGITAL INDIVIDUALISATION

Wright and Dyer (2000) distinguish three areas of HRM where organisations can choose to ‘offer’ HR services face-to-face or through an electronic means: transactional HRM, traditional HRM, and transformational HRM. Lepak and Snell (1998) make a similar distinction, namely operational HRM, relational HRM and transformational HRM.
The first area, operational HRM, concerns the basic HR activities in the administrative area. One could think of salary administration (payroll), cafeteria systems, and personnel data administration. The second area, relational HRM, concerns more advanced HRM activities. The emphasis here is not on administering, but on HR tools that support basic business processes such as recruiting and the selection of new personnel, training, performance management and appraisal, and rewards. Transformational HRM, the third area concerns HRM activities with a strategic character. Here we are talking about activities regarding organisational change processes, strategic re-orientation, strategic competence management, and strategic knowledge management.

The areas mentioned could also be considered as types of HRM that can be observed in practice. In some organizations, the HRM emphasis is on administration and registration, in others on the application of operational HRM instruments, and in a third group the HRM stress is on its strategic role. Within all the types of HRM, choices can be made in terms of which HRM activities will be offered face-to-face, and which will be offered through web-based HR (e-enabled).

The operational type of HRM, provides the choice between asking employees to keep their own personal data up-to-date through an HR website or to have an administrative force in place to do this. For relational HRM there is the choice between supporting recruitment and selection through a web-based application or using a paper-based approach (through advertisements, paper-based application forms and letters etc.). Finally, in terms of transformational HRM, it is possible to create a change-ready workforce through an integrated set of web-based tools that enables the workforce to develop in line with the company’s strategic choices or to have paper-based materials.

In cases where an organisation consciously and in a focused way chooses to put in place web technology for HRM purposes, based upon the idea that management and employees should play an active role in carrying out HR work, we can speak of the individualisation of the employment relation by means of information technology. With this line of reasoning, three types of a digitally-supported individualisation of the employment relation can be distinguished: Operational, Relational, and Transformational.

4 OUTCOMES

We assume that the incorporation of IT into HR fields aims to achieve a certain set of outcomes. There is a danger of confusing these with the goals distinguished earlier but there is a clear difference. Besides those goals that can lead to anticipated outcomes, a number of so-called ‘overall’ organisational goals can be distinguished regarding an organisation’s ‘social capital’. All HRM activities will implicitly or explicitly be directed towards these ‘overall’ goals. Beer et al (1984) distinguish four possibilities: high commitment, high competence, cost effectiveness, and higher congruence. High commitment implies a high level of trust between management and workforce. High competence points towards the capacities of employees to learn new tasks and roles if the circumstances require it. For HR itself it means, in Ulrich’s framework, playing the employee champion role. Cost effectiveness refers to the competitiveness of pay levels and employee turnover rate, and to the acceptability of costs resulting from employee resistance such as strikes. As Ulrich (1997) states, HR itself has to be able to play the administrative expert role in order to contribute to an organization’s cost effectiveness. Finally, higher congruence refers to the internal organization, the reward system, and the ‘input, throughput, and output’ of personnel, which need to be structured in the interests of all stakeholders.

These outcomes, in turn, may change the state of HRM in an organisation, or through individuals and/or groups within an organisation actually result in a new HRM state.
4.1 Consequences of e-HRM for the HR department

The literature seems to clear: IT will not leave HR departments ‘untouched’. Less administrative tasks for the HR department and therefore less administrative positions, more focus on the strategic goals of the organisation and therefore an HRM staff consisting mainly of ‘thinkers’; this is, in essence, what HR departments can expect or are already facing and experiencing. Let us look more closely at some relevant sources.

Kavanagh et al (1990) actually gave a good ‘push’ when they wrote about the consequences of HR information systems for HRM professionals: “Today and in the future, however, the successful HR professional must be part HR generalist, part HR functional specialist, part consultant, part business manager, and must understand and be comfortable using information systems” (p. 325). More specifically, they state that HR departments will be more involved in strategic planning processes if they are able to provide adequate, accurate and fast information through the use of information technology. A change for HR departments, related to this, is that with an appropriate use of information technology they can improve their client focus. “…The HR group will focus on providing services to employees, line managers, and senior management, often by serving as an internal consultant. This will better enable the HR function to truly support the business” (p. 323).

Other authors (for example Rampton et al., 1997; LeTart, 1997; Walker and Regan, 1997) also think that by the use of IT for HRM purposes there will be more time left for strategic decision-making. Fewer administrative tasks and a decrease in HR related questions from employees and line management, for example about training and development opportunities, will create this available time.

5 RESEARCH METHOD

We have conducted a case study at Dow Chemicals Benelux. It is not necessary to fully elaborate here on the case study method as such since there are a number of good overviews available (e.g. Yin, 1994; Lee, 1999; Hutjes and Van Buuren, 1992). Rather, this section just develops our specific application of the method.

With about 50 000 employees and annual global sales of around 28 billion dollars (annual report 2001), the Dow Chemical Company is one of the largest chemical companies in the world. This US-based company (Midland, Michigan) is now active in 33 countries around the globe. In 2001, Dow completed an important milestone, namely the merger with Union Carbide, which strengthens Dow’s position as a global chemical company.

Dow was until recently a country-oriented company, with fairly autonomous sites around the world only loosely coupled with Dow sites in other countries. During the mid-1990s this changed, and Dow aimed to become a global company in which the globally dispersed sites would be turned more into business-oriented units. Dow’s current organizational structure is flat (a maximum of six layers) and based upon worldwide-organized businesses. This provides employees with a high level of independence and accountability, and employees work in self-managing teams, process operators as well as managers.

5.1 The research site: Dow Benelux B.V.

Dow Benelux is a part of the global Dow Company, and has ten production locations and three office locations. Dow’s largest production site outside of the United States is located in Terneuzen (the Netherlands). This site consists of 41 units, of which 26 are factories. Dow’s European accounting unit and its Research and Development unit are also located in Terneuzen. The total number of employees at Dow Benelux is about 2800, with about 600 in Belgium and 2200 in the Netherlands.
(with 2100 in Terneuzen). The average period that the employees have been working at Dow Benelux is 16 years, and their average age is 42.

Dow Benelux produces more than 800 different products, most of which are semi-manufactured goods for application in all kinds of products used in aspects of our daily lives. Examples of markets where Dow is a major ‘player’ are: furniture and furnishings (carpets, furniture materials), maintenance of buildings (paint, coatings, cleaning materials, isolation), personal care (soap, creams, lotions, packing materials), and health and medicine (gloves for surgeons, diapers, sport articles). In 2001, Dow Benelux’s net profit amounted to 26 million Euro, a stunning drop from 2000 when the net profit was 233 million Euro.

Before the 1990s, Dow Chemicals was mainly a “blue collar/manual work” organisation. During the first half of the 1990’s, they suffered hard times and the company made financial losses. Global competition was increasing and technological developments were speeding up. Dow’s management concluded that if the company wanted to survive it had to become more flexible, more responsive, and permanently alert. Therefore a new strategic plan was developed: the Strategic Blueprint. The organisational structure was reduced from ten layers to a maximum of six between the shop floor and the CEO, a model chosen to bring responsibility and accountability as close as possible to the shop floor.

This need for change led to the development of a new global HR strategy that broke with the tradition of job security and switched to career security. Since the mid-1990s, Dow no longer guarantees a lifelong job, but instead the company offers a career that can develop at Dow, but also elsewhere.

5.2 Research techniques

The data was collected through semi-structured interviews and document analysis.

To enrich the three aspects of our research (goals, types and outcomes) we looked specifically at the following issues at Dow:
- goals of the introduced IT
- services and functionalities of the system for the individualisation
- implementation aspects
- early adoption by the individual employees
- late adoption
- outcomes.

During the interviews we asked respondents to talk about these aspects of the digital individualisation of the employment relation from their point of view. We interviewed 16 employees, their average time working for Dow was 24.5 years:
- 6 members of the Works Council (3 of them worked in the chemical shift, 2 – in the support department, and 1 – in the R&D department),
- 5 team coaches (responsible for training coordinating and people management in shifts),
- 5 HR professionals (2 of them responsible for the compensation and rewards, 1 - e-recruitment, 1 – PSS project management, and the head of the HR department).

We studied documents relevant for the research topics: the brochure for employees new to Dow ‘Enabling People Success at Dow’, the PSS Facilitator Guide, and the project plan.

The complete version of the case analysis was discussed during the feedback workshop with all the participants.

The following sections describe our findings.
FINDINGS: PSS AT DOW

Dow’s HR strategy, the so-called People Strategy, is rooted in the company’s overall strategy, the Strategic Blueprint. This People Strategy should ultimately provide the strategic leadership that is necessary to allow all Dow employees to use their ‘full potential’. Besides this, the People Strategy has to make employees realize that they are responsible for their own development in order to support the company in advancing to the next performance stage. Dow, in response, practices a ‘pay-for-performance’ philosophy, expresses the sentiment that it wants employees to stay for a long period of time, and offer employees the possibility to develop themselves and advance their careers.

6.1 The goals of the People Success System at Dow

In 1997, Dow started to introduce the People Success System (PSS): “a system of Human Resource reference materials and tools that help provide the underpinnings of Dow’s new culture”. Before the introduction of PSS (which is technically based upon PeopleSoft), Dow already had a number of electronic HR systems in use. PSS’s difference was that it was based upon the idea of having one database, and more importantly, with PSS, a completely new HR philosophy was introduced.

Coming up with a new HR strategy was part of the initiative to improve Dow’s performance after a period of tough years with annual losses of 1 billion US dollars. The new HR strategy was part of the new so-called Strategic Blueprint, which was introduced in 1993 as a ‘roadmap for the company’s transformation’. This Strategic Blueprint set out four critical and interrelated themes: productivity, culture, value growth, and competitive standards. Dow wanted to become a real global company, instead of an internationally dispersed one. In order to achieve this, internal policies, including HRM, had to be unified. The use of state-of-the-art information technology to support a new HR policy was seen as the obvious choice! Therefore, the way forward to the implementation of web-based HR, i.e. e-HRM, was open and the new HR system was called the People Success System (PSS). Alongside the implementation of the PSS, a newly-implemented global Employee Information Database was installed. The PSS had to become accessible through Dow’s Intranet to every employee, wherever on the globe they were based, using one of the 26 000 workstations that were to be installed.

With the PSS, Dow’s management aimed to provide an integrated Human Resources system that supported Dow’s strategy and enabled the culture that is necessary for individual and business success to flourish. Further, Dow’s management aimed to support a global business organisation, empower employees, support a de-layered organization and self-directed teams, and create a change-ready workforce.

The philosophy behind the PSS was based upon the premise that people are the source of Dow’s success. Dow expected the following benefits from the PSS: the system would support Dow’s strategies and goals, the system would be global, the system would provide Dow employees with greater control over their own professional destinies, and the system would bring alignment between the Dow’s HR components.

The goals of the People Success System as communicated towards the organisation were:

- Firstly, the PSS would provide an integrated Human Resources system that supports the strategy of the company and enables the culture required for individual and business success to flourish.

- Secondly, the PSS will support a global business organisation of empowered employees who know what to do, know how to do it, and who want to do it: a de-layered organisation with ‘broad spans of control’, self-directed teams, and that has created a workforce ready for change.

Among the organisation’s members, especially junior management and non-management employees, the perception of the reasons for implementing the PSS are sometimes less clear and more diverse, but generally they are in line with the formal justifications. Reasons mentioned include facilitating team
leaders to pick up HR activities, giving the main responsibilities for career development to employees, decreasing the number of organizational layers, having one system instead of various databases, to work with competencies instead of skills, switching HR issues from the central HR department to the line managers, the centralization and standardization of HR, and the aim of cutting budgets. In particular the aspects of cutting budgets and improving efficiency are less explicitly mentioned in the formal organizational ‘channels’, although they are heard from some of the organization’s members. All the above was succinctly put together in a statement by one of the interviewees:

“The main reason was to make Dow healthy, to work with less people, but more productively, in a new way. Dow’s management said that they wanted to give more freedom to employees, to empower them”.

Besides the prior goals, however, it is also clear that a global intranet-based system offered the opportunity to introduce a new way for the individualisation of the employment relation at Dow. Dow’s top management perceived this as advantageous for the company as the whole. It implied opportunities to serve employees better, especially in giving them more responsibility to develop themselves: up-to-date information, relevant electronic links, and relevant instruments for electronic performance assessment. It is also clear that the PSS created opportunities to standardize and centralize HR processes, and to make HR processes more efficient, for example by electronic database management, online recruitment, online training, and online assessment tools.

6.2 People Success System services

It is a system of ‘Human Resource reference materials and tools that help provide the underpinnings of Dow’s new culture’. The electronic tool is seen as a necessary enabler. The PSS consists of four components, visualized as four pieces of a puzzle: one in the center, and the other three around it. The middle piece, the heart of the ‘People Success puzzle’, is Performance Expectations and seen as the central component of the entire system. It describes the required contributions from both the employees and the company for success. The other pieces are compensation, development, and opportunities. Table 5.1 provides information about the main specifications of various components in the PSS.

Dow’s web-based People Success System was launched in 1997. Within 15 weeks, all Dow employees worldwide had received one day’s worth of training. Using a navigator, employees could find plenty of information about Dow’s HR philosophy as described earlier, which was in itself very relevant since this was completely new and different from Dow’s earlier HR approach. Thus, initially, the PSS was mainly an information provider. However, from the first moment on, new tools were regularly implemented. With the implementation of these tools, the PSS has become more interactive, and provided HR instruments to employees and line management.

Table 5.1 Content of the PSS at Dow Chemicals

<table>
<thead>
<tr>
<th>Main components of PSS</th>
<th>The intention of the component</th>
<th>PSS services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance expectations</td>
<td>It helps employees understand what is expected from them in their job, what knowledge, skills and behavior are required, and how their work will be evaluated.</td>
<td>Job Families, Competencies, Development Stages, Competency matrices, Competency profiles, Managing Performance</td>
</tr>
<tr>
<td>Compensation</td>
<td>It provides the resources, processes and tools to reward and recognize employees based upon their performance and contributions to Dow’s success.</td>
<td>Compensation</td>
</tr>
</tbody>
</table>
A major feature of the implementation was that there would be a complete rollout of the PPS in one go. Before its introduction, a six week promotional show was organized at Dow’s communication center to inform employees. After this, the system was technically installed. Employees attended a one-day training session about the system. Although most of the people were ‘open-minded’ about the new system, the one-day training was felt to be inappropriate by some groups of employees. For example, the idea that employees were expected to become responsible for their own development was not very clear.

- Groups of employees felt they were left on their own to study the system.
- Furthermore, major parts of the text in the new system were in English which for a number of groups of employees was problematic since they lacked the skills necessary to understand the English text. This was problematic since, from the beginning, the PSS contained important and relevant information (especially regarding the new compensation system) and therefore it was important that all employees were able to work with it.

The PSS is an intranet-based system. Therefore, PC availability is a key issue in achieving a successful implementation.

- At Dow, a shortage of PCs did ‘disturb’ the project since, at the time of implementation, there were only 3 - 4 PCs available for every 40 - 50 employees.
- Moreover, in a company like Dow where the largest group of employees works on the shop floor, a lack of PC skills can be problematic.

The workers council had a major concern with the fact that, in the plant, there were only a few employees who were happy to work with PCs and also about the problem of PC availability.

- In order to explore the PSS, employees needed time to do so. This was, and still is, a major issue. The council’s point of view is that if the management wants employees to use the PSS then PCs, and time to use them, should be made available.
The support group (Dow’s supporting staff from R&D, HR, Finance, etc.) had fewer problems during and shortly after the implementation of PSS since this group was already used to working with PCs.

In order to support the introduction and the use of the People Success System in 1997, Dow’s top management set up global teams of networkers, the so-called coaches. This coaching network was meant to be a network force that would help to apply HR policies. All the coaches have special certificates in team building and, in fact, have become the social facilitators of the People Success System. The coaches are trained in the use of the PSS and in teaching its use to others.

An issue that emerged early on was that only the plants had coaches, the supporting groups did not: later all departments got coaching.

The role of the coaches became crucial in clarifying the characteristics of the system. Coaches found at the beginning that it was quite difficult for employees (mainly in the plant) to get used to the system, to know what was available, which tools were optimal, and the background for specific tasks.

In 2001-2002, the coaches prepared a handout of about 50 pages dedicated to ‘unlocking the system’. It was meant to make the use of the PSS easier and to provide some keys for the employees.

The PSS initially contained mostly information, much about all the aspects of the HR policy and the philosophy behind it. Especially the information about the new compensation system attracted a lot of attention. The system provided information about the salaries of all the job families at all levels, and in all countries where Dow has a site. For example, employees could (and did) compare their salaries with those doing the same job in other countries. Also information about the salaries of the most senior employees at the company attracted much attention.

6.4 Early adoption of PSS by individual employees

This section describes the way people at Dow appropriate the People Success System, that is how people incorporate the HR philosophy through the web-based tools and resources available into their day-to-day lives.

The first reaction to the People Success System from people working in the plants was one of hesitance, and the supporting staff were also hesitant but in a more open way. The difference can be attributed to three aspects. Firstly, the differences in PC experience: the people working in the plants were generally less used to working with a PC, especially the elderly workers. Secondly, there was a lack of available PCs in the plants. Thirdly, the dominant language in the People Success System was English, and the plant workers were, on average, less skilled in English.

Overall, people at Dow appreciated the fact that, with the PSS, information became available that was not previously accessible. The global compensation system especially received a lot of hits at the beginning, because it provided information about salaries at all job levels at all Dow sites around the world. People could compare between countries and between job levels. This contributed to the open culture that had been announced as part of the HR changes at Dow.

Interestingly, due to the introduction of a whole new HR philosophy, there was so much information available that it discouraged people from exploring the system. It could create a feeling of getting lost, not knowing how to find the way.

With the implementation of the web-based version of the People Success System, most of the information available concerned compensation. The new HRM policy included a new global compensation system, based upon the idea that compensation had to be comparable among all Dow sites.

Initially, employees had a lot of questions about the system, but after some time these tailed off. Coaches organized meetings to explain the system to employees, especially for those in the plants. Employees were stimulated to use the system, and to investigate the system. The impression is given...
that the problems people experienced with the implementation of the system were not exceptional in comparison to other changes. The large resistance to using the PSS was similar to resistance experienced during other change processes.

As the system became more sophisticated, the enthusiasm for using the system itself increased. Quite soon after the implementation, in 1997, Dow’s Job Announcement System (JAS) became available. Until then, the people at Dow had been reluctant to believe that this system would really create the transparent and flexible internal labor market promised. At Dow, the traditional way of filling vacancies was to contact friendly colleagues or line managers within the company. Some people expected to be blocked by their managers if they wanted to apply for a job elsewhere in the company. However, the JAS has been the greatest success story with the PSS, initially and still today. Line managers have to publish job vacancies on the JAS, and employees, right from the very start, have used the opportunities offered to apply internally for jobs. Some line managers were not pleased by the fact that their employees ‘walked out’, and complained to HR “Help, my people are walking out”. HR’s reply in such cases was “Then you have a problem” meaning that the line managers had to work on the way they managed their people.

6.5 Adoption of PSS three years later

It can be said that various groups ‘incorporated’ the People Success System differently. Supporting staff were ‘getting along’ with the PSS more easily than plant employees. The impression exists that many people still do not go deeply into the system. A lack of time is one of the explanations that people give. Others think that this is just an excuse for not accepting responsibility for one’s own development. The People Success System stresses learning and development, which is a difference to Dow’s ‘old’ situation. One half a day every two months can be an appropriate amount of time for using the system.

In 2001 most of the material on the PSS was translated into Dutch, so language should no longer be a motive for not using the tools and resources. However, the view exists that this did not lead to a change in attitude towards using the PSS.

Generally, departments seem to have two or three employees who are interested in searching using the internet. In particular, young people were the more enthusiastic users. Elderly workers in the beginning did not want to work with the system because of their lack of PC skills and because most of the information was in English. However, much information has now been translated, as remarked upon earlier. Tools such as feedback and learning tools are used by some employees, but others find these tools to vague and difficult (especially operators). A significant group of employees did not use the 360 degrees feedback tool because they were afraid that a negative outcome would be used by their managers as evidence of a negative performance. This is despite Dow’s management having announced that the result of the 360 degrees feedback tool is confidential: the employee decides what, if anything, to do with the result.

Although everybody has received all the information about the system, it could be that there are too many screens and steps to go through. It could be that operators, in particular, need more precise interfaces.

One interesting aspect is that the opinion exists that the PSS stresses very much the social issues (training, conflict management, language, and social skills) rather than the professional technical skills. As one person close to this topic said: “We simply rely on their (new employee) education; presuming that they have their technical and professional skills. In my view, many mistakes were made in the recruiting of new employees because of the issues in the system: too much attention is given to the social aspects and not to the normal professional skills”.
Currently, an issue at Dow is how to educate people coming straight from school in terms of the necessary basic technical skills. The company has started collaborating with professional technical education institutions in its neighborhood to provide qualified new employees.

Further, performance rating has been a major issue. From a team leader point of view, the PSS lacks a real performance evaluation tool, it provides a lot of extensive explanations about it, but a tool to evaluate technical professional skills is not included.

An overall view that exists is that, in general, it took Dow’s employees (line managers and employees in the plant) three years to get used to the People Success System. Those who do use it know what to do or they know who to ask. It is difficult to say what percentage of the workforce are users, and it is difficult to say how much time employees spend on the system. This differs by application and by department. If you are working in the plants, and have dirty hands, you are not likely to access a PC. In 2001, the People Strategy was implemented, and part of this strategy is that by the end of 2004 all employees must have a personal development plan. This means that they will have to use tools in the People Success System. People will be ‘forced’ to schedule time (in advance) to work with the system, in order to learn how to work at Dow, or for personal development. However, there are still departments where this was not taking place at the moment of our visits.

In conclusion, it can be said that the organization’s members, in the first stage of usage, worked with the PSS mainly as an operational e-HR tool. They used it a source of information. When more tools and resources were added in 1997 and 1998, especially when the JAS was added, usage switched, to some extent, towards relational e-HR, albeit with caution. Since then, we have concluded that the PSS usage has slightly moved towards transformational e-HR, given that young new employees use the competency assessment tool for new employees right from their start at Dow. They use the development tool to compile their development plan for the near future, are happy to be immediately exposed to the JAS, and are used to learn@dow.

6.6 Outcomes at Dow Benelux

Since the start of the People Success System, Dow has received quite a number of awards for the system as a whole, for part of the system, and for its HR. In considering the outcomes of the introduction of the PSS, some statistics from an internal report make interesting reading:

- The People Success System recorded 4.8 million hits in 2001 and 12.7 million hits in 2002.
- Through the use of Learn @ Dow.now, cost savings rose from 3.5 million US dollars in 1999 to 45 million US dollars in 2001. In 2002, 42 000 courses were completed through Learn @ Dow.
- In 2001, 5 000 Dow employees used the 360 degrees feedback tool, in 2002, 4 850 employees.
- The Job Announcement System (JAS) advertises jobs in 8 languages. Dow says that its placement statistics are consistently higher, by 10-15%, when benchmarked against other companies.
- In June 2002, the JAS celebrated its fifth birthday. Since 1997, 12 792 jobs have been posted on the JAS, and over 7 100 job opportunities filled.

These facts present an image that the PSS approach at Dow contributes to cost savings, supports internal labor mobility, and encourages the employees to accept responsibility for self-development.

Two remarks should be made. Firstly, there is a strong perception among the employees that Dow would not have been able to realize its restructuring without the system and that Dow has changed completely. It is, however, difficult to separate the success of the PSS and Dow’s ‘transformation’
since these were closely interrelated. Therefore it is difficult to identify the immediate effects and outcomes of using the PPS. Secondly, in our view, the success of the system use is highly interrelated with its impacts on the changes at Dow since it was introduced. Giving these two observations, we present the outcomes of the e-HRM at Dow as an ‘overall’ description.

6.6.1 Commitment

The new system has not in itself changed the commitment of employees at Dow. If commitment has improved, and this is difficult to prove, then it is not because of the system.

At the same time we have found an indirect connection: the transparency of the company has increased and its policies have become more open - the same information is available to the management and to the employees. The most impressive example is the openness of the compensation part of the PSS. Salaries of all positions are visible to everybody, anyone can see how much the leaders earn, and in all countries.

There is no direct and linear relationship between the commitment and trust – whether the relationship was strengthened due to the PSS is uncertain. However, our respondents were certain that the system had not destroyed it.

6.6.2 Competence

Overall, it can be said that the competencies of people at Dow have increased: 60-70% of the employees have developed their competencies by using the PSS. There are amusing anecdotes in the company about some employees who had to start to learn how to operate a PC because of the PSS implementation. Some older employees now proudly tell their grandchildren that they have learned to work with a PC…

With the new Strategic Blueprint and the new HR philosophy (competence-based) there can be more people than before on a senior level within a group of workers. There can now be more than one ‘first operator’ working on a shift, and an increase in the number of team members who can do specific tasks, and this makes job rotation possible.

Since the implementation of the PSS, employees can see how to change and develop, and this is very new to them. According to some views, the idea of career self-management is not yet fully working: employees need more time and this has to be granted by their team leader. Within Dow, a more revealing opinion can be heard about the opportunities the PSS gives. There is a commonly held view that there are many examples of individuals who have wanted to develop themselves at Dow, and who have been successful due to the PSS. With about 2000 operators, it cannot be expected that all of them will develop careers at Dow. Further, time and the availability of the privacy needed to work on a PC are always limited. However, those who are motivated will find a solution, and the system has given people the opportunity to develop their basic educational level (the level they entered Dow with). This is desirable because the plant has become more complex, and more highly educated people are necessary. However, there are still people who do not accept this responsibility.

The Job Announcement System (JAS) has contributed greatly to personal development. Being a user-friendly and well-designed tool, it provides the opportunity to plan a career within Dow. Some of the respondents found the JAS the best part of the PSS.

People learnt the English terminology used in the PSS very quickly, and did not need to wait until the information was translated. Also people’s PC skills improved. Furthermore, the extent of communication with non-Dutch managers, ‘outsiders’, has increased.

The learning component was also experienced as very new. Now, if you want to learn, you can. An impression gained is that the general opinion is that the e-learning tool is used in a different manner than it was intended. This could be due to the American style of the courses that sometimes seem to
teach obvious things. The e-learning tool in itself is a good idea, but the content is not always relevant to a person’s position and needs.

6.6.3 Congruence

Communication is now very fast and it is very simple to communicate with anybody. In the plant, however, there are still employees who never check their e-mail. However, one hears that direct contacts have been dramatically reduced.

Overall, in the plants there are still voices that say that there is too much information that employees have to go through, there are too less PCs, there is little time to work with the PSS, and some employees have difficulties with English (although at least the materials have now been translated).

The philosophy of the PSS, however, is sound and important: it empowers the company, but it is valid to ask whether you need an intranet/electronic tool to achieve this. Most of the information was already available before the PSS was introduced, and to find that the new system contains already familiar information can be disappointing.

HR specialists say that people are now more aware of what the company wants from them. People are trying to do something about their knowledge and skills. All the information needed about how to develop is on-line, so there is no need to physically go to the HR department.

Now that the performance evaluation criteria and processes are clear, and information about this can be found on the web, leaders cannot do whatever they want because the employees are better informed.

6.6.4 Cost effectiveness

In terms of cost effectiveness, it is difficult to determine whether the PSS has helped in reducing costs. However, one interesting detail is that, ten years ago, Dow employees used less paper than they do now. So, probably the PSS did not help to reduce paper usage.

The e-learning component Learn@dow has saved money. It reduced costs in terms of space, time and human resources. The number of courses that can be offered through the HR intranet is also far more than the number that could be offered class room-based.

Further, there remain people at Dow who believe that 30-50% of employees will never access the People Success System. They would not know what it is, where to find information, and why they should access it. Potentially it is still difficult for half the employees to use the system in accordance with its initial idea, for example, to search out and manage their own personal development.

6.6.5 Consequences for HR departments

With the presentation of the Strategic Blueprint, Dow’s HR department was restructured. The new structure is based upon three different roles that HR has to fulfill. There is now a HR business center, a strategic center and a resource center. The business center acts as the sparring partner to Dow’s strategic management, the strategic center develops new HR products that fit the business needs, and the resource center implements them.

Dow’s HR department in Terneuzen, in October 2002, was staffed by 6-7 specialists. The general HR manager is based in the US, and not in Terneuzen. According to 2001’s annual report, Dow’s complete human resource staff consists of only 20 people.

The impression exists that responsibilities were shifted from the HR department to the line managers: the HR department became a consultancy instead of a ‘police office’. The HR staff had to learn not to play a policing role but to become more of a consultant. This transition went smoothly and the number
of HR staff was reduced. For example, the number of compensation specialists at Terneuzen was reduced from 5-6 people to 2-3 people, despite an increase in the number of countries to be served.

The PSS was a tool to enable such a change, without it, it would never have happened. The system also helps to save time. Because of its global scope, things like pay-planning, which took a lot of time in the past, are now only is a matter of picking the right tool from the web. The HR function is now carrying out activities on another level; it is free from a lot of the administrative work.

While things may be different at the global level, with the strategic HR centre being in the USA; HR specialists, at the national level, feel that they are the same ‘type’ of advisor as in the past. It can be said, however, that coaches have taken over some of the HR tasks formerly carried out by HR staff. They help team leaders to apply the tools and information contained in the People Success System, and they help employees to use the tools and to look for information.

Another challenge for HR is to ensure that ICT supports the HRM function to ‘grow’ into a more strategic role, instead of fulfilling the older traditional, administrative and service-orientated roles. At the same time, some of our respondents (non-HR professionals) expressed the feeling of many employees that, with the introduction of the PSS, Dow had become more bureaucratic than ever before, with lots of standard procedures, paperwork, and applications. There was even an opinion, especially among the elderly workers, that people had become less important to the HR department.

Systems like the PSS at Dow can take over supportive tasks such as those concerning job announcements and selection processes, job evaluation, and employee development. HRM professionals will then be able to pay more attention to the development of the company’s HRM concept. In the PSS system, all the HR information is available and there is a ‘questions and answers’ section where employees can raise questions. Some forms can be completed on-line, while others cannot.

Interestingly, HR specialists have sometimes, especially regarding certain applications, experienced the new system as worse than the old ones (or a step backwards since HR already had a number of things in place).

7 ANSWERING THE RESEARCH QUESTIONS

Based upon the research questions we can draw conclusions regarding the following three topics we investigated at Dow: (1) IT goals in the companies regarding the individualization of the employment relationship, (2) types of the digital individualisation, and (3) outcomes.

7.1 Goals

First of all, the three types of goals identified in our research (efficiency/cost reduction; improving client service; improving HR’s strategic orientation) were all observed in the case study. What is striking, however, is that we observed that the goals were not clearly chosen, i.e. they were not placed in a hierarchical order or in a time sequence. Dow has introduced PSS with the combined aims of reducing costs (by reducing HR head counts by reducing the administrative burden), improving HR services to clients (employees, line management, and top management), and improving the strategic orientation of HR. The IT initiators assumed, through offering PSS to line management and employees through an intranet, that HR processes would become more efficient and that HR processes would be perceived as better serving the needs of line management and employees. Moreover, they assumed that all of this would leave the HRM department with more time and space for strategic issues, or to become a full business partner for the management. Interestingly, these various goals were emphasized selectively by the ‘implementers’, depending upon the target group (management, employees, or HR professionals) that had to be convinced.
What seems to be new is that, a main goal for PSS was the standardization and harmonization of HR policies and practices across all parts of the company. This was explained by the initiators in the companies as being necessary in order to strengthen the company’s image as a global entity, not just an internationally dispersed one.

7.2 Types of the digital individualisation

Secondly, we found that there is a ‘gap’ between a technical sense (the available functionality) and the real use made of web-based HRM tools by employees, line managements, and HR. That means that, technically, the individualisation of the employment relation can have the intention of having a transformational (highly advanced) nature, but in practice (real use of tools) it can be of an operational nature (basic personal data management and use as an information source).

7.3 Outcomes

Thirdly, during the period of our investigation, the overall realized outcomes of PSS were primarily a reduction of costs, mainly due to reducing the administrative burden; an improvement in client satisfaction with HR services; and an improvement in the perceived quality of communication within the organization. Changes, let alone improvements, in the competences and commitment of the workforce were very limited.

Although people in the companies did say that they wanted to reduce costs through IT in HRM, and some actually claimed to have realized a significant cost reduction, it was surprising to observe that in two of the companies included in our study that there were non-HR people involved in stimulating and supporting employees and line managers to use the web-based HR tools. The question emerges whether the saving on one side (decreased HR head counts) is being neutralized by increased costs on another (increased costs for supporting users by non-HR people).

7.4 Emerged conclusions

Alongside these main conclusions, we observed a number of additional aspects. Firstly, we saw that technical support became an important ‘push’: to put HR responsibility in the hands of the line manager. After 15 years of ‘preaching’, an administrative component of HR is becoming a task for the line management.

For the HR department, introducing PSS shows itself to be a ‘push-factor’ for changing HRM within an organization: from a bureaucratic approach towards a market/clan approach.

Turning to the employees, the introduction of IT in HRM brings changes in the way they experience HRM in their company and in the HR tools and instruments they get offered. They acquire the opportunity to get updated in terms of organizational dynamics, take part in online discussions, and choose their career path. However, not all employees are willing to accept full responsibility for their personal career development through the available web-based HR tools. Some require their managers to come up with career development initiatives.

Further, although PSS creates new opportunities for line management and employees, the organizational practice in using these opportunities can be limited because of a lack of time and the willingness to pick them up.

Guaranteeing the security and confidentiality of input data is an important issue for employees in order that they should feel ‘safe’ when using web-based HR tools. Information technology and the like have the image that they make it easy for one to be checked upon and observed by ‘invisible third parties’. When implementing online HRM tools and asking employees and line managers to input personal data, the question arises as to who is authorized to look at the data and to use them? If employees do
not feel comfortable about the confidentiality of certain types of data, they will be hesitant about inputting such data.

There is also a danger of information overkill through an HR intranet. Without a clear and easy structure, employees and line managers can be afraid of spending excessive time exploring web-based HR tools.

Our final observation is that employees and line managers’ mindsets need to be changed: they have to realize and accept the usefulness of web-based HR tools. They generally feel that they lack the time and space needed to work quietly and thoughtfully with web-based HR tools and so, if there is no real need, they will not do it.

8 REFERENCES


