UNDERSTANDING e-HR PROBLEMS
WITH THE HELP OF SURVEYS AND CASE STUDIES

MBA Thesis

Prepared By
A. Mıترا Dinibütün

Supervisor: Prof. Dr. Erol Eren

Istanbul, June 2001
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PREFACE

e-HR has emerged as a sustained trend and source of much innovation at both strategic and operational levels. The implementation of an e-HR strategy can have far-reaching benefits including improved service delivery, better productivity and cost savings.

However, e-HR -the application of conventional, web-technologies to improve HR administration, transactions and process performance- also has some pitfalls. Delays, technical hitches and budget over-runs are the common ones. In addition to these there are the mismatches between people, process and technology interfaces of e-HR. Some impacts are underestimated or mostly unseen – preparing the organization and its workforce, overcoming resistance and resolving new HR paradoxes are the three.

Considering its opportunities and issues, the aim of this study was to examine a different dimension of e-HR: to identify the impact, opportunities and difficulties of technology, on the key organization-wide HR processes especially on recruitment and selection, training and learning, productivity and performance, and on the facts as departmental costs and paper usage, employee communication and the usage of service delivery approaches.

This study provides the basic information of how e-HR can answer the improvement of the performance standards relating the functions of HR mentioned above. With a brief look to the past of HR business; case studies, reports, and considerable amount of research have been provided, and with the addition of interviews and surveys the results made it possible seeing the ways of having evolutionary impacts when shifting towards e-HR.

In Sections 1&2, an introduction of the study and a brief description of the previous works are given. In Section 3, the context for e-HR, examining both sides as the transforming role of HR and the expected developments, and the paradoxes these developments may raise, have been provided. In Section 4, e-HR is taken as part of the new strategic role of HR. The main advantages and the main impacts on recruitment and selection, training and learning, and productivity were found out. In Section 5, information of the service delivery parameters have been provided. How models are conceptualized and deployed, and how systems are evaluated in terms of effectiveness were found out. In Section 6, the new HR process thinking related to technology have been mentioned, and applications in resourcing and training have been described.

Istanbul, June 2001

A. Misra Dinibütün
SUMMARY

Human Resources Management has come to mean something very different for organizations. What was once a departmentalized, transaction-driven function is now being recognized as strategic part of an overall enterprise system. There is a transition of HR function from an administrative role to a strategic business partnership. And as players of a strategic role within an organization, HR professionals need the tools and resources to turn HR functions into more effective systems that could answer the speed of the job market where companies compete for "human talent". Finding out the talent needed and keeping the talent is an important process. Innovations on technology increase the expectations for finding (e-recruitment) and keeping (e-training and e-learning) the best talents faster then before.

Over the last two years, electronic HR, so called "e-HR", has become an irresistible force for change, or at least an enabler of HR transformation in some leading organizations. e-HR becomes an important issue on creating a strategic advantage through the optimization of the production factor "human resource" (human talent) while recruiting, managing and developing. It enables HR to double outputs with the same resources/budgets.

As a result, developments on technology are becoming critical to sourcing, retaining, developing and rewarding the "talent". Today, some companies are using technologies to deliberately build an "employer brand", pushing a strong self-image. Also, internet applications are becoming very useful for employees as these enable them to utilize their time most efficiently. Companies, on the other hand, will be able to support their employees with the most effective tools and technologies to do their job. HR is a business that has to think logically, execute fast, reduce costs and show good returns on investments. Technology answers these needs as it increases the information availability, and helps in increasing knowledge.

Developments of e-HR have different ranges and levels of internal effects on the organization. While some organizations have successful results, others may fail. Why?
Besides the benefits of technology it has some paradoxes, as well. Since, e-HR makes complex interfaces between people, processes and technology necessary, some dilemmas will increase in urgency and new ones are likely to emerge.

In fact, the Human Resource profession and practices have undergone substantial change and redefinition with the new technological era. This study mentions some critical points in order to see the developments and find out the most reasonable answers for improving the key performance indicators of HR on recruitment and selection, training and learning, and productivity while shaping a new strategy of e-HR. For this study a survey was developed for identifying the major points of drivers and expectations of e-HR, and finding out if conditions such as eliminating waste, cost reductions, speed, more efficient resourcing, greater productivity and value-added services are being achieved by the use of technology. To corroborate and compliment the information gathered from the survey, an extensive literature search was conducted. Also, case studies, experiences of companies were used as a guide in order to understand the different levels of facing e-HR as a new strategy.

The final results of the study confirmed that development of a successful e-HR strategy is not an easy process. The finding from case reports, experiences and surveys shows that are some main issues which are important in having successful results. The expectations behind e-HR vary immensely, depending among external or internal drivers, a function's ambitions, business circumstances, resources and, HR leadership. This makes it necessary to have rationally planned applications, and to rethink/redesign the HR functional impacts before any kind of a transformation to e-HR development. A planned e-HR strategy does enable improved business productivity and performance, and effective service delivery on all functions of HR. And last but not the least, it is necessary aligning HR strategy with "Corporate Strategy" of the organization in order to have effective results. A lot of work needs to be done and a lot of time needs to be invested but for being a strong strategic business partner in the future, HR cannot hide from the opportunities or challenges that technology is bringing.
ÖZET

İnsan Kaynakları yıllardır insanların becerilerini geliştirmesine destek olmakta ve bu konuda gittikçe artan beklentilere çözümler üretmektedir. Bu deneyimi ile, diğer iş dallarının arasında, paylaşımı sağlayan ve destekleyen bir ortam yaratma görevini de üstlenmektedir. Teknoloji, İnsan Kaynakları profesyonellerine mevcut gelişmeleri aktarmakta destek olmakla birlikte, aslında bireylerin ihtiyaçlarına cevap verebilecek bilgilerin belirlenmesi ve paylaşılmasında daha etkin bir rol üstlenme fırsatını sağlamaktadır.

Diğer taraftan, yükselen teknoloji düzeyi yeni iş alanlarına giriş fırsatları ortaya çıkartmaktadır. Bu durumda, insan kaynakları sistemine ve departmanına oldukça önemli görevler düşmektedir. Yeni ekonomide kökleşmeyi hedefleyen bir firma, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firma, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firma, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firma, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firma, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının dizaynını dinamikleştirmeyi hedefleyen bir firmanın, önce insan kaynaklarının 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Tüm bu olumlu faktörlere ulaşabilme için, çalışma neticesinde, elektronik insan kaynaklarına (e-HR) geçiş sürecinin emek ve vakit yatırımı gerektiren bir süreç olduğu kanısı ortaya çıkmıştır. Her şirketin beklentisi ve amacı farklı olduğuundan bir başkaşına uyan sistemlerin aynen uygulanması yarar sağlamamaktadır. Şirketlerin kendi amaçlarına uyan planlamalar yapmalarının ve mevcut süreçlerini gözden geçirerek işe başlamalarının başarılı sonuç elde etmelerinde önemli bir rol oynadığı tesbit edilmiştir. Bu konuda deneyimi olan firmalardan edinilen bilgiler de incelenerek, tüm çalışma neticesinde, şirket amaçlarına ve stratejilerine göre planlanmış uygulamaların başarılı olduğu görülmüştür. Teknolojik uygulamalar geçiş süreci her ne kadar zahmetli bir iş olsa da gelecekte güçlü konumda olan şirketler ile yararlanmak için bu sürecin aşılması gerektiği bir süreçtir. İnsan Kaynakları teknolojisinin sağladığı fırsatları fırsata vermelidir.
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CURRICULUM VITAE
ABBREVIATIONS

ASP : Application Service Provider
BSP : Business Solution Provider
B2B : Business-to-Business (Service Provider)
B2E : Business-to-Employee (Service Provider)
e- : Electronic
e-HR : Electronic Human Resources
ERP : Employee Relations Process
ESS : Employee Self-Service
HR : Human Resources
HRM : Human Resources Management
HRMS : Human Resources Management Systems
IT : Information Technology
SHRM : Society of Human Resources Management
1. INTRODUCTION

"Technology is creating great opportunities for HR, but also raised expectations from others in the organization. Critically, the function will have to understand how applications can be deployed most effectively, to what purpose, and the effects that will have on a new form of integrated service provision. It may require new components for HR professionals if they are to feel comfortable in using and applying technologies." (Marquardt M., George Washington University, 2000)

1.1 Aim of the Study

Over the last two years, e-HR has become an irresistible force for change, or at least an enabler of HR transformation in some leading organizations – formerly time-consuming transactions take minutes, self-service delivery models are deployed, great web tools are used by managers and employees, HR doubles outputs with the same resources/budgets and, more generally, e-working is embedding. In many cases, e-HR innovations boost the bottom line. Speed and agility have become key words for HR operations. Now the modern technology enables all, to use information constantly, quickly, in new combinations and permutations. The purpose of getting data “in” to a system is to get it “out” and to use it in order to support the next action. In this era, e-HR does this in improved ways and at a speed, which have changes the face of business (Marquardt, 2000).

Significantly, developments on technology are becoming critical to sourcing, retaining, developing and rewarding the talent an organization requires for success. Some companies are using technologies to deliberately build an employer brand, pushing a strong self-image and a promise of prospects for attracting, perhaps, the people on your payroll. Web and voice technology-enabled ‘talent management’ is, now, the defining strategic issue for HR.

e-HR has emerged as a sustained trend and source of much innovation at both strategic and operational levels. Considering its opportunities and issues, the major aim of this study was to identify the impact, opportunities and difficulties of technology, on the key organization-wide HR
processes especially on recruitment and selection, training and learning, productivity and performance, and on the facts as departmental costs and paper usage, employee communication and the usage of service delivery approaches.

In order to find out the key performance indicators of technology on recruitment and selection, training and learning, and productivity the selected hypothesis below were the main drivers to be proved:

1. The use of Internet is allowing companies to become more innovative in areas such as recruiting and optimization.
2. Web-based services will drive efficiencies and increase the quality of people hired with reduced costs.
3. e-HR enables improved productivity and performance, more effective service delivery and more engagement in strategic HR services, only if planned rationally - with defined needs.
4. Building an effective service model should be guided by a broad e-HR vision with complementary goals.
5. Without at least basic process expertise, the HR bar of performance improvement is unlikely to shift upwards.

With a brief look to the past and present of HR business, case studies, reports and considerable amount of research have been provided in order to see the evolutionary impacts of shifting towards e-HR. Interviews and surveys made for finding out the place of e-HR – the importance given to technology on HR functions, and how HR professionals can have effective results out of using technology.
1.2 Methods Used for the Study

Literature Search
Identications are made to have a clear idea about the purpose of the study. The research has been done to give some general guidance of Human Resources profession and find out how the profession changes with the new technological era. The research was made from out of the written sources and the attended conferences.

Changing Role of Human Resources
Activities and Roles of Human Resources
The meaning of e-HR
The benefits of using technology on HR
The paradoxes of technology
e-HR as part of the new Strategic Role of HR
Stages of e-HR

Other Research Methods Used
The research methods below were used in order to understand the levels of e-HR and the future expectations of developing electronic application models. Although all these methods were used within the study, case studies, reports of companies and questionnaires take the major importance in defining the results.

- Method: Survey Groups (of applied systems)
- Method: Internet-based Survey (from available applications)
- Method: Case Studies and Reports
- Method: Interview Design
- Method: Questioning (face to face)
- Method: Questionnaires
- Sample Design and Fieldwork
- Analyzing, Interpreting and Reporting Results
Survey Groups

A questionnaire was made with national and multinational companies who started or planning to start e-HR applications within their HR function. HR Departments and HR / IT project leaders of 16 companies -from Technology, FMCG, Consultancy, Training, Finance, Investment, Automotive sectors- contributed to the survey. Their names are not being mentioned in order to protect the internal information they have shared, for having effective results out from the study.

- **Dimensions of e-HR**
  - Strategic Dimensions
  - Business Dimensions

- The use of internet based applications
- The results of using on-line services
- The use of service delivery approaches
- The results of using service delivery approaches
- Web-based process rethinking

**Internet-based Surveys**

Survey made by the guidance of attended conferences and seminars, applied studies of companies and internet searches.

- How do internet based HR services work
- The terms and conditions for using internet services
- The best ways of using on-line services easier
- The purposes of service delivery companies
Case Studies and Reports

Case studies and case reports being used to provide a range of experience for the related issues, mentioned briefly above. These case studies and reports are very helpful in identifying a specific idea as they include key learnings and guidelines.

Within the study the case studies and reports of multinational companies are being used to give a global perspective; Ford Europe, Unisys Corporation, British Telecommunications, Honeywell, Nokia, Kraft Foods, BP, Oracle Corporation and IBM are some of these companies.

Applied Models and Sample Design

Applied e-HR models were searched. The models are conceptualized and deployed. These models are helpful in understanding the purposes and results of using technology. The research made by the help of companies attended to the surveys, also some example applications are given for clarifying the ideas behind the application processes. Examples of applied systems and design of application process are given, and “what can be done” is being discussed.
1.3 Limits of the Study

The central message of this study is that the potential of e-HR cannot be ignored since, in successful organizations, it connects directly to HR transformation, improved manager and workforce productivity, business effectiveness and, ultimately, sustained business success.

In order to identify the ideas behind this message, some of the strategic and business dimensions of e-HR is being discussed and supported by the surveys and case studies. The study aims to prove that the use of web-based technology on HR functions allowed companies to be more innovative on areas such as recruitment and optimization, driven the efficiencies and increased the quality of people hired, made able to reach the talent faster, cut the costs, improved productivity and performance where as service delivery models are being costly and may have too much time for application.

Dimensions of e-HR, the context for e-HR, how e-HR visions are articulated, the benefits and paradoxes are being described. The changes on HR process thinking, related to technology, generally is being identified. However, specifically the innovation and changes of recruitment and selection, training and learning, productivity and performance, the facts as departmental costs and paper usage, employee communication and the usage of service delivery approaches are being the subject of this study. As a result, the study is made to find out the main drivers of e-HR on recruitment - as more effective service delivery, cost control and savings, productivity and performance, improved internal knowledge sharing - communication.

A wider perspective could be given, or an additional study could made by identifying the changes of e-HR on, total rewards/benefits, career development, knowledge management, workforce planning, and relations with the third party could be mentioned. Since these subjects were not the purpose of the study, they were not detailed and totally included.
2. PREVIOUS WORKS ON E-HR

There are not much research works and studies in the literature of e-HR. In order to have the right perspectives about HR functions and its transformation through e-HR, 36 resources have been studied—given at the references section. Although, all these resources were helpful, some were in main importance as being the “guides” for the study (resources: 1, 7, 10, 16, 27, 30, 32, 33).

2.1 About the Selected Resources

Electronic HR (e-HR) has gotten a lot of attention from a wide range of companies especially over the year 2000. It has emerged as a sustained trend and source of much innovation at both strategic and operational levels. Today most companies mention that e-HR will be important for the future and they see it in their future, the majority of them view it as a means of gaining efficiency in HR functions hopefully reducing the costs for activities including benefits, payroll, retirement, and other areas.

e-HR represents a testing agenda for the HR function, considering the issues and experiences raised. The resources used as a guidance for the study were searched from the articles, reports and case studies written out of company experiences, and publications that gives the theory of new roles in HR. As the Human Resource profession and practices have undergone substantial change and redefinition with the new technological era, articles and publications were searched for guidance to find out the most reasonable answers for the key paradoxes in shaping this new strategy, and in order to see the new developments.

Although the resources were somehow limited—as this “e-HR” concept is a new trend—the articles and the case studies were very helpful in combining the theory with the practice. In addition to these, surveys were made with both some national and multinational companies in Turkey. Applied e-HR models were also searched using internet and by the guidance of companies which attended o the surveys. These models were helpful in understanding the purposes and results of using technology.
The researches, studies, and applied model samples were used within the study to support the idea that e-HR can answer the *performance standards* of companies’ HR functions.

### 2.2 Summary of the Related Previous Works

In the study of Business Intelligence, *e-HR: Transforming the HR Function (2001)*, Chris Ashton mentions the importance of e-HR as an irresistible force for change in a time where speed and agility have become the key words for HR operations. The study points out that there is a significant development of HR functions with the use of technology and these developments are becoming critical to sourcing, retaining, developing and rewarding the talent an organization requires to succeed. According to the author, some companies use technology to build an "employee brand" and pushing a self-image. With the use of web technology talent management becomes to define the strategic issue for HR. The study includes the some case reports of companies in order to share experiences. These case reports were given as proven approaches, and most of them were evolutionary. The case reports of Ford Europe, Unisys Corporation, British Telecommunications, Honeywell, Nokia, Kraft Foods, BP, Oracle Corporation and IBM were helpful in understanding the whole concept of e-HR. This study also gives an idea about the paradox of e-HR, to be considering the subjects from different dimensions. Another study of Business Intelligence, *e-HR: A Survey of Corporate Trends (2000)* shows the most used web-enabled HR functions of the companies. Survey findings was the most used guide in order to understand the HR trends and find out a correlation between different measures of the same concepts.

The study of Richard Noe et al., on Human Resources Management (2000), mentions the changing role of HR through a strategic business partner, which is an important point in shifting towards eHR. It is mentioned in the study that technological advantages such as development of intranet etc. have decreased the role of human resources in maintaining records by allowing HR services to be offered on a self-service basis at less cost than the traditional face-to-face service system. Also in the study of Dave Ulrich, *Human Resource Champions (1996)*, the changes in HR function’s role is being mentioned. According to the author of the book, the HR emphasis is shifting to deliverables not doables.
The Human Resources Management Conference (Feb. 2001) notes of Patrick Dixon$^7$ from IBM and Peter Squire$^{32}$ from Global Change points out the key roles of HR and the impacts of using technology effectively. According to their notes, the HR future model will be a strategic one that structures for operational HR delivery and on this model speed, quality, effectiveness, productivity will become the major indicators. It is mentioned by Peter Squire, that human resources will be in a war for getting the best talent and keeping them, therefore should establish effective systems for it. Another speaker of the conference, Dr. Geneviève Feraud$^{16}$ from Harvard Business School, points out how HRM must include IT in its strategic business development responsibility and how must have an optional use of IT tools. He states that IT creates advantage by leveraging or exploiting preexisting, complementary human and business resources. He adds that while technological systems producing cost savings in terms of reduced headcount, they are reaching their limits in terms of competitive value. He supports the idea that HRM must have an optimal use of IT tools, and must include IT in its strategic business development responsibility.

Prof. Richard Scase$^{30}$ from University of Kent at Canterbury, speaker at the 32nd Global HRM Conference (April 2000), mentions that using technology on HR functions will have impacts on key success factors and performance indicators, cost control and saving, shared values and communication, appropriate information systems. According to his notes the key challenges of using internet and technologies are: innovation, corporate intelligence, competitive advantage, shared information, increased customer (internal) relations, more focus on strategic role, able to act as business partnership.

On the way to understanding transformation systems, the article on e-Human Resources Solutions, by IBM (2001)$^{13}$, is giving some highlights. It mentions the issues related with e-HR, and the best ways of transformation. The article argues on the HR transformation with internet tools as the quickest way. This way is explained as, “using new internet tools to jump starting e-HR”. The article mentions benefits of moving up to e-HR as, reducing costs, increasing service and adding value to the work done. It also mentions the necessary points to be considered during the implementation stage and argues that it will be a mistake to underestimate cultural changes and focus areas, in planning to establish a new system. Table 5.1 (section 5) is given from this article, in order to have an understanding about the broad e-HR focus areas and their results.
3. THE E-HR CASE

3.1 The Meaning of e-HR and the Benefits / Paradoxes.

e-HR can be defined as, the use of conventional IT and web-enabled technologies to HR systems and deliveries. In order for doing business it will be a necessity that will have benefits with its impacts.

What are the Benefits?

The implementation of an e-HR strategy can have far-reaching benefits (table 1.3) including improved service delivery, better productivity and cost savings on key organization-wide HR processes such as:

- recruitment and selection
- total rewards/benefits
- performance management and appraisal
- career development
- learning/training/education/knowledge management
- workforce planning, practices and facilities
- employee relationships/communication

There are however, paradoxes on the road to e-HR (personeltoday.com, issue: 27 Feb. 2001). Implementing an e-HR system will help HR directors become more strategic but it can also throw up a number of paradoxes along the way. As technology arranges the complex interfaces between people, processes and technology, some dilemmas will increase in urgency and new ones are likely to emerge. This may be a critical opportunity for the HR function as e-HR begins to embed – acting as the mentor, adviser, arbiter and counsellor of technology-created sensitivities. It is important to consider the paradoxes and the possible answers before implementing an e-HR strategy.
What are the Paradoxes?

Among others, there are key paradoxes (Ashton, 2001):

- Will employees willingly take to technologies if not already "e-literate"? What percentage does not have direct access or desktops, as with "blue collar" and hourly-paid workers?
- Has intranet technology become so commonplace that people now expect it? If so, what does that imply for organizations and how they work?
- How are data protection, privacy and security issues resolved? How is confidence in systems integrity built?
- Does a balance have to be achieved between the efficiency of remote electronic HR provision or 'e-working' and the human need for personal interaction? Is this an opportunity for 'higher quality' work relationships?
- Can e-tools make work a more fulfilling experience for managers and employees? How might that balance with personal/home influences on work fulfilment?
- If technology enables on-line feedback and reporting between individuals, supervisors and managers, does that make for better people management practices? Can weak managers hide behind good technology and systems?
- Given the potential for technology failure, is over-dependency on technology a real danger? To what extent is outdated technology a barrier to e-HR developments?
- As the shift to e-working and the e-enabled worker emerges more strongly, what consequences does this have for the organizational structure and arrangements?

On this study while looking to the basic changes that occurs with the “shift to e-HR”, the answers of these questions are being answered by the guidance of case studies, reports and survey results. Clearly, e-HR represents a testing agenda for the HR function, considering the issues and experiences raised. The Human Resource profession and practices have undergone substantial change and redefinition with the new technological era. In order to see the developments and find out the most reasonable answers for the key paradoxes in shaping the new strategy, it is helpful to define and summarize the roles of HR.
3.2 Activities and Roles of Human Resources

Only very recently the companies started to look at Human Resources practices as a means to contribute to profitability, quality, and other business goals through enhancing and supporting business operations (Gerhart and Wright, 2000). The activities of human resources are responsible (table 3.1) for include outplacement, labor law compliance, record keeping, testing, unemployment compensation, and some aspects of benefits administration.

Table 3.1 Activities of Human Resources
(SHRM Survey No.60, Human Resource Activities, Budget and Staffs, 1994-95)

<table>
<thead>
<tr>
<th>Area</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment and recruiting</td>
<td>Interviewing, recruiting, testing, temporary labor coordination</td>
</tr>
<tr>
<td>Training and development</td>
<td>Orientation-performance management skills training, productivity enhancement</td>
</tr>
<tr>
<td>Compensation</td>
<td>Wage and salary administration, job descriptions, executive compensation, incentive pay, job evaluation</td>
</tr>
<tr>
<td>Benefits</td>
<td>Insurance, vacation-leave administration, retirement plans, profit sharing, stock plans</td>
</tr>
<tr>
<td>Employee services</td>
<td>Employee assistance programs, relocation services, outplacement services</td>
</tr>
<tr>
<td>Employee and community relations</td>
<td>Attitude surveys, labor relations, publications, labor law compliance, discipline</td>
</tr>
<tr>
<td>Personnel records</td>
<td>Information systems, records</td>
</tr>
<tr>
<td>Health and safety</td>
<td>Safety inspection, drug testing, health, wellness</td>
</tr>
<tr>
<td>Strategic planning</td>
<td>International human resources, forecasting, planning, mergers and acquisitions</td>
</tr>
</tbody>
</table>
Human resources management has come to mean something very different for organizations. What was once a departmentalized, transaction-driven function is now being recognized and exploited as strategic part of an overall enterprise system. And as players of a strategic role within an organization, HR managers - and others - need the tools and resources to turn HR functions into something more than the sum of their distinctive parts (Deveau, Issue: May 26, 2000).

The HR function has a transition from an administrative role to a strategic business partnership (Noe et al., 2000). A study done by the Center of Effective Organizations, University of Southern California, and the Human Resource Planning Society shows that the percentage of time human resources devoting to administrative roles such as maintaining records, auditing and controlling, and providing services has decreased (table 3.2). Technological advances such as development of the Intranet have decreased the role of human resources in maintaining records by allowing HR services to be offered on a self-service basis at substantially less cost than traditional face-to-face services (Greengard, 1998).

Table 3.2 The Changing Role of Human Resources
(Center of Effective Organizations, University of Southern California, and the Human Resource Planning Society, 1996)

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>6-8 years ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining records</td>
<td>15 %</td>
<td>22 %</td>
</tr>
<tr>
<td>Auditing and controlling</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>HR service provider</td>
<td>31</td>
<td>35</td>
</tr>
<tr>
<td>Product development</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Strategic business partner</td>
<td>22</td>
<td>11</td>
</tr>
</tbody>
</table>

Automating those processes received a decided boost with the explosion of Internet usage in the workplace. Not only has the Internet facilitated communications within and without the enterprise at a fraction of the cost of more traditional means, it has also provided a springboard for developers to deliver a new level of Internet-related HR services to a much broader audience.
3.3 Facts of e-HR as Part of the New Strategic Role

- As explained above, HR function is transitioning from administrative to strategic function in a job market where companies compete for “human talent”. The quality and flexibility of the human resources has significant impact on the quality of the products and services delivered today and tomorrow.
- e-HR is an important issue on creating a strategic advantage through the optimization of the production factor “human resource” while recruiting, managing and developing.
- Companies will be able to support their employees with the most effective tools and technologies to do their job: anticipate demand, manufacture products, manage resources for assembly and delivery of products, serve and client.
- It is necessary aligning HR strategy with Corporate Strategy.
- Internet applications are useful for employees as these enable them to utilize their time most efficiently.

As defined on section 3.1, and in considering the points mentioned above, it is helpful to figure out the advantages of internet applications for having a clear view. Comparing to the applications being handled -as package programs, access, etc.- on HR, internet applications are more simple and designed to be used by large numbers, as they are user friendly designs there will be no further need for training there fore no extra training budgets are required, and also the users take the advantages of using internet links and multimedia (table 3.3).
Table 3.3 The Advantages of using an Internet Application
(Learn How the Next Generation of HRMS Works, Heesen B., Prescient Consulting, 2001)

<table>
<thead>
<tr>
<th>Normal Application</th>
<th>Internet Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerful, but complex</td>
<td>Simple!</td>
</tr>
<tr>
<td>(built to handle all possible situations)</td>
<td></td>
</tr>
<tr>
<td>Designed for the professional user only</td>
<td>Designed to be used by large number of users</td>
</tr>
<tr>
<td>Requires a trained user</td>
<td>No user training required</td>
</tr>
<tr>
<td></td>
<td>Takes the advantage of Internet links and Multimedia</td>
</tr>
</tbody>
</table>
4. STRATEGIC AND BUSINESS DIMENSIONS OF E-HR

e-HR, as part of the new strategic role of HR, creates a strategic advantage through the optimization of the production factor “human resource” while recruiting, managing and developing. Considering the point mentioned in section 3, it is possible to make a comparison of HR systems for guiding the decisions of having to use internet applications:

From

Document oriented,
Stand-alone applications and optimizing processes in one enterprise
Inflexible support systems, not user-friendly system
HR only does HR
Transaction exchange
Historical reporting
Restricted opportunities for reaching the talent needed
Solutions related to personal systems being used

To

The use of self service applications to eliminate paper forms, a role-based system, it is personalized, and it eliminates intermediaries

- As a result, there is an increase in productivity and satisfaction

A system related with business solutions and optimizing the end-to-end value stream

- As a result, there is a simplification of the work done,

A system which is easy to use

- As a result, the need for special user training is reduced

A system that requires knowledge exchange for strategic and real time decision support, in which the managers can give importance to HR, and has time for doing HR.

- As a result, value-added activities will increase,

A system which enables forecasting

The operation of the system is low in cost

The system enables the opportunity to reach the needed talent fast and easy

The system which makes able to use innovative systems for the best solution
Considering the transformation mentioned above, the subjects related to innovation, speed, cost, efficiency and availability of sharing knowledge easier are being the major points of interest to be proved in the following parts.

4.1 The use of Internet is allowing companies to become more innovative in areas such as recruiting and optimization.

e-HR marketplaces for functions such as recruiting, training and staff development are changing the dynamics of the HR business. HR becomes a wider profession, a system not only being used by HR professionals (figure 4.2). Today most of the HR systems does not able professionals to have wider users, also HR professional can not be able of doing each related process as the system is not flexible to support controlling each related activity. As a result HR does the administrative business, and only HR functions but can not able to work as a strategic business partner (figure 4.1)

Figure 4.1 Users of the HR system (today)
(Learn How the Next Generation of HRMS Works, Heesen B., Prescient Consulting, 2001)

The industry has already seen considerable progress made in such areas as supply chain management, sales, marketing and customer relationship management, where the concept of collaborative workflow and knowledge management via the Internet have become part of the everyday business lexicon. But HR has been one of the last areas to be brought into this new business model.

"HR management is the hardest job to automate because people are unpredictable. HR systems have traditionally been treated like financial systems. And although these do a good job of recording transactions and performing data management in areas such as payroll, benefits and
compliance-oriented issues, there has been a need to move to process optimization for enterprise related functions, such as hiring, relocation, planning and forecasting" (Merritt¹, 2000). Merritt agrees that the Internet has been a key driver behind the evolution of a new breed of automated solutions.

e-HR as a new vision of the collaborative enterprise, offers employees access to internal and external data or services through a single screen (portal). Previously, employees had to use different strategies to carry out transactions, recruitment, employee benefits changes, training, expenses and performance evaluations. These all have been approached via different routes with different contact points. With the power of internet, now it is possible to integrate all transactions through a single point of contact- the web home page. The HR System on internet makes innovation necessary (survey 4.1) in every step of the whole process as the system (portal) has to be unique, user-friendly, interesting and informative. The users of the system can differ according to the needs of the company: HR Department, Recruitment Agent, Applicant, Retirees, Health and Life Insurance Companies, Group Companies of a Holding, Professional Organizations, Government Departments, Employees, Managers can all be included in the system and could also have links with each other if necessary. Benchmarks, surveys, travels, trainings can be organized within this system (figure 4.2).

¹ Doug Meritt is the CEO and president of Icarian, Inc. in Sunnyvale, Calif.
This is not an easy work to do. However, once all the transactions are integrated with the best e-HR solution for the company, the system can make managers, employers and providers more effective and efficient.

In the new era, there is an increasing use of internet especially on recruitment (survey 4.2). To find out the best implementation of internet based recruitment (also called as technological recruitment) among the increased numbers of application providers, the companies have to be more innovative then before. As the areas of research and selection becomes endless, it is necessary finding out ways to get the target people, make them visit the home page, and take their applications. Companies are going that extra mile to attract top technical talent. Also creating a user-friendly database is necessary for the optimization of productivity. Approach to technological recruiting is intended to augment traditional efforts such as internal referrals, job fairs, and good
old-fashioned advertising. Using the recruitment sites on internet can provide information about the ways of doing it better. While searching for the best matches on internet recruitment, HR staff or recruitment firms can also have the risk of loosing much of their time. Even though using internet for recruitment is a low cost or even no cost, loosing time is also a very important issue as money. Among the many internet recruitment sites it is important to be unique and collect the best candidates and for the recruiter it is important to find out the best match.

Survey 4.1 "The opportunities of web technologies – along with HR related software and systems – are causing a significant evaluation and rethinking of the services the HR function delivers." Please indicate the agreement or disagreement with this statement.

From the answers of the respondents the poll results of this question was as below:
(Scale 1-5, 1= agree strongly, 5=disagree strongly / Nil replies, 440 replied to the question)

According to the answers, most of the respondents agree on the point that opportunities of web technologies are causing a significant evaluation and rethinking of the services the HR function delivers. They mentioned that opportunities of web technologies enables knowledge exchange for strategic and real time decision support, in which the managers can give importance to HR, and the staff has the ability in searching to use innovative systems for the best solution in doing HR. This can be considered as a drive of increasing the efficiencies and the value-added activities of employees and managers (section 4.2).
4.2 Web-based services will drive efficiencies and increase the quality of people hired with reduced costs.

Web-based services will drive efficiencies and increase the quality of people hired, as they enable companies to get the talent they need.

Online recruiting services companies have been shifting into high gear in recent months, and the industry is trying to make inroads into the market dominated by established online job boards. This field is relatively new, and it's changing so quickly.

As an example, some of the web-based services have been checked. SkillsVillage.com is one of these services. The service, launched on 1999 summer, provides a platform where contractors can match up with enterprise hiring managers. To date, the site has facilitated more than 100 successful matches, and additional services such as the ability to handle contractors' time sheets and billing have recently been added. CEO of SkillsVillage.com, Chris Wong, predicts that Web-based services will become an integral part of the corporate staffing process: "Companies already have ERI systems in place, and they will integrate online services into their process," he says in one of his interviews on-site (Business Intelligence, 2001).

In today's highly competitive business environment running at Internet speed, companies can't afford to be hindered by a shortage of skilled professionals. The landscape is changing so fast, that shortcomings in recruiting efforts could result in a major setback, such as a product or service being late to market. The key is talent. If companies can't get the talent they need, they're totally behind the curve. With the use of web-based services there will be and already is an increase in the quality of people hired as they companies are able to reach to the right people faster and able to get the talent they need (survey 4.3).
According to Atlas Van Lines’ 1999 Corporate Relocation Survey, 71% of participants said they use the internet to research, administer and track employee relocations. However, only three years ago, a mere 6% said they used the Internet for these functions (Dixon, 2001).

| Internet is not used by this department | 29% |
| Internet is used by this department, but not for relocation related matters | 33% |
| Internet is used to research relocation related matters | 22% |
| Internet is used to communicate via e-mail with relocating employees | 27% |
| Other | 4% |

Recruiters and HR professionals are starting to turn to Internet-based “auction sites” to bid on prospective employees.


**How do they Work?**

Recruiters bid on prospective employees or teams of employees anonymously via a silent auction. The site features a job-matching system that lets employers post job requirements and match them to services offered in the auction. These sites also give general information about management books, special offerings, seminars and conferences, for helping managers and members updating their *business life knowledge*.

There is a contract being made with the clients (employer companies) in order to announce the jobs and find the matching employees for the employers. In consideration of the payment, the Company (Internet-based auction site) agrees to perform the *Services* in accordance with the *Contract* (table 3.1).
Using these sites, as being mentioned before, does not require a further training etc. On the other hand there are some definitions made on internet recruitment sites which are being used for enabling the right communication between the users, applicants, the registered companies, and the sponsors (gives advertisements, shares knowledge by on-line articles etc.). Some of the most used definitions are mentioned on table 4.1.
Table 4.1 Definitions of terms used by internet recruitment companies.

(With the guidance of www.career-globe.com project group)

In order to give a clear idea of how these sites work definitions of mostly used terms by internet recruitment companies are given below.

- **Advertisement**: Any advertisement material supplied by a Client for transmission by the Internet from the Company's Site (including but not limited to advertising banners being electronic advertisement whose dimensions and delivery format are agreed) that are placed on pages of the Company's Site, customized links and sponsorship logo display.

- **Client**: The person(s) firm or company to whom the Services are provided.

- **Company**: Means an legal corporation registered on Internet.

- **Company Site**: Means website operated and maintained by the Company.

- **Contract**: The contract for the purchase and supply of Services

- **Fees**: Means the fees and charges payable by the Client as specified in the Schedule

- **Internet**: The global computer network comprising interconnected networks using standard set of rules that regulate the manner in which data is transmitted between computer.

- **Web Site**: a site at which text, graphics, data, files and information are stored electronically and access to which is made available to third parties via the Internet.
The United Nations Population Fund (UNFPA) wishes to recruit professionals for the following positions, stationed in Ankara.
Sample 4.4 iJive.com
(www.ijive.com)

(For detailed information about recruiting techniques on internet: appendix 2)
As described, web-enabled process implementation, can have significant HR function and business benefits. Eliminating waste, cost reductions, speed, more efficient resourcing, greater productivity and value-added services are some of these examples.

Survey 4.2 On which purposes Human Resources related Internet Sites and systems are being used by HR professionals and employees in Turkiye?

From the answers of the respondents the poll results of this question was as below:

- Workforce planning: 6%
- Gaining more time: 6%
- Improve the internet site of company: 2%
- Recruitment: 26%
- Following new opportunities: 7%
- Work optimization: 16%
- Promotion: 2%
- Training & Learning: 22%
- Costs control & savings: 12%
- None of the above: 1%

According to the results of the survey, technological applications are mostly used on recruitment and training/learning areas of HR, in Turkiye. Of particular surprise, cost control and savings is only on the 4th place. As e-HR is a new concept and on the establishment phase in most of the companies in Turkiye, moving step-by-step is more preferred. And recruitment and training/learning areas are used as so-called pilot areas of this process. Evolutions are being considered with in these functions and further development plans are being made accordingly which the “cost factor” will take place on this phase.
Survey 4.3 What evolutions occurred with the use of web-based services on HR Profession?

**Poll Result:**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A decrease in paperwork</td>
<td>7%</td>
</tr>
<tr>
<td>Efficiency of the work done</td>
<td>14%</td>
</tr>
<tr>
<td>Reach the target talent faster and easier</td>
<td>19%</td>
</tr>
<tr>
<td>An increase in the quality of people hired</td>
<td>25%</td>
</tr>
<tr>
<td>An increase in internal business communication</td>
<td>7%</td>
</tr>
<tr>
<td>Faster and easier establishment of core values</td>
<td>8%</td>
</tr>
<tr>
<td>Evaluation on orientation &amp; training programs</td>
<td>8%</td>
</tr>
<tr>
<td>A decrease in costs</td>
<td>12%</td>
</tr>
</tbody>
</table>

According to the survey results, companies who are using internet recruitment (online recruiting) figures out the increase in the quality of people hired as they are able to reach to the right people faster and able to get the talent they need. Users of the online recruitment strategies argue that current web technology enables superb filtering and tracking mechanisms. Consequently, internet-based promotional campaigns can more easily measure success when compared to other recruitment approaches, such as printed material.

Also, with existing database systems, prospective overseas “talents” may type their pertinent information (name, address, date of birth, citizenship, background details, interests, level of skill knowledge...) into a specially-formatted online form (sample 4.5). That information may be fed directly into a compatible database (sample 4.6) - thus eliminating the mundane task of re-keying that same data.
"İçimize de değişim, isteğin farklılığını ve gürün doğuşunu hissiyoruz."

Sample 4.5 Doğuş Holding A.Ş. web page
(www.dogusholding.com.tr)
Human Resources – Online Application Form
Application resumes are recorded electronically. These are saved on the database and the user (admin) is able to search the needed talent by selecting the relative fields.

There is also an automatic matching system between resume details and current openings. An e-mail is sent to the recruitment specialist, every time a potential candidate with the skills he or she requires comes onto the database.
Doğuş Holding Human Resources Department, started to use online recruitment system and created their own database. From June 2000 they are actively collecting applications and arranging forums considering HR profession. This system enabled HR to decrease in paperwork, reach the target talent faster and easier, have an increase in the quality of people hired, optimization of the production of particular processes, identify and establish orientation and preferred training programs, and reduce costs.

Technological change also requires confidence from HR. In this respect, the web helped enormously. Web page is useful not only for communicating HR information, but also for having more general business information (sample 4.7).

Sample 4.7 Doğuş Holding (www.dogusholding.com.tr)

From the application of Doğuş Holding web page there's no excuse for anyone within the group not to know what, for example, the annual report says, or what the strategic intent of the company is. They're now all available on the web.
The internet is the most empowering tool of our generation. There are about + 369 million internet users worldwide. That figure is expected to reach the one billion mark by the year 2005 (C.D. Boychuck, President / CEO of the U.S. Journal of Academics). In today's business environment the key is talent. Running at Internet speed, companies can't afford to be hindered by a shortage of skilled professionals. The landscape is changing so fast, if companies can't get the talent they need, they're totally behind the curve.

HR as moving towards a strategic business partner in the global world, will have to give a major importance to resourcing, development and knowledge sharing in order to act globally. HR is a business that has to think logically, execute fast, reduce costs and show good returns on investments. Technology answers these needs as it increases the information availability, and helps in increasing knowledge (inspired from Hempel, 2001):

\[ K = (P + I)^S \]

- \( K \) = Knowledge
- \( P \) = People
- \( I \) = Information
- \( S \) = Sharing

People are key to company success and technology enables a “sharing environment of talent” the companies’ need as a Global Ambassador on the power of communication. HR must enable technology to create more than an ability to share, it has to create an environment where people want to share information and increase knowledge. This is an important point in order to take place in global business world.
4.3 e-HR enables improved productivity and performance, more effective service delivery and more engagement in strategic HR services, only if planned rationally - with defined needs.

Developments of e-HR will have different ranges and levels of internal effects on the organization. Therefore, rational planning is the main step before implementation. The corporate strategy and technologies/applications align to HR has to ideally, positively impact on current, or future perceived, business issues. If these plans are not made before the implementation, then opportunities will be lost and, likely, effort or investment will become a loss.

The strategic expectations behind e-HR can vary immensely, depending among external or internal drivers, a function’s ambitions, business circumstances, resources and, HR leadership, which are all guided by a kind of e-HR vision. Planed applications will have a strong business rationale, also taking into account the HR functional impacts of e-HR development; as planed e-HR strategy can enable improved business productivity and performance, and effective service delivery on all functions of HR (survey 4.4).

A research made by Business Intelligence\(^2\), on Jan. 2001, in 91 international organizations indicates that 76 per cent had redesigned or introduced new HR technologies/systems in last 12 months and those that had not, 90 per cent will do so over the next year. According to the results a rationally planed e-HR strategy has impacts on:

- Improved HR function productivity and performance (82%)
- More effective HR service delivery (79%)
- Engagement more in strategic HR services (78%)

The purpose of e-HR is to address specific business requirements for internal clients using web technology and, as such, ought to always have a business case based on timescales, deliverables

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\(^2\) Business Intelligence delivers independent, authoritative advice on emerging business trends and practices including CRM, Supply Chain, Data Warehousing, Balanced Scorecard, Business Intelligence, Human Resources and Knowledge Management, presenting its findings in the form of conferences, exhibitions, publishing, training courses and web communities.
and results agreed with clients (Hickmott\(^3\), 2001). Rational planning of e-HR applications is an important point as, with the use of technology HR becomes more strategic; it should give employees access to the information they need to do their jobs more effectively, and should reduce HR time spent on administration tasks. e-HR is a tactical, increasingly important enabler of wider HR functions and people management strategies.

Survey 4.4 **In which of the areas of HR, the service delivery will, or might, improve and be more effective as a result of adopting a planned and corporately designed web based technology?**

From the answers of the respondents the poll results of this question was as below:
(Scale 1-5, 1=important, 5=not important)

**Workforce planning, facilities and work environment**

*(Nil replies 1; 43 replied to the question)*

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**Job/competencies/skills matching**

*(44 replied to this question)*

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<td>29.5%</td>
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<td>9%</td>
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\(^3\) Hickmott is the director of Hickmott Consulting and formerly head of organization and business effectiveness at Unisys Europe.
Learning, education, training and seminars  
(Nil replies 1; 43 replied to the question)

Employee relations and communication  
(44 replied to this question)

Personal and career development  
(44 replied to this question)

Performance management and appraisal  
(Nil replies 1; 43 replied to the question)

Rewards, compensation and benefits  
(Nil replies 1; 43 replied to the question)
Recruitment and selection

(*Nil replies 1; 43 replied to the question*)

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Employee administration and records

(*Nil replies 1; 43 replied to the question*)

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Reports for internal management

(*44 replied to this question*)

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<td>47.7%</td>
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According to the survey results, the participant companies agreed on the importance of a planned and corporately designed web-based HR technology on improvement and effectiveness of HR related functions; especially on job/competencies/skills matching, training, employee relations and communication, performance management and appraisal, recruitment and selection, employee administration and reporting.

With the opportunities of e-HR, there may be many strategic choices and directions to take. HR professionals who have embraced the challenge have been able, in recent times, to adopt and - in some cases - innovate interactive HR transaction and delivery systems that meet flexible and highly fluid human capital needs.
However, it has to be important for the HR department to *evolve* its e-solutions over a period of growth stages, such as:

- Information publishing
- Database enquiry
- Simple HR transactions
- Complex HR transactions
- HR workflow via the web

As always, in adopting all these stages a company's own internal culture is the key to the success of such initiatives, which translates to mean: "Don’t rely on technology to change who you are, organizationally – rather, develop the culture to embrace such change and the means by which change will be delivered." (Business Intelligence, 2001)

Figure 4.3 Five factors for being the successful organization
(Inspired from Business Intelligence, 2001)
Identifying the stages of e-HR before starting any implication process is important to focus on each stage and to make the necessary changes according to company's own internal culture. The importance of these considerations relies on having effective results on the way of being a successful organization (figure 4.3)

**Information publishing** - reflects the first evolutionary stage of the e-HR revolution. At this stage, applications provide one-way communication of general company information to employees. Typical applications in this category include:

- policies and procedures,
- explanations of benefits,
- company histories,
- executive who's-who listings,
- directories of services, and
- notices of current events.

**Database enquiry** - applications provide one-way communication to employees, who can access a back-end database that provides employee-specific data in response to user inquiries. Examples include:

- inquiries about paid-time-off accruals and balances,
- current benefit coverage,
- personal demographic data,
- work schedules,
- retirement plan balances, and
- electronic pay stubs

**Simple HR transactions** - applications replace paperwork with transactions using electronic input. They combine the inquiry functions of Database enquiry with employee updates of personal information on HR databases. Such applications include:

- update of personal information,
- dependent and beneficiary designations,
**Complex HR Transactions** - applications involve:

- application branching based on user input or employee file data,
- calculations or other internal processing of data, and
- multiple-output transactions

**HR Workflow** - applications walk users through all of the steps necessary to complete whole processes rather than just discrete transactions:

- Gives employees and managers a way to administer their own HR data and processes without paperwork or administrative support
- a mix of capabilities including information publishing, HR transaction processing and extranet access
- ESS (Employee Self-Service) applications

**e-HR applications in action** - the key HR deliverables that are migrating towards interactive real-time delivery:

- e-Recruiting & Selection
  e-Learning, Development and Assessment
  e-Performance Management Systems
  e-Payroll
  e-Compensation and Benefits Administration
  e-Job & Competency Profiling
  e-Career Coaching and e-Career Path Planning

After giving all definitions and the important conditions of shifting towards e-HR, there are some knowledge sharing reports and case studies given for supporting the ideas on this section from e-HR application experiences. These were also helpful in finding out a correlation of the study statements, between survey measures made in Turkiye and measures of European studies.
4.4 Case Reports: Strategic Dimensions of e-HR

Case Report of Unisys Corporation

(Ashton C., e-HR: Transforming the HR Function, Business Intelligence 2001, p.24-25)

Worldwide human resources at Unisys Corporation, including its Europe-Africa division, was driven by a strategic plan for change launched in 1998 which shapes the function’s future direction globally and historically. It had three operating elements – HR Business Consultancy services, HR Client services delivering high-technology, low cost, fully automated information/transactions, and Unisys University, a platform for wide learning and development.

Unisys planned to develop this model in response to different business challenges. Changing customer demands and priorities, reduced time to market cycles, technological change that embraces e-business and the need for systems integration are four top of such challenges. People issues were a critical reality too, requiring the corporation to become an employer of choice if it wants its fair share of the talent needed for success in the IT sector. The formerly head of business and organization effectiveness at Unisys Europe, Ivan Hickmott, explains as “employers of choice must attract, deploy, motivate, assess, develop and retain employees to execute their strategies. This means the people side of business has to change so that people management decisions are increasingly implemented using the same processes and web-based system around the world.”

The focus of Unisys’ efforts to launch e-HR had included; determining global core HR processes, standardized management reporting of people data to support strategic and operational planning, self-service on the web for managers, employees and HR to execute people transactions, utilizing an existing shared service center to support e-HR implementation and maintain data and process integrity, re-engineering over 6000 jobs into 400 role profiles and single global grade

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4 Unisys unveils a comprehensive strategy and integrated portfolio of services, solutions and technologies to help clients succeed in e-business. Unisys e-@ction Solutions enables organizations to take advantage of the operational efficiencies and growth opportunities of the Internet economy.

5 Business Intelligence delivers independent, authoritative advice on emerging business trends and practices including CRM, Supply Chain, Data Warehousing, Balanced Scorecard, Business Intelligence, Human Resources and Knowledge Management, presenting its findings in the form of conferences, exhibitions, publishing, training courses and web communities.
infrastructure. HR Client service is the global delivery model based on both self-service via web fronted (PeopleSoft, sample 5.1) platform and shared service center for three end-user client groups – managers, employees and Human Resources. Managers primarily use it for executing straightforward employee data transactions through the web based Manager Action Center.

All users were supported for specific, commonly defined or applied processes – career management, for example - through a mix of telephone and e-mail process support and advice, procedural integration and document fulfillment, and self-service. The shared service center connects to Unisys work sites through the corporate intranet and is backed by:

- HR process guides and reports from a data warehouse
- helpdesk and end-user support
- the Unisys Employee Network – a customized portal through which web tools such as a Career Center and Personal Records Online are self-accessed and updated.

According to Hickmott (Jan. 2001), the central purpose of Unisys’ e-HR evolution was to create universal web tools for everyone to use anytime from anywhere through standard interfaces right across the organization. This leverages technology to the point where the company can achieve internally what, as an IT provider, they do for external customers. Managers and employees can then have more time to add value to the business, while HR people in the field will have less policing of paper and more solutions consulting with clients. This begins the realization of the whole project.

Hickmott (2001) explains that the e-HR journey for Unisys will continue in partnership with a consultant firm under the terms of a process and vendor management contract. The consultant firm is planned to help redesign and manage a number of Unisys HR processes and services, while Unisys retains accountability for its HR strategy and planning as well as for development and management of core values and strategic HR programs. This partnership is planned to built on the substantial investment in HR process excellence and web enablement that Unisys has already made.
Case Report of BT Company

(Ashton C, e-HR: Transforming the HR Function, Business Intelligence 2001, p.25)

BT has a corporate vision to be the most successful worldwide communications group, which has led to the acronym “e-BT” to characterize its “e-organization” activities and translate those into e-HR.

Over the past two years, developments in this area have begun to transform how HR is positioned, focused, structured and delivered its services. Although e-HR is self-service based and features the e-peopleserve joint venture with Anderson Consulting, Malcom Cook in BT’s HR Commercial Management and Service Excellence Unit, stresses that e-HR is also strategic by nature in contributing to the e-BT mission. e-HR includes automating transactional activities, gearing HR services towards self-use, and introducing innovations – distance learning/development, pay and benefits, etc.

Cook (2000) explains that the strategic focus was guided by an e-HR strategy team that continually examines how current e-HR activities fit with the corporate strategy and BT’s new business unit structures. Apart from initiating the e-HR agenda, the work includes reviewing the HR services delivered, setting performance standards and measuring actual performance. According to Cook, e-HR has to be guided by the organization’s strategic direction, different stakeholder requirements and beneficial outcomes for line managers and employees as the end customers.

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6 British Telecommunications is one of the world's leading providers of telecommunications services and one of the largest private sector companies in Europe. Its key activities include local, long distance and international telecommunications services, mobile communications, internet services and IT solutions.
Beyond the different approaches to strategic e-HR at Unisys Corporation and BT Company, the use of strategy formulation or strategy review teams is a key practice, along with clearly defined cause-effect linkages between corporate strategy, HR strategy and e-HR developments. On the strategic dimensions of e-HR out from this case, the below key learnings emerge:

- The HR strategy must be clearly defined
- The links of companies’ business issues to corporate strategy and current, or future must be considered
- Strategy review teams has to be established for further success
- The issues that can be realistically applied through e-HR innovations has to be redefined
- The strategic elements that cannot, or are unlikely to, be addressed using technologies and web tools must be taken into account as another project
- The end-users and/or stakeholders have to be considered, in order to establish a user-friendly and effective application
- If necessary the consultancy of e-HR plans must be made in accordance with the corporate strategy

The case reports below (4.5) will guide in the business dimensions of e-HR, as considering the both sides are important in establishing an e-HR application.
4.5 Case Reports: Business Dimensions of e-HR

Case Report of Ford Europe  
(Ashton C., e-HR: Transforming the HR Function, Business Intelligence 2001, p.27)

Ford Motor Company has successfully launched an intranet-based HR service to its global workforce, called HR-Online. It is the platform for an integrated service delivery model geared to the needs of internal customers. The company expected the initiative would have far-reaching impacts since the spin of heavy investments in e-commerce and e-business affects every part of the business. This high level business driver – web-enabling the entire enterprise – has impacted on HR, as e-business translates to business-to-employee solutions at Ford. HR Global Vice President David Murphy (2000) explained that they are ready to make a great study for becoming truly an e-HR function, offering innovative technology-based services. According to Ford Europe HR systems planning team, e-HR is not just about using technology to provide more efficient transactional processing, it enables HR professionals to focus more on effective business partnerships and customer support. They can be able to provide new opportunities to deliver high-value programs in areas such as leadership development, induction and e-learning.

The ultimate goal of Ford Europe was to fully leverage the transformational capability of e-HR so, HR-Online was therefore more than just a website; it was considered as a new way of doing business.

Case Report of Honeywell International  
(Ashton C., e-HR: Transforming the HR Function, Business Intelligence 2001, p.30)

According to Chris Ashton (2001), the author of “e-HR: Transforming the HR Function”, an aggressive transformation towards an e-business model at Honeywell International (sample 4.8) had reshaped corporate strategy and created significant changes in the way HR is defined, managed and delivered. The company’s e-business shift manifests itself through a new internal discipline which executives call e-HR (Results Through People, vol.3, no.3, Hewitt Associates, 2000). A manager portal was expected to facilitate the continued evolution of HR This was a
web-based channel with access to information tools, advanced modeling, decision support and transactions – all of which help to improve their effectiveness. According to the e-HR director of Honeywell International, Maureen Coleman (2000) business and operations managers are key in the war of talent, as they are the ones who develop relationships with employees. So, they planned that HR has to do whatever it can to enable these managers improve decision making capability. Coleman explains that e-HR will also help HR professionals focus more on strategic issues: “...Before we implemented our Europe Service Center, most of HR was very transactional. Currently, the HR generalist’s time is still taken up by traditional work – helping managers do their job better – whether it’s pay planning, managing performance, or assisting in employee relations. With e-HR, they can automatically access information more efficiently to make better decisions themselves for the business and its people.”

Sample 4.8 Honeywell International (www.honeywell.com/eventures)
Considering the experiences of case report companies Ford Europe and Honeywell International, e-HR innovations were approved by non-HR executives as much as HR vice presidents or directors. HR today, struggles with quantifying the value of technology, not recognizing the benefits of being able to provide services faster, cheaper and better. Yet, these considerations are fundamental to setting a business case for e-HR developments around the proposition that they will support the organization in executing the strategic plan and building intellectual capital. There is no place in today’s e-business for the old system - or as John Ryder (2001), chair of SHRM HR Technology Management Committee, said “old school” – HR business case, which rests on reducing headcount.

For e-HR developments, companies usually look for legitimate business reasons. Otherwise they will be perceived as counterproductive. Ultimately, the case will boil down to dollars and sustained business advantage. So, the critical focus becomes profitability. This can be, however, interpreted differently according to an organization’s circumstances – processing efficiencies, service improvements and better employee performance can convert to bottom line metrics. Regardless of which level is chosen, it is and must be important an HR leader to make a business case for professional business reasons. Web based technologies and tools should never just be adopted to make HR practitioners’ lives easier, as it is a system essential to support the business. The key issue here is to clearly define what technology is being used for, and what is needed to create greater value, along with the intended outcomes.

When the above information being considered, it is clear that e-HR can improve talent attraction and retention levels, internal client satisfaction with HR service delivery and, even, external customer service effectiveness. These considerations in an e-HR plan are as valid as the basics of cutting costs.
Some of the key learnings out from considering these case reports may be summarized as:

- Setting a business case is good professional and business practice.
- Rigorously thinking through an e-HR innovation.
- Estimating the costs of e-HR developments and their risks/potential downside.
- Considering the value directly created from deploying technologies across HR services/processes.
- Estimating the value that will result from process improvements and service delivery efficiencies.
- Deciding on implementation timescales, along with the process milestones.
- Considering non-financial outcomes from e-HR developments in relation to people policies.
- Ensuring that an e-HR innovation has not being introduced for its own sake or to make life easier in HR.

However, an important central learning throughout these was that e-HR applications have to be planned rationally in order to have successful impacts. This is a critical issue, as mentioned above, for concerning good professional practice since e-HR developments will bring completely new dimensions to the way things have been done before. In order to give an overall idea about the e-HR in practice the case studies of Nokia (4.6) and of British Telecommunications (4.7) are given. These companies’ experiences are good examples in shaping the processes from the beginning to the end, the requirements, the necessities, the difficulties and the end-process benefits are being clearly mentioned. These show that the expectations and company culture is a major point in designing such a strategy and these are highly related to having effective results, increased knowledge sharing, ambition to adding value and cost saving.
4.6 Case Study: NOKIA
(e-HR: Transforming the HR Function, Business Intelligence 2001)

Nokia with its headquarters in Finland, has been shifting towards e-HR, based on a successful e-business model and its own enabling technologies. The approach now comprises an HR intranet, expert platforms for HR processes, shared services and e-learning centers, though full implementation is expected to take one - or more year(s). Nokia’s vision is to put self-service, personal choice and responsibility into an individual’s or manager’s hands. Nokia has its own voice, web and network technologies, is a huge organization with around 60,000 employees. Sales are generated from over 130 countries. As a result, speed, interconnectivity, and continuous change are critical success factors, but the important issue behind these networks was the culture.

The Nokia Way, as it is called for the strong values, attitudes and behaviors form HR’s central purpose. The values are stated as:

- customer satisfaction
- respect for the individual
- achievement
- continuous learning

The model being built was an internally designed HR intranet called HR Jazz Café, with features such as Ask HR for employee communications, expert platforms for each core HR process, a shared services facility to administer HR transactions and e-learning centers.

Designing this approach involves a complete rethinking of HR processes and by doing so, clearly configured processes will enable HR to measure the success of what it delivers – and, therefore, the effect of HR investments.

Since HR operations attempt to mirror the Nokia business model, based as it is on customer relationships management, the final element of e-HR will be the creation of an international network of HR business partners, deployed through the three divisions and geographic regions.
As they were released from formerly time-consuming transactional work, they will be able to provide line management with increasing levels of strategic HR support. Director of HR communications at Nokia's head office, Lynn Rutter (2000) explains that their e-HR capabilities are not simply systems-related or driven. These are tied to business issues.

"...if HR cannot work this way, we don't have a business." Clearly, she adds, there are implications for a lean, global function. Practitioners will have to understand the business and its products, become skilled in managing relationships, act as customer-focused consultants and try to serve as a bridge across the organization's specialist platforms. Most of all, HR people have to be 'e-Literate': "HR staff will have to pioneer for the function's own purposes the very technologies that Nokia is developing because we are remotely located and always on the move. WAP technologies will enable to be accessible anywhere because people demand quick responses and instant information to make decisions. You could say we'll be able to do HR over the phone. This will be a shock for many HR generalists used to traditional systems, but global companies nowadays simply cannot afford to have unwieldy HR functions (Rutter, 2000)."

**e-HR in Practice**

Nokia's approach to e-HR connects to HR strategy and core processes and is guided by an executive project team. The ongoing agenda is to continuously review process integration and standardization around e-HR platforms and e-HR possibilities. The team's work is ongoing since some innovations are still being planed and will take time to introduce more widely.

Historically, HR processes have differed immensely across business divisions and territories. For instance, in any country where Nokia had significant presence, it was not uncommon to have five separate payroll systems, provided by different vendors. Process rationalization and technological innovation is helping to build one centralized HR information system and a helpline through the shared service units. According to this aspect of e-HR, Nokia is aiming to achieve more systematic delivery and consistent quality. Rutter says, "Apart from our own technologies driving developments, reduced costs and efficiencies have proved to be significant drivers. This brings us to the point where we will be able to start delivering value to the business."
On the other hand, operating as a global company in so many countries raises cultural and legislative considerations. Although overall HR strategy and policy are determined at corporate HR level and communicated through web means for local implementation, cultural and legislative considerations important issues especially for global companies, where it is difficult trying to impose the same systems on everyone. On this point, the awareness of the need for true diversity within the organization is a benefit for the application process.

In giving a snapshot of how e-HR works in practice, Rutter (2000) explains that her official base is in the UK, with her boss in Finland and key contacts all over the world, interconnected as parts of global process teams. They constantly stay in touch with each other as Rutter explains: "In the not so distant past, it used to take a week to get a letter out and then another week to receive the reply. Today, I can deal with Australia at the beginning of my workday, Brazil and the United States at the end, and anywhere else in between, constrained only by time zones. I have complete exchanges of correspondence in a matter of hours. My own vision is to have access to several databases for information, be involved in working groups, or sit in an airport lounge or the local park with a web-based training course on my WAP phone. Scenarios like these will enable most HR practitioners to manage and control their own working lives through technology."

Rutter also comments that people cannot continue to work longer hours to cope - they have to use the 'off' button and learn to work smarter. According to Rutter, if people will be able to update their own addresses with one piece of technology, it has the potential to be done instantly. And, this will eliminate the frustration often resulting from the old method when people had to phone someone in HR, which there was no guarantee that any action of particular job had been taken.

As another example, an HR manager in India will not have the time to chase sources of HR information or amendments to policies and regulations from traditional systems. So, access to one web address will have to provide these requirements, plus a discussion page for feedback or queries. Increasingly then, globalization and effective working are emerging as drivers of e-HR change. According to this example Rutter adds: "Considering Nokia's technological leadership, it would be ridiculous to send out bits of paper from HR. The function must be seen to be shifting
towards world class performance in these areas if it is to have any credibility in the industry, and internally."

Prospective employees and staff themselves are impacting on e-HR developments too. It would not be appropriate for HR to be at a trade fair and ask potential recruits to fill out an application form by hand, nor for the annual climate survey to be shipped in boxes worldwide for completion by ballpoint pen. People expect and, in some cases, will even demand web-based working. As for instance, with on-line surveys, employees should be able to get responses quickly, access reports in a matter of days and ideally, print their own copies from a web source.

e-HR process is emerging as a mix of self-service, shared services and strategic partnering under the umbrella of an e-HR organization. Following the thinking of HR guru Dave Ulrich\(^7\), the HR emphasis is shifting to deliverables not doables (Human Resource Champions, Harvard Business School Press, 1996). This approach is not perceived as a loose collection of initiatives or system developments but more of an electronic operating model.

Nokia has implemented e-HR elements for all core HR processes - resourcing, compensation and benefits, performance management, learning and development, workforce planning and employee relationships. The company, is evolving towards a “total e-HR solutions” model which will take some years to realize. For example, one of the a recent innovations was to improve the twice-a-year, paper-based performance management and review process with an electronic version during the year 2001, which currently is in application process. It was planed that, this will comprise elements such as web-enabled appraisal, skill evaluations, career mapping, personal development paths and learning opportunities.

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\(7\) Dave Ulrich is a professor at the School of Business at the University of Michigan. He co-directs the HR Executive Education Programs. He is a fellow in the National Academy of HR and was named by Business Week as one of the world’s top ten educators in management and the top educator in Human Resources. He has consulted and done research with more than half of the Fortune 200.
The idea was to support the more functional aspects of performance management by technology, but not lose sight of the importance of personal interaction and face-to-face feedback in reviews. Regarding this new system Rutter (2000) said:

"The new system will help managers link and communicate an individual's, their own and their unit's objectives to business strategy more effectively by giving them access to real-time information. For employees, access to skill databases, as one benefit, will help them identify appropriate courses in relation to their personal objectives. But, we will always have to rely on personal interactions and relationships. It is, after all, an attribute of Finnish culture to establish relationships first and then build-in the electronics."

This perspective of balancing relationships and electronics applies to learning and development and specifically e-learning opportunities. As mentioned in the report of Business Intelligence (2001), Nokia has five regional learning centers -two in Europe, with the others in Asia-Pacific, China and Americas -which provide a mix of conventional and e-enabled opportunities, based around personal choice and guidance from an individual's team leader or manager. By this way, power and authority will be in the hands of employees and managers because they could easily access information, check availability, sign up for a course and work through programs, all online. HR functions, such as collecting paper lists of people's training needs, which are then analyzed by a relatively remote practitioner, are becoming a thing of the past. Personal interaction, on the other hand, is still important, so actually attending training courses will probably never disappear completely. But, the e-Learning (section 6.3) issue for HR is to develop more coaching skills, interactive systems and user-biased programs that save people having to fly miles to sit in a classroom somewhere.

Similar to the survey participant companies' results mentioned above (surveys 4.2 & 4.4) recruitment is emerging as an e-HR strength at Nokia. By accessing the corporate website, people can file their resume and complete applications on-line (sample 4.9). They are clearly guided on how to do this, supported by a dedicated careers portal, a help line or by e-mailing HR direct. Personal details go straight into a global recruitment database which Nokia hiring managers scan.
There is also an automatic matching system between resume details and current openings anywhere in the world.

This enables HR to avoid the traditional procedure of putting an HR person between an applicant and the recruitment manager when sourcing applications and short-listing, since the manager is sent an e-mail every time a potential candidate with the skills he or she requires comes onto the database. HR input is confined to the human angle of assessing the applicant's interpersonal skills as technical abilities will have been evaluated by the manager concerned. From the HR perspective, building the centralized system and global access for multinationals over time is not just desirable, it will be and already is, essential.

As indicated above, e-HR developments have brought changes to the HR function at Nokia. While emphasizing that HR should not lose its human face or interpersonal skills, technology creates the need for different skills as people shift from administrative work to the service delivery model and more business-focused products. So, changing HR's role could only be successful if internal customers accept it. At Nokia example, where people are very technology-minded, are embracing the use of computers and mobile telephones as a way of working, it might be easier for people to accept that HR is changing, too.

Major changes to most people's working patterns, preferences and work-life balance can not happen quickly. In the short term, technologies can be quite threatening, as people may feel overwhelmed by all the possibilities and changes. Technology may bring pain for most of the organizations during the set-up stage. This requires a considerable input from HR people to plan, design and implement systems more effectively and to determine how each part of the system works.
Accepting technological change, as mentioned before, requires confidence from HR. All too often, HR professionals complain that no one tells them anything, they are not involved in the business decision-making process, or they do not know what the corporate strategy is. Also in this respect, the web helps enormously. As, Rutter explains, web is useful not only for communicating HR information, but also for having more general business information: "There's no excuse for anyone in Nokia not to know what the annual report says, or what the strategic intent of the company is. They're all available on the web, so HR must not fall into the trap of becoming isolationist by accessing only HR-related information. The function also has an obligation to build company knowledge by using the technology that is available to us."
British Telecommunications is one of the world's leading providers of telecommunications services and one of the largest private sector companies in Europe. Its key activities include local, long distance and international telecommunications services, mobile communications, internet services and IT solutions. In his address to the last Annual General Meeting in 2000, CEO of BT, Sir Peter Bonfield, remarks that, if he had to choose a single word to describe what was happening in the global communications industry, it would be transformation.

Having a vision as being the most successful worldwide communications group, transformation could be easily applied to BT's internal context given a recent restructuring into different business units which represent the company's distinguishing international competencies -wireless, data, internet, network and solutions provision. In fact, BT already uses the acronym e-BT to characterize the so-called “e-organization” activities. BT's global future is being determined by a mix of organic growth, strategic partnerships, differentiating capabilities, people and technological advantages. These attributes are also being contributed in transforming how HR is positioned, focused, structured and delivered into the organization. More rapidly in early 2001, e-BT has been translated into e-HR for the function. According to the information taken from HR Commercial Management and Service Excellence Unit, they used BT’s inherent technological capabilities to provide more efficient self-service and reduce costs, but it is also a means of empowering the workforce as part of our mission to attract, develop and retain increasingly scarce talent. The study in BT includes automating transactional activities, gearing HR services towards self-use, and introducing innovations -the e-peopleserve joint venture with Andersen Consulting, a recruitment portal, e-performance reviews, distance learning/development, pay and benefits, etc.

Malcom Cook in BT’s HR Commercial Management and Service Excellence Unit, explains that a small, senior executive, e-HR strategy team has been formed with, for its first agenda, a wide range of priorities:
"The team's challenge is to examine how current e-HR activities fit with BT's corporate strategy and the new business unit structure. And, as there are so many initiatives, prioritization is a big issue. We cannot push everything through we would like, in addition to having to balance cost considerations."

As mentioned in the report of Business Intelligence (2001), the two-person HR Commercial Management and Service Excellence Unit acts as the 'guardian' of HR service excellence - the ultimate aim of e-HR. It is also the crucial link between HR strategy/policy and senior HR professionals at the operational interfaces who advise BT's different businesses. The unit's role includes reviewing the HR services required, defining performance standards, setting outcome-biased performance measures and tracking actual performance. As Cook (2000) says, e-HR has to be guided by the organization's strategic direction, different stakeholder requirements and have beneficial outcomes for line managers and employees as the end customers.

**e-Joint Venture**

The e-peopleserve 50/50 joint venture with Andersen Consulting was announced in June 2000 and launched two months later. Facilitated by PeopleSoft (sample 5.1) support/technology and, eventually, other third parties, it is a significant e-HR innovation with both strategic and operational dimensions. Apart from providing HR services for the organization itself, it offers online solutions to major companies as a separate revenue stream for the business.

e-peopleserve acts as HR's preferred supplier as the delivery mechanism for its self-service model. Delivery performance benchmarks have been set, along with pricing mechanisms linked to volumes or usage, incentives for service excellence. Cook explained that prior to the deal becoming active, contractual arrangements had to be clarified. These included setting up a partner Joint Review Board, drawing up contract review processes and deciding how service performance would be monitored and reported. Performance standards also had to be defined for four areas - priority service items provided, speed, volume and client satisfaction measures. Managing the joint venture also had to be clarified.
Success for BT is regarded as reduced headcount and overheads, along with guaranteed price and performance for HR services and access to partner capabilities for outsourcing and internet development. Cook adds that, they expect e-peopleserve to become an important means of value creation for both BT and Andersen Consulting.

Performance management was a key challenge for HR, following the BT mission to attract, develop and retain talent. Central to the process was the creation of electronic personal profiles for every employee, tied to the capabilities and professional/technical skills which the business requires. Used for development, job deployment and pay/benefits purposes, the profiles had common elements (figure 4.4). The first covers competencies and employee performance, in relation to an individual's contribution and potential for helping to meet the objectives of the business, division, function or unit in which they work. Second, the personal elements of profiles were represented by:

- basic employment details
- recruitment information
- skills
- training records
- aspirations
- mobility
- succession planning

As the examples above show, HR at BT has begun a transformational journey towards e-HR, which was effectively introduced in September 1999.

Self-service has been positively received in providing individuals with the opportunity to access and update personal data through PeopleLine. According to latest figures, over 60,000 hits have been recorded with an estimated reduction of 250,000 calls per annum that were previously made. Second, the graduate recruitment program became completely web-based with, for the year 1999-2000, almost 7500 application forms requested and 1750 completed for 969 vacancies.
This should be a broad statement of how the person has performed with regard to the BT Values, Style and Capabilities, taking into account specific job standards. This can be done at any time and should not be limited to 1 to 1s or annual reviews. It is completed by the line manager, or another contributor who has been given access by the individual. Please limit your narrative to 2000 characters or less.

Figure 2.1: e-Performance review
BT believes e-HR transformation has brought different benefits for the organization as; reduced expense and time spent on HR transactions/administration, enhanced strategic business focus of HR professionals, significant cost reductions in HR service delivery, improved data quality, increased employee productivity, improved employee morale and ownership.

This is an ongoing challenge. Depending on what the e-HR product is, deliberate steps are taken to prepare the organization for its introduction, including pilot testing and evaluation. Sometimes, this approach has involved organization-wide education programs, supported by workshops for HR professionals and line managers.

Considering these results of case studies, the major changes from approaches in Turkish companies is being considered and the survey question on 4.5 was asked to be a guide.
Survey 4.5 a- If your HR function rethought, redesigned or introduced new technologies/software/systems in the last 12 months, what were the major changes, please indicate briefly.

Results were taken out of the main and most frequent responses of the survey respondents. According to most of the respondents the major changes of new technologies/software/systems were as follows:

- Employee on-line absence recording and on-line employee information.
- Payroll analysis and creating a functional database, recording regarded information.
- Introduction of SAP, creation of local website in coming six months.
- Automated performance management and HR systems.
- Wanted and planed to implement manager and employee self-service.
- Implementation of a fully integrated global HR information system.
- Currently in the process of developing and implementing a shared services approach for HR incorporating employee and management self-service through utilization of web technologies.
- MIS for the group bulletin board, including a job vacancies HR system, automatic booking and evaluation system for training, sickness absence monitoring. On-line management handbook.
- Using recruitment systems.
- Introduction of on-line coaching model and web-based induction to the group's career development approach.
b- Please cite the main intended outcome of using new technologies/software/systems.

Results were taken out of the main and most frequent responses of the survey respondents. According to most of the respondents the main intended outcome of using new technologies/software/systems are as below:

- Improved shared services, improved communication, cost savings, simplification.
- HR more focused in strategic issues.
- More efficient HR service delivery, full e-HR functionality, significant cost reductions.
- More effective delivery at less cost, shift emphasis of HR work to more business partner activities.
- Easier access for all, a wider audience.
- Efficiency, cost, consistency, globalization of HR policies.
- Better management information, increase in manager's accountability, less manual processing/duplication.
- Improved service, reduced administrative cost, standardized consistent HR processes, revised operating model for HR incorporating employee and management self-service, improved capacity for strategic HR activities.
- Improved efficiency in HR, possible cost savings, improved service, some responsibilities devolved to line managers, supporting culture change.
- Reduction of administration in the HR department to improve image and to have time to be a partner of the business.

According to these results, the respondents’ view, and the shared experiences on case studies the use of new technologies/software/systems is a challenging process which enables HR to focus more on strategic issues. In order to enable improved shared services and cost savings it is important to prepare the organization for the changes mentioned above (survey 4.5) and plan the most effective model in accordance to the company culture and the goals. The service delivery approaches are explained in section 5 and the web-enabled process thinking is defined in section 6 in order to have an overall understanding.
5. HR SERVICE MODELS AND SERVICE DELIVERY APPROACHES

e-HR application would be necessary to meet the future organizational goals, as these goals are; going through managing by processes- not tasks, improvement of team members, thinking and acting globally, using technology for competitive advantage, outsourcing local admin and investing in HR professionals.

Figure 5.1 HR Model – The Future

This model was found out by considering the main functions and needs of both HR professionals and the employees. The case studies of experienced companies which are mentioned in this study and the interviews made with the survey respondents and the HR conference of Squire (2001) all guided in figuring out such a future model. The flow chart is given in figure 5.2 in order to describe how such a system can work.

With building effective models HR will be able to double outputs, give better and faster service with the same resources and budgets. In order to understand the model, the important points of a service center is being mentioned below:
The Objectives of HR Service Center (Squire, 2001)

- Internationalization of HR
  - Delivery of consistent service
  - Faster HR process harmonization
  - Encourages cross-country culture
- Improved HR Efficiency
- Improved Customer Service
  - Reduces workload for managers
- Use of Technology

The service center is for enabling a centralized service for managers and employees, centralized operation for the HR processes, use of web enabled e-solutions, call center telephony and case tracking tool.

Figure 5.2 Flow chart of how the Service Center Works
Although this study’s main aim to identify the changes of HR by the use of technology and facts of e-HR specifically on recruitment and selection, training and learning, productivity effectiveness, the points below may all be included in the system and could be considered in a wider perspective.

**Transactions**

Professional Careers  
Skill Assessment  
e-Learning Opportunities  
Job Positioning  
e-Management Development

Road Maps  
Development Plans  
HR Information  
Business Information  
e-Knowledge (workroom, team room, etc.)

In all these applications as mentioned and proved by case studies and survey results in section 4, company expectations and goals has a major importance. This is also true in designing a model for future.

5.1 **Building an effective service model should be guided by a broad e-HR vision with complementary goals.**

Although web-enabled process implementation (as mentioned before on section 4.2) can have significant HR function and business benefits as eliminating waste, cost reductions, speed, more efficient resourcing, greater productivity and value-added services, when it comes to building and implementing a service delivery model as a part of this process, companies have to be careful in choosing the right solution. There are, of course, many advantages of doing so, but difficulties too—long competition timescales, high funding requirements and significant change issues can be given as three of these. An effective service delivery model has to meet the needs of managers, employees and HR professionals, it has to rationalize, simplify and standardize the HR processes within an alignment of core business (Brandman, Watson Wyatt, 2000).
Depending on what an organization wishes to achieve, some fundamental issues need to be addressed. What services, which means of delivery, which customer groups and what forms of technology/applications are the four key questions to ask.

Levels of access and end-user receptiveness are also important considerations. Apart from a review of current service delivery practices, the each step for their effectiveness should be measured/evaluated. Usage, service failures and customer satisfaction could be taken as the key metrics for this purpose.

Developments in e-HR are envisioned as an integrated process called “employee life cycle management” (Ashton, 2001) under which personal information, shopping, home help and lifestyle services will soon complement HR transaction processing. With these developments, HR services are more effectively processed and the function's professionals appear able to add more value through strategic consultancy around difficult people issues such as, workforce modeling, performance optimization, resource planning and leadership development.

Sample 5.1 e-Service Delivery System: PeopleSoft (www.peoplesoft.com)
Despite the attractions of these HR service delivery models, they are usually initially expensive, take two to three years to develop, have major pitfalls for the unwary and require significant technological and workforce transitions. Considering these situations, for some organizations, simpler routes to better - not necessarily “world-class” - HR services and delivery may meet requirements and resources just as well. Technologies enable the most beneficial improvements if the HR function is clear on the services it wishes to provide and how they are best delivered. For most of the organizations this requires a fundamental rethinking of current practices.

With regard to HR/payroll system improvements, the Watson Wyatt Worldwide\(^8\) 2000 survey report (*The Net Effect*), found that almost 50 per cent of initiatives were biased towards self-service.

The 2000 HR Survey Report of Hunter Group, indicates five objectives for HR self-service initiatives from 342 organizations:

- improved services to employees/managers
- eliminating unnecessary process steps
- reducing administrative costs
- enabling strategic HR guidance
- increasing information access

Taking these trends and developments into account, there may be some main elements to be considered by the organization such as, the principles and parameters of service delivery; how service delivery models are conceptualized, designed, built and deployed; and developments in the use of HR service centers.

Participant companies who attended this study’s survey (listing available on section 1.2) argue on the significant shift in the trend of using technology – enabled services. What do they see is, an

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\(^8\)Watson Wyatt is a global consulting firm. They provide consulting services in the areas of employee benefits, human resources technologies, and human capital management.
increased willing to use web-enabled services among the employees. This willingness of employees, is a significant internal driver of web-enabled service delivery, according to Anthony Bruce (2000), management consultant in PriceWaterhouseCoopers global HR solutions team. According to Bruce, it is leading some companies through service delivery models to deliberately increase their knowledge of employee needs and personalize their experience of the organization, he suggests that, "with talented people in scarce supply and as their value increases, so do individuals' expectations of the work experience. They want more choice and flexibility in the services offered, in return for tougher work or longer hours -even to the point of requesting concierge facilities and shopping deals with third-party organizations. The ultimate vision is a business-to-employee (B2E) portal (Ashton, 2000), a customized, personalized, ever-changing mix of news, resources, applications and e-commerce options that becomes the desktop destination for everyone in the organization -and, of course, the primary vehicle by which people do their work."

Although this is a right point of view, however, an organization does not have to go as far as a complete model since this depends on the ambition and circumstances. When web-enabled HR services being used - or are going to be used, it could be better to start with small projects, moving step by step, and get the basics right. On this process first as a new medium will be introduced, the principles of employee communication may have to be reviewed, and second, initial investments will have to be continued for improvements, overcoming service failures, system problems, etc.

After giving a brief definition and the points of building a new model, there are again some knowledge sharing reports and case studies given for supporting the ideas on this section. These were also helpful in finding out a correlation of the statements made within this section. Also survey measures made and measures of European studies are being compared by this way.
5.2 Case Reports: Service Delivery Parameters

Case Report of Kraft Foods
(Ashton C., e-HR: Transforming the HR Function, Business Intelligence 2001, p.51)

In the early 1990s, as Kraft Foods has committed to re-engineering the HR and payroll functions of the Kraft and General Foods organizations, and HR planned to identify self-service as a key component of its employee services delivery strategy. Worked with Watson Wyatt as partners, they made a study for allowing employees to execute basic HR-related transactions.

According to the report results of Business Intelligence (2001), this very simple first step towards e-HR was well received, especially since users accessed their own information quickly and easily. But it begged to evolve into something more. In 1996, Karen Isaacson, director of HR information and Mike Kelly, HR systems manager, were put together a proposal to launch a more efficient, elaborate self-service vehicle—an HR intranet site.

The employee services delivery consultant at Watson Wyatt explains that, lots of companies head down the path of building self-service applications for employees to get direct access to HR information and transactions. However, not many have done that with an overriding service delivery strategy in mind—they've done it more in a smokestack fashion. But, Kraft Foods was aware from the start that an integrated HR intranet site would provide services that fit into its overall HR scheme, and could evolve as that strategy evolved.

Isaacson mentions that with several different intranet sites throughout Kraft Foods, it made sense to create one specifically for HR that would pull many services into one location, enabling employees to view salary details, transactions or other information from their desktop. This was thought as something more practical, more cost-effective and much more user-friendly than their previous efforts.
Kraft Foods' HR Online was launched to 5000 employees in headquarter locations in 1996 and has been expanded to its 13,000 salaried population. Designed as a comprehensive HR site, it provided on-line documents like policies, handbooks, cafeteria menus, contact lists for additional information and basic transactions. Through this site, employees can view and change their own information out of the corporate mainframe database.

In addition, the HR Online service customized all information. After logging on with a secure code, users are provided with personalized data specific to their region, business area and individual location. Even the menus for the cafeteria are personalized.

Joanne Armenio, director, benefits, communication, implementation and compliance mentions (2000) that HR Online today is very different than when it was launched. Success was partially derived from their HR Intranet Council, who was focused on maintaining consistency. They kept information on Kraft Foods' sites up to date and made sure there was buy-in and ownership through its growth.

These are very important points in having the right results from an intranet site. A key learning is that the initiative was not just a systems project or an HR project, or anyone area's sole responsibility. The study of Kraft Foods company is a good example in realizing that delivering self-service to employees is a coordinated effort, and it should be approached on an enterprise-wide basis. If there is true communication and team working, an intranet site can be a very valuable HR tool (survey 5.1).
**Case Report of Oracle Corporation**

(Ashton C., e-HR: Transforming the HR Function, Business Intelligence 2001, p.53)

Oracle Corporation started a study for business-to-employee (B2E) transformation. Finding the most qualified, talented people for a continuous Oracle Corporation success, especially in the age of the internet workforce, was managed as an important HR challenge for the company. So too is structuring and delivering the right compensation, benefits and retention strategies and equipping a highly diverse workforce with the tools and information they need to be as productive and satisfied as possible.

In addition to these challenges, the HR organization has to control costs, quickly induct new employees so they become immediately productive - as mentioned on the report of Business Intelligence (2001), over 200 are hired each week in the US alone - and provide leadership/program design that has the greatest overall impact on the company's bottom line. Senior Vice President HR, Joyce Westerdahl (1999), explains that they had to strive for excellence in recruiting and staffing, training, compensation, benefits and international workforce management. Therefore, they planned to automate the routine, necessary non-value-added functions to the greatest extent possible, so they could leverage HR expertise in more meaningful ways.

Oracle Corporation used the so-called “B2E” solutions that Business-to-Employee relationship. Like many rapidly growing global organizations, there were numerous local, disparate HR systems, making program management on a global level complex and time-consuming. So, in partnership with Oracle's HRMS software (sample 5.2) development organization, HR began its B2E transformation as a process of continuous improvement.

There were several objectives:
- delivering 100 per cent internet-based self-service tools for all managers and employees
- automating virtually every routine transaction via self-service and workflow technology
- empowering managers with tools to improve people-related decision-making
- reducing administration costs to contribute to growing profit margins
- decreasing the ratios of HR administrative staff to employees
- changing the HR focus from administration to program design, management and consulting.
According to Westerdahl, the HR organization devised a deliberate B2E strategy - it is a business imperative at Oracle, with several elements to achieve these objectives.

Examples being rolled-out included:

- internet-based HR solutions, allowing "24 x 7" access with only a browser
- self-service everywhere, including complete integration with rules-based workforce processing (that is, automated business process management)
- single instance implementation to improve a global view and the management of global workforce program - via one worldwide system or database.

As mentioned in this study report, through self-service, employees could be able to update their personal information, automatically route approval requests and inform those who need to know. In addition, they could apply for training, update their competency profile to reflect that training, identify other appropriate experiences or certifications achieved and express their career interests and preferences. Also, e-HR solutions will enable them to review/apply for internal jobs, inform managers about their professional development opportunities and even indicate what work environment they prefer to encourage loyalty. Similarly, managers could be notified via workflow of the authorizations they must make and people-related actions to be taken.
On the other hand, as in order to have consistent data worldwide for workforce management issues that is to say, headcount, termination analysis, employee categorization, job definition, compensation levels, etc.-all local sites are asked to upload this information to a global reporting database every night.

Currently, such arrangements appeal primarily to smaller companies (the largest companies often develop their own dedicated software), but the bigger players may find hosted applications more attractive as more integration is introduced (Mott, 2001).

Considering the case experiences above, difficult choices may face an organization keen to develop more web-enabled means of delivering HR services. The respondents of the survey question below gives a clear view of how technology is being integrated within the functions of HR.

Survey 5.1 "The adoption of new technologies/software and systems is having significant internal impacts on how the HR function is organized and staffed." Please indicate agreement/disagreement with this statement.

From the answers of the respondents the poll results of this question was as below:
(Scale 1-5, 1= agree strongly, 5=disagree strongly / Nil replies, 4:40 replied to the question)

```
1  25%
2  55%
3  12.5%
4  5%
5  2.5%
```

According to the responses, most of companies agree on the point that adoption of new technologies/software and systems is having significant internal impacts on how the HR function is organized and staffed. However there are respondents that do not agree on this point. When the following survey questions (5.2) are taken in to account, the situation may be considered as they may not using the system effectively or even more strong possibility they could not give the right choices during the implementation phase.
Survey 5.2 a- Considering the most recent changes to HR technologies/software/systems, even if more than a year ago, how effective has implementation been in relation to the function's objectives?

From the answers of the respondents the poll results of this question was as below:

(Scale 1-5, 1 = very effective, 5 = not at all effective / Nil replies, 14;30 replied to the question)

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<tr>
<th>Scale</th>
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<tbody>
<tr>
<td>1</td>
<td>6.6%</td>
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<td>2</td>
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<td>3</td>
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<td>5</td>
<td>3.3%</td>
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b- If less than effective, please list the most significant difficulties or barriers.

Results were taken out of the main and most frequent responses of the survey respondents. According to most of the respondents the most significant difficulties or barriers on effectiveness are as follows:

- Unreliable technology
- Change management, communication to employees.
- Getting staff used to the new system and technical problems transferring data.
- Current HR should have utilized the opportunity to challenge/re-think HR processes.
- Rapid change in other parts of the business and expectations upon implementation of HR software is pressuring the users of this new system
- Fining the right compatible system - expensive and takes long time
- Information entry and software knowledge of HR people
- Significant problems with the customization of systems
- Lack of business manager support and commitment to the new ideas
As seen from the survey results (survey 5.1-5.2) and the company case studies, having a broad e-HR vision with complementary goals is an important fact for building an effective service model. Depending on what an organization wishes to achieve, some fundamental issues need to be rethought. Also, coordination, willingness to work -from each employee to managers, process development, awareness of company goals and planned operations have important roles in this effectiveness.

Before building a service model, the effectiveness of current HR service delivery methods has to be reviewed and the points that need to be improved have to be listed. The adopters must be aware of what new service delivery channels and methods are required to improve from the current one, and what the organization wishes to achieve out of this service. Controlling the effectiveness is an ongoing process that starts before the implementation and continues after it. It is also important to control what kind of evaluations on effectiveness occurred after the implementation (survey 5.3).

If these factors were taking into consideration, as seen, the difficulties or the barriers—both during and after the implementation process—could decrease, and this will also have positive impacts on decreasing money and time spent for the process.

It is important to have knowledge about service delivery models especially in the evolutionary stage. This point is being mentioned by the guidance of case reports (5.3) below. Also survey respondents gave important information on the importance given to the evolution of the system in terms of effectiveness.
5.3 Case Reports: Service Delivery Models

Case Report of Ford Europe – A Global Model

(Ashton C., e-HR: Transforming the HR Function, Business Intelligence 2001, p.56)

Ford Motor Company's service delivery model was deriving from an overall e-business strategy, enabled by a global platform called HR Online, as described in the case report accompanying section 4.5. This is a web-enabled service for employees and line/operating managers to conduct transactions and view their own personal details or HR information from a single source on the corporate intranet. Although access was limited to approximately 80,000 white-collar workers in US, UK and Germany, it could potentially be used by all 37,000 employees in over 200 countries.

The design phase included benchmarking with global businesses such as IBM, contributions from internal focus groups and widespread testing of the HR Online site. Also, a deliberate marketing and communication plan was introduced six months before launch and continues to build awareness. These were important issues in making the system effective and decreasing the user barriers. Notably Ford project team mentioned that, concept to launch was achieved in less than four months.

The project team continually reviews HR Online's eight key content areas - benefits, pay, personal files, life events, a manager's toolbox, etc - and the site currently attracts a weekly average of 10,000 unique users, irrespective of location, function, gender or age. So, the project as a result of having a marketing and communication plan, has overcome the “cultural” barrier.

HR Online mission was to deliver superior customer satisfaction and value. Effectiveness is rigorously measured through sets of some “key metrics” such as usage, penetration and the top ten items accessed. Whereas satisfaction is evaluated by internal customer surveys, focus group response and electronic/voice feedback. The surveys help the team to upgrade the system for more effective usage. On this respect HR Online project leader, Steve Nolan, in the UK says that in addition, system response times, user likes and dislikes and feature/functionality effectiveness, were all measured. The best performance indicator they have was the user opinions.
Case Report of BP – Putting “myHR” into Service
(Ashton C., e-HR: Transforming the HR Function, Business Intelligence 2001, p.57)

Launched in April 2000, BP's myHR.net, jointly designed and implemented. It is a global platform for HR. As a global model, it was realized, the model should have the five applications below:

- total compensation services
- organization and people development
- workforce planning and resourcing
- employee data management
- other HR services, including strategy, employee relations, vendor management, etc.

However, as mentioned by the project team, myHR serves as an employee's own, highly personalized portal; for their direct management of work-related experiences and opportunities. Compensation, benefits, performance management, job details, promotions, career development, life events and community interactions were all self-serviced with client service center support. The global delivery manager e-HR, at BP, David Latin (2000) describes the system as, “a one-stop HR shop for both employees and managers.”

He also adds that, the initiative has provided a focal point for action around continual HR process re-engineering and standardization. In consultation with an executive steering committee of HR vice presidents, business and digital business representatives, Latin describes his role over time as getting myHR up and running, focusing on customer issues and guiding HR's process migration to standardized global solutions.

BP's aim was as a complete transformation of HR, requiring both visioning and change management and e-HR was the core to its strategic transformation of HR services.

The case studies above also show that service delivery requires careful considerations. Since, HR services are being redefined the limitations of existing HR service has to be taken into account. The vision for service delivery has to be shaped –HR alone, or with others. Decisions regarding
the internal and/or external partners of building the model or new development, the potential HR process impacts, and the core technological considerations have to be made. Identifying the benefits that would result from the development for the HR function is also an important point in the project planning process.

One other point is to think about the staff who lack computer skills and have limited access to office facilities face further problems. Some companies have almost half of their employees that have never used a PC, and also some of the employees don’t have a desk. These kind of problems will solved by installing computer booths in the staff areas and by training employees to use them.

By no means, e-HR innovations generally, and service delivery in particular, usually cause a fundamental rethinking of core HR processes, in addition to a clearer view of the distinctions that have to be made between core and support processes. With the innovations on technology and the speed of new era, doing things in the old way does not make sense anymore. For today, and for the future, e-HR may be the trigger for HR process transformation.

The responses to the survey question below (5.3) gives an idea on how much importance is given to fundamental rethinking of core HR processes and on evaluation of these processes with in the Turkish companies that are using -or started to use- technology on HR. The responses are also helpful in making a comparison on the results of case studies.
Survey 5.3  a- Have HR technologies/software/systems regularly reviewed and evaluated in terms of effectiveness.

From the answers of the respondents the poll results of this question was as below:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No reply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>61%</td>
<td>34%</td>
<td>5%</td>
</tr>
</tbody>
</table>

b- If yes, approximately how frequently?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing</td>
<td>6</td>
</tr>
<tr>
<td>Monthly and weekly</td>
<td>8</td>
</tr>
<tr>
<td>Fornightly</td>
<td>1</td>
</tr>
<tr>
<td>Every 2-6 months</td>
<td>1</td>
</tr>
<tr>
<td>Quarterly</td>
<td>1</td>
</tr>
<tr>
<td>2-3 times a year</td>
<td>1</td>
</tr>
<tr>
<td>Twice yearly</td>
<td>1</td>
</tr>
<tr>
<td>Annually</td>
<td>12</td>
</tr>
<tr>
<td>When needed</td>
<td>7</td>
</tr>
<tr>
<td>Implementation phase</td>
<td>3</td>
</tr>
<tr>
<td>Too early to comment</td>
<td>2</td>
</tr>
<tr>
<td>No reply</td>
<td>1</td>
</tr>
</tbody>
</table>
c- Who is/are involved in these reviews?

Results were taken out of the main and most frequent responses of the survey respondents. According to most of the respondents the involved persons in reviewing the system are:

- HR director/manager
- Other HR staff
- IT/systems/director/manager
- Other IT/systems staff
- Project manager
- Project management personnel
- External consultant firm

d- If no, are you planning to evaluate this?

From the answers of the respondents the poll results of this question was as below:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>No reply</th>
</tr>
</thead>
<tbody>
<tr>
<td>82%</td>
<td>4%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Depending on what an organization wishes to achieve, HR technologies/software/systems regularly has to be reviewed and evaluated in terms of effectiveness, in order to understand if there is any function to be rethought or redesigned. Even though within a perfectly planned implementation process, there may be some fundamental issues need to be rethought. Again coordination, willingness to work -from each employee to managers, process development, awareness of company goals and planed operations have important roles.
Before and after building a service model, reviewing the effectiveness of HR service delivery methods has important impacts on achievement, improvement, and of course on the money and time spent. As also seen from the survey 5.3, today most of the adopters are aware of this continuous process of controlling the effectiveness.

Since all the possibilities and difficulties are being thought, e-HR sometimes seems like not an easy way. Shifting to a new service model involves fundamental changes in HR, impacting on everything the HR does (mentioned above in case reports). Though technologies enable different ways of doing things, e-HR is a long process that needs to be focused on specific areas in order have results (table 5.1).

The innovations and the speed of today’s world make e-HR necessary in a way. However, it is not right to think doing something “electronically” will solve everything. If the first step of the process is right and the process is taken seriously, during and after the following steps, the so called “e” - as shown with the case reports, will help in achieving goals faster and better.
### Table 5.1 e-HR services at a glance
(e-Human Resources Solutions, IBM Article, 2001)

<table>
<thead>
<tr>
<th>Focus area</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Define e-HR strategy</strong></td>
<td>Understand how the current or future business strategy can be best supported by an e-HR strategy</td>
</tr>
<tr>
<td>“What should I do about the internet for HR?”</td>
<td>Understand how the e-HR strategy will impact organization, processes and HR system requirements</td>
</tr>
<tr>
<td></td>
<td>Understand the HR practices required to support the e-HR strategy</td>
</tr>
<tr>
<td></td>
<td>Indicate ROI and business case for change, evaluate readiness for change</td>
</tr>
<tr>
<td></td>
<td><strong>Define Roadmap for transformation</strong></td>
</tr>
<tr>
<td><strong>Redesign HR</strong></td>
<td>Understand potential benefits of moving to an e-HR model</td>
</tr>
<tr>
<td>“How can I address my HR issues using e-HR” e.g.</td>
<td><strong>Identify where to begin within the process and organization</strong></td>
</tr>
<tr>
<td>- <em>Increase service levels</em></td>
<td><strong>Determine which best practices apply</strong></td>
</tr>
<tr>
<td>- <em>Free up HR for strategic work</em></td>
<td><strong>Assess impact on existing systems and business processes and organization</strong></td>
</tr>
<tr>
<td>- <em>Empower employees</em></td>
<td><strong>Select which e-HR tools to use</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Build business case for change, evaluate readiness</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Define Roadmap for transformation</strong></td>
</tr>
<tr>
<td>Focus area</td>
<td>Results</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Merge HR</strong></td>
<td>Define how e-HR tools can create an integrated e-HR solution for a company with disparate business and systems</td>
</tr>
<tr>
<td></td>
<td>Understand the impact on process and organization</td>
</tr>
<tr>
<td></td>
<td>Select which e-HR tools to use</td>
</tr>
<tr>
<td></td>
<td>Build high level transition plan</td>
</tr>
<tr>
<td></td>
<td>Build a business case</td>
</tr>
<tr>
<td></td>
<td>Roadmap for transformation</td>
</tr>
<tr>
<td><strong>Streamline with e-HR</strong></td>
<td>Understand potential benefits of using e-HR to reduce administration</td>
</tr>
<tr>
<td></td>
<td>Determine which best practices apply</td>
</tr>
<tr>
<td></td>
<td>Assess impact on existing systems and business processes and organization</td>
</tr>
<tr>
<td></td>
<td>Select which e-HR tool to use</td>
</tr>
<tr>
<td></td>
<td>Build business case for a change, evaluate readiness</td>
</tr>
<tr>
<td></td>
<td>Define roadmap for transformation</td>
</tr>
</tbody>
</table>

Move to e-HR to increase service, add value and reduce cost
(extract of e-Human Resources Solutions, IBM Article, 2001)
6. WEB-ENABLED HR PROCESS THINKING

As mentioned and described in sections above, web-enabled process implementation can have significant HR function and business benefits. Eliminating waste, cost reductions, speed, more efficient resourcing, greater productivity, and value-added services are some of these benefits mentioned. The opportunity of technology is to enable a complete rethinking of an HR process. The process thinking focuses efforts on outcomes, results and, often, high impact practices.

According to the *e-HR: A Survey of Corporate Trends* (2000), of 91 organizations in the survey, 20% said their e-HR developments had process improvement goals, compared with 35% systems issues and 28% administration/basic transactions. 11% of respondents reported the use of process re-engineering teams and 23% project management teams -the latter is often used for process implementation and is generally one of the new skill sets that HR professionals need to acquire. However, when the question comes to note the specific innovations they would like to see introduced in the future, almost one-third cited new HR process orientations.

On current activities, apart from improving administration and reporting, the main process improvement impacts of e-HR were as follows (*e-HR: A Survey of Corporate Trends, Business Intelligence, 2000*):

- recruitment and selection (88%)
- learning, education and training (85%)
- job/competencies/skills applications (68%)
- performance management and appraisal (65%)
- employee relationships/communication (63%)
- rewards, compensation and benefits (57%)
- workforce planning (45%)

As seen from this survey results and also from the surveys made with some Turkish and multinational companies (survey 4.2 and 4.4) currently, among other activities, the main e-HR improvements are on recruitment/selection, and training/learning functions of HR.
For having a continuous improvement, as all companies major goal, on these functions (as well as others) process rethinking comes into consideration. In accordance with this idea the statement below is proven by the guidance of case studies and relative survey responses.

6.1 Without at least basic process expertise, the HR bar of performance improvement is unlikely to shift upwards.

e-HR can help build a stronger process orientation in HR to tackle specific challenges more effectively and, in consequence, produce significant performance improvements.

Two sets of challenges will be mentioned as the main elements of this section - how technologies improve the process and its outputs in:
- resourcing, recruitment and rewards
- learning, training and development.

Significant shifts will have to be made by more functionally biased HR units, along with major professional adjustments, especially in mindset. After all, e-enabled process thinking aligns to the goal of most success-oriented organizations - business effectiveness, enabled by continuous or, sometimes, breakthrough improvement built on new technologies (Ashton, 2001).

For multinational and most national -Turkish companies, e-HR developments are becoming more insistent, with some significant impacts on the organization, HR processes and the workplace. As it is explained in the Strategic HR Report (2000), e-HR is enabling flatter structures, greater organizational transparency, more participative management styles and, as a consequence, a process-focused, less bureaucratic function. However, e-HR improvements also raise the expectations from others in the organization. So, as a result the function has to understand how applications can be best deployed, to what purpose and the effects on integrated service provision.

A wider HR process perspective, explained in the Business Intelligence conference, Web-Enabling HR (2000), that to be successful an e-HR initiative must be based on an elegant blend of people, process, technology and strategy. It was also noted that, HR cannot simply automate an existing
process, by using the web or intranet effectively. The changeover requires a complete rethinking of the process, its assumptions and outcomes. Most importantly, it implies an empowerment of users to obtain and use information within system-defined parameters.

For example, if we take the electronic applications, - when resumes come in electronically to a database, the selection emphasis shifts from initial reviewing, screening and sorting towards a vacancy-related search based on selection criteria (see sample 4.6 of Doğuş Holding). This process typically takes HR staff entirely out of the loop - in this example, their role shifts to monitoring and intervening to provide consulting assistance for, managers etc.

In transforming to a web-enabled service delivery model, the major steps were explained in the notes of Web-Enabling HR Conference (Business Intelligence, 2000) as analysis/readiness, HR process redesign, building the service delivery/technology infrastructure and only then, self-service delivery itself. According to these information, it seems that the important question is how to use e-HR as a competitive weapon. Considering this point, a crucial HR issue is to decide how alignment between people, process, technology and strategy is articulated and achieved. This will help in shaping a new process-oriented function but also engage its practitioners. A key task on this point is to design, implement and centrally manage an HR process model - guided by a process vision of what HR wants to, or has to, become - which supports the overall strategy. Now, HR should see itself as a customer-focused, internal process consultancy firm. Its challenge must be create the best service with value-adding HR processes.

According to Transforming the HR Function Report (2001), Dr. John Sullivan, professor at San Francisco University, explains that:
“By combining technology and process thinking, e-HR is not solving the same problems in the same way, just without paper. It helps professionals address new problems and make better decisions closer to the customer - that is, managers and employees - around clusters of HR services. In these scenarios, HR assumes the role of an electronic consultant or coach.”
Considering these views, tied generally as they are to business effectiveness and competitive advantage by mobilizing people and system capabilities, a process-orientation is a definable HR asset or capability.

Case reports below will help in having an idea of how the HR bar of performance improvement can be raised to far higher levels in resourcing and training functions.

6.2 Case Report: e-Resourcing

**Case Report of American Express – Re-engineering for Electronic Recruitment**  
(C. Ashton, e-HR: Transforming the HR Function, Business Intelligence 2001, p.78)

In 1997, recruitment at American Express was stretching the HR function to the limit. Supported by a dated mainframe application, which required intensive coding and specialist computer programming skills. In addition, applications, approvals, offers and contract production were all paper-based. Processes were poorly defined and lacked controls. Yet, at the time, the business was committed to a 30% year-on-year growth rate. As American Express director of process re-engineering HR, Stelios Milonakis explained: “The recruitment process was resource intensive and administratively challenging. The function was constantly chasing work and targets in order to close service delivery gaps. Clearly, instead of trying to be administrative experts, professionals needed to become process experts to improve performance.”

To deliver a more effective recruitment service, customer feedback with line and business managers was sought which began a process transformation to create value for internal clients -but as they perceived it. Following HR function re-engineering and new project management/IT skilling in 1998, *EuroTrack Online* was designed, developed and implemented in 1999. It was a Lotus Notes recruitment platform, complemented by an employee data records system from PeopleSoft. Milonakis was leader of the re-engineering initiative, and as he explained they sought to implement an integrated, seamless end-to-end process for recruitment and eliminate non-value adding administration. Technology was the critical enabler of the project. Using client-server technology, the on-line system had three main elements:
1. **Requisition and approval.** Line managers register vacancies and gain the necessary approvals to replace staff or create additional positions.

2. **Job posting and application.** Positions are notified internally and applications are made on-line, followed by interview and selection.

3. **Offer and contract.** Collect candidate details, generate offer, produce a contract and register the new hire on the existing PeopleSoft software system.

Asked to consider the improvements from the initiative, Milonakis cites both financial and process outputs. For example, not counting the salary packages of HR people involved, around US$95,000 of hard savings were achieved while the US$18 cost of sending an offer package has been halved. The net technology investment was US$25,000. But, according a significant outcome has been to almost double staffing volumes with no increase in HR headcount:

“Before the new system, 1700 staffing requests a year were handled, but now around 3000 are processed with fewer staff and greater data accuracy. Tedious administration has been removed from the HR role, while call volumes for queries have dramatically reduced. This is very much in line with what the business and HR requires, enabling the function to begin adding value by focusing more on providing expert subject matter advice.”

Specific outcomes comparing 1997 and 1999 also mentioned as including:

- a 35% reduction in the time taken to fill a position -from an average eight weeks to five weeks
- reduced contract production times by 85% -from an average of two weeks to 48 hours
- almost doubling compliance, or completeness of documentation -from 50% to 90%
- increased HR job satisfaction for eliminating unnecessary practices and giving professionals a feeling of accomplishment -levels are now up to 70% -plus satisfaction
- stakeholder satisfaction for finding information on job opportunities has improved from 65% to 8-4%.

Noting that line managers also have a smarter process and real-time MIS reports, Stelios Milonakis expresses that the re-engineering of recruitment has been a “win-win” story:
"We had to bridge the recruitment service gap which was welcomed both by the business and HR. The enabler was a more user-friendly tool based on current technology that interacts well with users."

But there also have been some difficulties during the process. Among others, changing employee mindsets to accept the new process, getting buy-in to system solutions which rarely work perfectly the first time round and the steep learning curve that HR had to go through to keep pace, or even to say no to internal customer requirements in the business, can be mentioned as three such challenging ones. Milonakis, on this point adds that the readiness of HR professionals to embrace technology and apply it to work was one of the key determinants of e-HR and its relevance for the future. In this respect, HR faced the burning platform scenario -given technological advances, the function has no option but to change.

A central learning from this organizations' experience above is that it rethink basic processes and then decided how technology could be deployed to achieve greater process effectiveness. Though driven by inefficiencies, slow execution etc., the organization at the end experienced some of the benefits noted in the beginning of this section – cost, speed, higher end-user satisfaction, better resource usage, business alignment and recognizing new opportunities/applications once the process was redesigned and rolled-out. On the other hand, making shifts to these proportions is not an easy thing, it requires a revisiting of some process fundamentals in HR. According to Ashton (2001), a key point of process thinking for resourcing is to make a clear distinction between core and support processes which will differ between organizations according to their circumstances. This will also may be helpful in determining how technologies as enablers and tools aid effective process management.

Besides recruitment, as mentioned at the beginning of section 6, training and learning is a function in improvement by the use of technology as well. There is a transformation in training as it becomes from something provided for employees to an employee initiate, something that employees can able to have when needed. The case report below (6.3) is used as a guide in proving and defining this idea and to give a further perspective about "e" studies.
6.3 Case Report: From Training to e-Learning

Case Report of Manpower Plc – e-Learning
(C. Ashton, e-HR: Transforming the HR Function, Business Intelligence 2001, p.87)

Director at Manpower Plc., Daniel Kasmir, HR, has worked in HR, he has seen a major shift from bureaucracy, paper-intensive HR processes and manual transactions to electronically enabled service delivery. Although e-mail, intranets and HR portals have allowed HR to shed its administrative shackles, this transformation had a deeper study. According to Kasmir, after the new HR processes had been introduced, the growth and development of people facilitated.

In the HR of tomorrow, more time will be spent on coaching, learning and training, which puts these issues at the center of the strategic HR professional's role.

Kasmir believes there are different drivers from a business and employee perspective as, employee knowledge as a primary business asset, competitive advantage, high staff turnover, constant reskilling and personal advancement.

On the other hand, there is also a technological perspective. As more individuals become e-literate, enabled by constant technological innovation, there is continual pressure on professionals to update skills to keep abreast of technological change. As Kasmir said, because of these prevailing factors, training methodologies became very important, more than ever before.

Manpower plc. has adopted web-based learning with around 2000 programs, currently provided by intranet from its global learning center. Kasmir mentions that now, their e-learning is mainly for developing technical expertise, which is an acceptable way to deliver training for IT-based skills. He continues that it was less effective for behavioral learning but, as technology advances, the opportunity to move in that direction will increase. The next wave of telephonic capability will enable training departments to deliver courses in more cost-effective ways and to much wider audiences.
Generally, Kasmir suggests web-based learning has advantages, as being highly interactive, instructionally engaging, easily updatable, inexpensive for undertaking courses.

He also acknowledges that there is also a downside: "However, the initial hardware set-up costs are high. Also, web-based learning can be intimidating and confusing and requires students and teachers to be technologically adept. Any limited ability of users will have to be developed to navigate the exploding universe of information on the Internet. And, as web-based tools become more powerful, HR needs to think creatively to exploit this learning medium to enhance their productivity."

The main barrier, he adds, occurs especially in situations where training is only really effective face-to-face—as with improving interpersonal skills, for example. Given his point above concerning training scrutiny, deciding on key performance indicators for e-learning is crucial and should include cost, audience, accessibility, volume, skills usage and productivity criteria. Kasmir mentions that the opportunity cost is, however, more important.

"What would happen if HR did not improve its training services offerings using the educational power of web-based methods? Although its full potential has yet to be realized, choices between traditional and e-methods will need to be made on a case-by-case basis."

According to the experience of Manpower plc in the case report new interpretations of learning processes are emerging and these are guided by rapid advancements in technology such as highly personalized interactive content, innovative solutions, real-time content updates, virtual learning networks, massive reach, personal ownership, seamless multilingual delivery, etc. Attitudes to e-learning will be and already is an essential consideration too.

In the new era, e-learning solutions enable organizations to achieve real measurable results that map to companies business goals (sample 6.1). Therefore it is also important to set company goals and identify the needs before an establishment of such a process. There are always similar kinds of important issues that has to be taken into account before and after the establishment of e-learning as a process. For example with the use of technology in training, the performance expectations
will increase, so, new results or process outcomes have to be set and afterwards it has to be planed how e-learning process will most effectively managed, for the company.

Application of any kind of a new process in HR, requires a rethink of that process in order to have effective solutions. The new “HR technology”, as Sullivan mentioned in IQPC e-HR Conference (2000), will enable HR to act as results-focused, business solutions consultants who are metrics-driven because everything they do will have business impacts.

According to Sullivan (2000) there has to be an advanced process thinking for HR, first as an internally-derived goal but also as a result of the expectations of internal clients will shift to a different phase as an e-HR innovation embeds and reveals its true value.

He suggested that this transformational shift will be guided by different outcomes, expectations or consultancy services in core process areas such as:
- Learning and training: Up to 90% web/intranet-enabled, supported by knowledge databases and simulations -HR 's role is to custom-design learning solutions for key populations such as leaders and top performers.
- Talent retention: The use of real-time surveys and e-mail post-exit surveys to reveal frustrations and forecast which employees are at risk of leaving -HR's role here is to anticipate and respond to those exiting to avoid causing serious business problems.
- Compensation: On-line, instant salary surveys and pay decisions made by managers with benefits being completely outsourced -HR’s role is to continuously rethink total rewards in relation to acquisition, performance and retention issues.
- Employee relations: Expert systems currently being developed will predict potential performance failings, litigation/industrial relations problems and defection signals -HR's role will include risk analysis and assessment to guide the organization through, or away from, potentially damaging scenarios.

Considering all these factors mentioned, it is clear that process rethinking is almost always a continuous impact for e-HR developments. In order to do thing faster, more efficiently, on the least cost, and to provide a higher quality of employee service, organizations now started to turn e-
HR and HR technologies to achieve their most important business objectives. HR departments with the expectation of having these results for the organization, begins the process of looking at technology solutions. With this aim, starts the workings with providers who will educate HR people in order to make them having effective results. On this point process rethinking must take an important role for the HR department and for the organization as whole. Working by teams as mentioned above, may help this achieved. Business objectives, and then the objectives of HR and the employees’ objectives are all have to be considered. It is crucial to have an understanding of the new technology before implementing it takes place and this is not an easy thing to do. There may be some difficulties and barriers (survey 6.1). Process rethinking has an important place in minimizing these difficulties and achieving the objectives.

Sample 6.1 e-learning Solutions
Provider: SkillSoft (www.skillsoft.com)
Survey 6.1 a- What have been or are the main difficulties experienced in implementing web-enabled process on HR functions?

Results were taken out of the main and most frequent responses of the survey respondents. According to most of the respondents the main difficulties experienced in implementing web-enabled process on HR functions were as follows:

- Organizing the needs
- Organizing the management of the process
- Having the talent that has the specific knowledge
- Lack of specification of technological requirements (applicants agree on, most HR people are not technical people and most technical people do not understand HR)
- Information entry and control phase
- Significant problems regarding to process updates, specific changes and system customization
- Getting people to use the new system (as some people resist against changes)

b- According to your experience, what were the reasons of these difficulties?

Results were taken out of the main and most frequent responses of the survey respondents. According to most of the respondents the main reasons of these difficulties were as follows:

- Lack of basic process rethinking (applicants agree on this point as the basic reason)
- Unorganized process management
- Lack of having basic training before the implementation phase
- Lack of specifying the system requirements and empowerment of users
- Unorganized process management
- Undefined needs and unplanned implementation phase
- Lack of internal communication
Survey 6.2 In overview, what were the top three impacts of developments in web-enabled HR processes, HR technologies/software/systems as whole, on the HR function’s practitioners?

Results were taken out of the main and most frequent responses of the survey respondents. According to most of the respondents the top impacts of developments in web-enabled HR processes on the HR function’s practitioners were as follows:

- More impact on the organization, more work done
- More data analysis
- Time saving, effective and simple procedures
- More value adding
- Change in type of work performed, more involvement with the decrease in paper work
- Faster and better service
- Better communication, quicker access to information needed
- Improved access to information
- Rethinking of the processes and evaluating them for having more effective results
- Advanced relational database, internet access, improved security.
7. CONCLUSION

An organization has a variety of structural forms and processes when implementing a strategy. Certain tasks must be accomplished, according to the company’s goals, for the company to have effective results from that strategy. Making a strategy come to life in its day-to-day working, requires a process rethinking and formulation. All these pre-studies make the difference on having effective results, cost savings, increasing efficiency, that is to say the expected out comes from an implementation.

Since the HR function has a transition from an administrative role to a strategic business partnership technological advances have became more important for HR professionals as these advances decreased the role of human resources in maintaining records by allowing HR services to be offered on a self-service basis at substantially less cost than traditional face-to-face services (Greengard, 1998).

Human resources management today, seeks to proactively provide a competitive advantage through the company’s most important asset (Noe et al., 2000), its talent -its human resource. The key achievement expected with the application of an “e-HR” strategy as a new process, also seen from the survey results and case reports which do correlate with each other, is to take paper, unproductive work and outdated workflows out of HR process and support systems which impacts on the HR as a more strategic function for the organization.

There are drivers and expectations behind planning an e-HR strategy for the company. Although these differ depending on the company’s sector, culture, goals etc. basic drivers and expectations are similar for the most. According to a former research made by Business Intelligence (2001), drivers and expected outcomes of e-HR was mentioned as below:
Most important drivers

- Requirement for more effective service delivery to management and staff
- HR function cost control and savings
- Improved HR productivity and performance

Secondary drivers

- Delivery of more strategic HR services
- Internal process re-engineering
- Availability of technologies, software and systems

Most important/desirable expected outcomes

- More effective recruitment and selection
- More efficient employee administration and records
- Better internal management reports

Secondary important areas of expected outcomes

- Rewards, compensation and benefits
- Performance management and appraisal
- Job/competencies/skills matching
- Learning, education and training
- Employee relationships and communication

These findings from the former researches are helpful to find out if the findings from survey - made with the contribution of HR Departments and HR / IT project leaders of 16 companies from Technology, FMCG, Consultancy, Training, Finance, Investment, Automotive sectors- do correlate with each other. Not surprisingly the survey results do correlate on the major points of drivers and expectations of e-HR, as eliminating waste, cost reductions, speed, more efficient resourcing, greater productivity and value-added services.
According to the survey results the most important drivers and expectations of using web technologies along with HR related software and systems, were more effective service delivery, better employee administration and internal management reports, improved productivity, more effective recruitment and selection. The survey participants agreed (almost 80% agree strongly) on the fact that the opportunities of technology cause a significant evaluation and rethinking on such HR service delivery functions (see survey 4.1 & 4.3).

Among the participants, 26% agreed that e-recruitment is has effective results and 22% agreed on e-training is being used effectively (see survey 4.2 & 4.3). Out of these results, surprisingly, cost control and savings were not mentioned in a high level of percentage as one of the most important drivers. This was discussed and agreed by the applicants, as a result of not having a complete transformation to e-HR within the whole organization yet, in Turkish companies. e-HR is a new concept that is being discussed, and most of the Turkish companies prefer going step by step but not changing the whole system. Whereas, also seen from the case reports, some European organizations are completely being transformed their HR functions to e-HR and rethink the services and the way work is done. For such companies cost savings becomes a more important driver as they do change the whole process.

Multinational companies in Turkey, on the other hand, could be taken in a different perspective as they are acting faster in order to establish the same HR standards with their colleagues worldwide, and they have the advantage of using and adopting the “already established systems”. To give an example, Company X which contributed to the survey - is a multinational on FMCG sector - mentions that they have to use the similar systems worldwide and therefore they moved to establishing an e-HR strategy within the whole company and they have established an intranet system for the internal communication and knowledge sharing of all HR groups, worldwide. Company Y, on the other hand, is a national company in the same sector, mentions that they prefer to use technology on some of the HR functions as employee administration and records, they also use internet for recruitment and selection but the overall staff does not have internet access yet.
It is, by case reports, found out that with e-HR managers and employees are becoming more empowered, their productivity improves and, generally, they display increasing satisfaction with innovations. Also survey supports the idea that the service delivery functions of HR shows an improvement and becomes more effective as a result of using a well planned and corporately designed HR technology (see survey 4.4).

The movement to e-HR requires some strategic choices and directions to take (case reports 4.4&4.5). On this point, there appears to be more strategic coherence about HR strategy, policies and practices, and a stronger sense of purpose-all of which are guided by an e-HR vision. This best practice picture is not an easy thing to do, which the rethinking of the overall processing and identifying the company goals are very important stages to be considered.

For around 90% of the companies' contributed to the survey agreed on the point that, delivering e-HR can be difficult as redesigning it brings some major changes (see survey 4.5). There are some interesting points that the companies that have redesigned or introduced new technologies on HR functions, in the last 12 months, mentioned as more important than the e-HR innovation itself:

- the evolutionary aspect; requires up to two or three years to fully deploy a global self-service model.
- tightly managed project approach
- alignment with strategy,
- rethinking of HR processes, cross-functional impacts,
- the management efforts for change

According to the experiences of the project leader in Company Z, which contributed to the survey and is in technology sector, even the best technology can fail. The movement can have painful phases. Launches can be rescheduled, platform shutdowns may occur and milestones can be missed. Often, budgets over-run. Accountabilities and reporting lines usually becomes blurred, especially when top team executives are driving the shift to e-business and e-HR.
Considering these difficulties and the paradoxes mentioned on section 3.1, balances have to be made between conflicting issues, and this often requires HR to make very fine judgements. Organization of the HR functions will have its impacts on the adoption of new technology (see survey 5.1 & 5.2). Managing the “softer” issues leads most organizations into managing expectations – a balance between what is promised and what is actually delivered (Ashton, 2001). Starting to e-HR processes means a movement to a different stage that requires a vision for change, defined goals, defined service delivery parameters, review of current system effectiveness, commitment of CEO and high level executives (case reports 5.2). Prioritizing applications, process redesign and internal employee communication, benchmarking are also important for building successful systems, in most of the organizations (case reports 5.3).

However, according to the results taken from case reports, after the evaluation provided after considering the above points, it is seen that participants have the opportunity to move up a level in their work contributions. HR can be able to provide the consulting, business partner role for internal clients and in turn, can take a more holistic approach to managing HR in their part of the business instead of people management practices being injected into their operations from conventional HR. Chances are that they can also become better managers. Through self-service and related e-HR innovations, employees can also assume much more responsibility for their work destinies (case studies 4.6 & 4.7).

On the other hand, if the facts as cultural differences of organizations with different ambitions, resources and circumstances, the ranges and options of technological solutions, and the unique the people management policies and practices, are being considered there can be no one right way in deciding the implementation of e-HR. Also the organizations’ HR technological efforts plays role on this point. While there are organizations like Nokia (case study 4.6) pushing forward the e-HR boundaries, many others may not prefer struggling with basic system and software issues, as a respondent to the survey carried out for this study said “unfortunately, at this time, e-HR is not a high priority on our list” (see appendix 1).
Deciding whether to use a customized e-HR solution is an area of balance, tied specifically to HR requirements and what the function wants to achieve. A key criteria can be to consider which solution best streamlines administration and transaction processing tasks. In achieving the balance some paradoxes mentioned in section 3.1 may be considered as a guide. HR with the support and commitment of high-level executives has to made judgments regarding on, personal versus electronic interactions, employee/manager work fulfillment and satisfaction, the focus of people management practices, managerial and leadership effectiveness, rapid implementation versus consolidation, legislative and regulatory impacts, the e-working impacts on structure, and best practices in other organizations and benchmark lists (Ashton, 2001).

PricewaterhouseCoopers management consultant in global HR solutions team, Anthony Bruce (Business Intelligence, 2001), believes that while technology will enable current HR service delivery performance requirements, the function must look forward continually to ensure that a platform is being built to satisfy potential requirements in the future.

According to Hewitt Associates (2000), establishing a successful e-HR strategy requires key factors to be considered: “Practitioners will need a clear idea of why they are considering an e-HR innovation, which technologies they should use and how they will be deployed. In these respects, great care is needed. Beyond, however, even in this internet age, managing the emotional impacts of technological change is crucial.”

Although there are some barriers to take over and a lot to be considered, the need of technology can not be disregarded. Along with many complexities and uncertainties around e-HR, it is also supported with the case reports and surveys that establishing a successful system is possible, and e-HR enables improvement on having more effective results out from HR services. So, for being a strong strategic business partner in the future, HR cannot hide from the opportunities or challenges that technology is bringing. As chair of SHRM's HR Technology Management Committee, John Ryder agrees (Business Intelligence, 2001):

“It is the major paradigm shift in HR for many years. We can't turn back the clock, nor resist what is happening. HR has to adjust and learn to manage this new world of technology.”
Suggestions

Depending on the survey responses and the interviews made with the respondents, some suggestions could be given to the HR professionals related to the studies on transforming the HR functions through e-HR.

Most of the Turkish companies' HR departments - among survey contributors - with the expectation of having effective results for the organization, begins the process by looking at technology solutions and trying to adopt the best system by checking out some user references. Also in using the internet based service tools, such as recruitment online companies, they prefer to use the most popular one. Although this is a right way of consideration, there are some main points to be considered as well. Business objectives, for example, and then the objectives of HR and the objectives employees are all have to be considered. It is crucial to have an understanding of the new technology before any kind of implementation takes place. One other point is to think about the staff who lack computer skills and have limited access to office facilities face further problems. Some companies have almost half of their employees that have never used a PC, and also some of the employees don't have a desk. This kind of problems can be solved by installing computer booths in the staff areas and by training employees to use them. Also the way HR people doing things will change, and training them may be required. Especially when establishing a new service delivery approach HR people -as the users of the system- have work with providers, and must make them build the most effective system for their company. During this stage and on the evaluation stages it is important to enable providers to train the HR people for making them having effective results. On this point process rethinking takes an important role for the HR department and for the organization as whole, which is being missed by some of the Turkish companies. As a result, their expectations does not match with the end results and they are not really satisfied with the new technological approaches. Working by teams may help in achieving this mistake.

There is a common agreement on the point that with the innovations on technology and the speed of new era, doing things in the old way will not make sense anymore. Taking this in to consideration, some companies starts using technology without discussing their current situation
and without defining the goals. However, on such a movement, depending on what an organization wishes to achieve, some fundamental issues need to be rethought and redesigned. Coordination, willingness to work -from each employee to managers, process development, awareness of company goals and planned operations have important roles in having effective results. Before building a model, the effectiveness of current HR service delivery methods has to be reviewed and the points that need to be improved have to be listed. The adopters must be aware of what new service delivery channels and methods are required to improve from the current one, and what the organization wishes to achieve out of this service. Controlling the effectiveness also must be considered as an ongoing process that starts before the implementation and continues after it.

Another major point that comes out from the experiences of this study is the importance to give the understanding that the “initiative” is not just a systems project or an HR project, or anyone area’s sole responsibility, it is a “coordinated effort”, and it should be approached on an enterprise-wide basis. Internal communication and team working is important here as always. If there is true communication and team working, any kind of e-HR system can be a very valuable HR tool.

Communication also includes knowledge sharing with the companies that are using technology within their HR functions. This takes an important place especially during the design phase. Benchmarking with global businesses that has experiences on widespread testing of the HR online sites can be useful in building a system and decreasing the barriers. Cultural differences must be considered during these benchmarks. A very successful system in one company may not fit to the other. The important thing is to getting the idea and learning the process and then redesigning it in accordance with the company needs.

The last point is not to forget that this is not an easy thing to do. It requires an overall change in the system. Therefore it needs time and patience. Once the function understands how applications can be deployed most effectively (the above considerations may all give additional view), and on what purposes, HR professionals in Turkiye will be able to feel comfortable in using and applying technologies.
RESOURCES

Books, Articles and Conferences

11. e-HR, Conference Notes, IQPC, (Sept. 2000), London
13. e-Human Resources Solutions, (2001), IBM
22. *Inside Human Resources*, (1999), Issue 3, St Albans: Hewitt Associations
Internet

2. www.career-globe.com (12 March 2001)
4. www.kariyer.net (12 March 2001)
5. www.ijive.com (12 March 2001)
6. www.recruiting-online.com (16 March 2001)
7. www.dogusholding.com.tr (Feb.-May 2001)
8. www.honeywell.com/eventures (20 March 2001)
10. www.peoplesoft.com (4 April 2001)
13. www.oracle.com/b2b (16 April 2001)
14. www.businesswire.com (16 April 2001)
21. www.businesswire.com (Jan.-May 2001)
Appendix 1 – Additional Survey Question to Have an Understanding of e-HR Perspectives for Further Studies.

Please provide any additional details or general observations regarding your organization’s goals, that may guide for further studies in understanding the importance of e-HR.

From the answers of the respondents the poll results of this question was as below:

- Moving into a stage where the majority of HR functions and employee development functions etc. can be PC assessed by all in an integrated way
- The technology phase is amazingly fast, there is a frustration lying under the question how quickly companies and employees are being able to change. Change will be necessary, it is better to recognize this and make strategic planning towards this way.
- Most of the organizations are aware of the importance of e-HR but does not give the necessary importance yet.
- It will be too sorry for the companies which moved to using technology/software/systems without having an established strategy and a rational planning.
- e-HR is important as it really enables us to free up time to work on value added issues
- Cost benefits have and will continue to be, a major driver for e-HR implementations
- At this moment of time, e-HR is not, unfortunately, at a high stage in our priorities list
- All of our company staff does not have access to the web / intranet yet.
- Each group in HR is currently reviewing their initiatives for the coming year and looking to see how the web can play role.
- Many policies and strategies have been discussed in order to establish an effective technology system on HR, our results were satisfying and we have a continuous study.
- We are using technology on HR, on the other hand, there may always be a danger (in my opinion) of oversimplification and overestimation of the “e” in the HR role.
Appendix 2 - Tested Internet Recruiting Techniques

Following are some tested Internet recruiting techniques that Human Resources staff or recruiting professionals can implement at low or no cost of time and money from any computer, provided by the Internet recruiting trainer Gutmacher of Recruiting-Online.com, Inc. (related subjects are underlined).

1. Many of the best candidates for unique industries can be found on the niche sites. It is better to get five great resumes than 500 iffy ones. The smaller sites tend to be much less expensive, too. For a free, fairly comprehensive list, visit www.myjobsearch.com/career.html.

2. Career portals large and small are usually happy to give a potential new customer temporary access, such as one free job posting for a month, or a day or two of unlimited resume searching. This lets you properly evaluate the site, and you might actually get some good candidates for your toughest-to-fill positions.

3. Large virtual communities: Sites that offer free web page space, email, chat rooms and other resources to bring together people with common interests like Angelfire.com, Geocities.com and Tripod.com have millions of members each. These sites are still relatively unused by recruiters, even though they offer sophisticated search engines attached which let you target people with specific characteristics. For example, let's say you need resumes of electrical engineers in Wisconsin. Just go to www.geocities.com and in the Search box under "Explore Our Neighborhoods", type: resume AND electrical engineer AND Wisconsin (then click "Search").

4. College recruiting: Campuses where talent is plentiful, and you don’t have to fly a recruiter to schools anymore to staff a booth during career fair week in order to find students. Many schools allow real-time video interviewing, and the total one-time cost on your end is under $200. See www.recruiting-online.com/videoconf.html for details. You can also search for student resumes online. For example, go to www.utexas.edu/world/personal/ for links to personal pages at any of 200-plus colleges.

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9 Glen Gutmacher developed the Advanced Online Recruiting Techniques seminar in 1997, the world’s first Internet recruiting course offered either completely over the Web or in-person (www.recruiting-online.com). In addition to training recruiters from hundreds of employers and placement firms, he has also developed and run career websites for Fidelity Investments’ Community Newspaper Company and for VillageGenie.com, Inc. He was the official Internet recruiting certification instructor in 2000 for NEHRA, one of the largest regional chapters of the Society of Human Resource Management (SHRM).
5. **Where the most resumes are:** Though you hear sites like Monster.com, reaching 6 million resumes in their proprietary databases, several times that number exist on personal and company pages on the open World Wide Web. These can be searched—free—using one of the growing number of search engines. Altavista.com is the best overall as of now, says Gutmacher, who teaches how but has some free tips at [www.recruiting-online.com/press.html](http://www.recruiting-online.com/press.html).

6. **Where high-tech resumes are:** While most sites are good for techies, Deja.com is the best site to search newsgroups, which are the 40,000-plus bulletin boards on the Internet containing messages on specific topics. Several hundred of these focus on employment, either by geography (e.g., atl.jobs for jobs in Atlanta) or industry (e.g., prg.jobs for computer programmers). Search at [www.deja.com/home_ps.shtml](http://www.deja.com/home_ps.shtml).

7. **Your Own Web Site:** How strong is the Careers section of your web site? Do you even have one? These days, candidates rarely apply for a job without learning more about the company via their Web site. In fact, 94% of college student job-seekers do, and 43% became interested in working for a company based on what was on the site, according to a 2000 study by WetFeet.com. But the reverse is also true: As one undergraduate in the study said, “If a company has a crappy website, job seekers are likely to be discouraged from wanting to work there, if only on a subconscious level.” *As a start to improving yours, look at the strong Jobs sections* (and your competitors).

8. **Use automated tools:** It’s easy to get lost for hours doing things online, but the Internet should save you time if used properly, and these are free: [www.profusion.com](http://www.profusion.com) can save you much time hunting for resumes, as it allows you to tap many of the largest search engines simultaneously. For daily-updated news on your industry, it’s hard to beat [www.individual.com](http://www.individual.com), and if you want to find news about competitors, companies etc., try the free trial downloads of Copernic2000 ([www.copernic.com](http://www.copernic.com)) or BullsEye Pro ([www.intelliseek.com](http://www.intelliseek.com)).

9. **Free Internet recruiting tips:** Internet recruiting seminars and courses abound, but even the fee-based companies offer free e-newsletters to recruiters that you can sign up for. Some leading ones are the monthly newsletters from [www.airsdirectory.com](http://www.airsdirectory.com), [www.netrecruiter.net](http://www.netrecruiter.net) and [www.recruiting-online.com](http://www.recruiting-online.com).
Appendix 3 - Security Considerations
(Heesen, B., Learn How the Next Generation of HRMS Works, Prescient Consulting, 2001)

There are tools and methods to reduce risk and create highest level of security, which are important to be used as no one has ever said, "This door lock is so effective that we don’t need police protection, or breaking-and-entering laws." Products work to a certain extent, but you need processes in place to leverage their effectiveness. (Information Security Magazine, April 2000, www.infosecuritymag.com/apr2000/cryptorhythms.htm)

What to do for enabling data security?

- Proactive Tasks (Inform)
  - Work with authorities to ensure compliance and influence
  - Communicate early with works councils and other employee bodies
  - Document processes and business purpose

- Enforce access security (Protection)
  - Firewalls, Intrusion monitoring, Anti-virus Protection, Authentication, Encryption, User Administration
Appendix 4 – An Example Study of e-Recruiting Solutions: Hewitt Associates and SkillSet Software Delivering "Best-in-Class" e-Recruiting Solution Alliance Formed to Improve Attraction and Retention of Talent.

(Business Wire, Oct 18, 2000 - www.businesswire.com)

Hewitt Associates -a global management consulting firm specializing in human resources and benefits delivery- and SkillSet Software Inc. -a leading provider of enterprise hiring solutions- announced an alliance on Oct. 2000, to deliver an end-to-end e-recruiting solution that will allow companies to improve recruiting results with speed and efficiency. According to this agreement, Hewitt will design and implement recruiting strategies and processes that will leverage SkillSet's technology and e-services, so companies can realize the full potential of moving to an e-enabled recruiting environment.

Mike Wright, principal and global practice leader for Hewitt Associates says that "While the talent war is prompting many companies to look to technology to expedite the recruiting process, implementing an e-recruiting tool represents a major change for an organization. The benefit of the Hewitt/SkillSet agreement is that Hewitt will design an e-recruiting process to meet a company's business objectives using SkillSet's award-winning technology and e-services. In short, this alliance offers a unique solution, emphasizing strategy along with technology to create results beyond just cost savings." Wright also points out the benefits of the Hewitt/SkillSet venture from an employee retention perspective.

"In working with Fortune 1000 companies, Hewitt found that a positive view of job opportunities within an organization consistently ranks in the top three of ten factors in predicting retention," explained Wright. "The Hewitt/SkillSet solution provides direct, timely and convenient access to available positions, so employees can stay well connected to job openings within their own companies."

While SkillSet and Hewitt initially will collaborate across business disciplines including client services, technology, marketing and sales, anticipated future projects include working together on industry standards and co-chairing a product industry advisory council that will include customers, prospects and industry analysts. In addition, the two companies will undertake an evaluation and
possible development of a "best-in-class" Business Service Provider (BSP) solution that will deliver the highest level of service available.

According to Dan White, executive vice president and founder of SkillSet, their agreement with Hewitt will enable companies to unlock the value that exists in their recruiting organizations by helping them take full advantage of an e-business environment.

The SkillSet offer represents one of the "e" solutions available through Hewitt's new Human Resource Effectiveness (HRe) practice. This practice is designed to help clients transform the management of human capital using e-business solutions.

"From strategy and development through implementation and operation, the Hewitt HRe practice is delivering effective e-HR solutions to clients worldwide," said Wright. "The result is a more strategic and efficient HR department that is aligned with the business objectives of the company."

About SkillSet Software Inc.

Founded in 1993, SkillSet (www.skillset.com) is the leading provider of integrated, enterprise-level HR applications that automate 100 percent of the recruiting process. By allowing HR professionals, line managers, employees and the talent market to collaborate and communicate, SkillSet's solutions enable organizations to efficiently recruit across their enterprise and support rapid growth. HR achieves dramatic cost savings, an accelerated hiring timeline and the ability to assume a far more strategic business role. 15% of the Fortune 50 uses SkillSet products.

SkillSet Software, Inc. is a Microsoft Certified Solution Provider.

About Hewitt Associates

Hewitt Associates LLC (www.hewitt.com) is a global management consulting firm specializing in human resources and benefits delivery. The firm ranked among the Top 200 of Forbes magazine's listing of the largest private companies and as the largest employee benefits consulting firm in the U.S.
It sounds, at first, like heresy: Take your corporate inventories, your capabilities, your supply chain needs, your anticipated prices—assemble, in other words, a fairly intimate picture of how you intend to do business in the near future—and put it all on the internet, and let everybody take a good look.

That this philosophy undergirds one of the most immediate and dramatic shifts in worldwide business practice in the last 100 years would be even more astonishing if not for one overarching fact: It appears to work.

In less than a year, the internet-based business-to-business (B2B) model has grown from an embryonic idea to winning broad acceptance among many of the biggest players in the game—from giant auto makers to massive convenience and department store chains. It has also captured the imagination of many small retailers who, like the global players, often stand to realize substantial savings in time, effort, and money. But, as with many internet-based innovations, the current B2B model has passed out of its infancy and entered into what some industry observers think may be a promising, if awkward, adolescence. If there is an inevitability surrounding the emergence of the B2B model, there also will be inevitable problems of organization, management, adaptability, internal and external standardization, realignment of corporate culture, reassigning of jobs, and mutual trust among partners—a quantum shift by any measure.

What it looks like?

The current B2B model is a kind of high-tech partnership most often operating around a platform known as an exchange. An exchange at its most basic is a type of e-marketplace performing two functions: it brings a group of dispersed trading partners together and provides software and protocols allowing the traders to conduct business over the internet—essentially assembling deals and agreements from start to finish.
For example, a car manufacturer needs a door assembly component for one of its new models. It publishes the specifications for the part on the exchange, allowing an approval of suppliers (also exchange members) to see and act on them. The exchange's software applications allow the suppliers of door parts to manage their inventory and supply chain, saving money by ordering no more and no less than they need to do the job.

There are three broad categories of exchanges, each designed to play a specific business role:

Industry exchanges developed for specific industries (Ford, General Motors, Daimler-Chrysler, and Renault-Nissan, etc.)

Private exchanges formed by single large companies specifically for their trading partners.

Combinations of large or small companies coming together to form what might be called "cross-cultural" or "horizontal" exchanges for mutual benefit.

The glue binding the exchanges together are increasingly sophisticated suites of software applications. The first exchanges operated by using business-to-business software in a type of off-the-shelf, piecemeal approach. Applications may not have been integrated. Then came the advent of "hosted internet-enabled procurement solutions," in which business software providers such as Oracle developed integrated applications that could be licensed for an annual fee by exchanges, allowing members of the exchange to operate by using the same integrated software for all transactions. Having an integrated suite of software becomes vital to fully reap the rewards of an exchange. With such suites of software applications, exchange members are not burdened with periodic upgrades, maintenance, or infrastructure concerns.
CURRICULUM VITAE

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Graduated from Boğaziçi University, B.A on History Major (Istanbul, 1996).
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Has professional experience in Human Resources issues including selection and recruitment, performance appraisal systems and career planning, compensation analysis, and training. Also has experience on newsletter publishing, organizing public relation facilities regarding to creating professional image and awareness of the company identity.

Has knowledge of establishing human resources functions, setting requirements for team building, setting the business objectives and processes, identifying and planning the training needs, implementing performance appraisal systems. Worked on the HR side of BPR projects, and Intraweb - Internet web page data gathering and design projects.

Gained her experience in multinational and as well as local companies.