The success of a construction organisation is largely dependent upon the quality and morale of its people (The Chartered Institute of Building, 1992; Clough et al, 2000). Human resource management (HRM) provides an influential approach to the management of people in many business sectors (Beardwell and Holden, 1997: 3). The construction industry, however, presents a challenging environment for the effective management of human resources due to the dynamic and fast changing organisational, project and skill requirements. This paper reports on the preliminary findings of a research project which aims to develop a strategic employee resourcing framework (SERF) to inform the efficient management of a company’s human resources, taking into account competing HRM priorities, project requirements and employee needs and preferences. This process will involve 1) the initial modelling of current HRM practices and the subjective decision-making processes, and 2) the development of a more appropriate framework, SERF. Simulation will be used to test the developed framework.

**EMPLOYEE RESSOURCING IN CONSTRUCTION**

Employee resourcing is an important function of HRM within medium-large construction companies. The major components of this function are staffing, performance and administration (Taylor, 1998: 3). These HRM processes are influenced by several factors internal and external to an organisation. Figure 1 below provides an overall conceptual framework for discussing employee resourcing in this paper, and emphasises the complex interrelationships between the many variables affecting the resourcing process.

---

**Figure 1. Integrating the competing HRM priorities, project requirements and employee preferences**

The main functions of HR administration, staffing and performance management within employee resourcing consist of several distinct, but interrelated management activities. HR administration serves not only the resourcing process but also employee development and relations processes, focusing on the collection, storage and use of employee data (Torrington et al, 1991: 22). Information technology is widely used to support this function (see for example Torrington et al, 1991; Taylor, 1998; CIPD, 2000), although the ways and levels of practice within construction organisations vary greatly (Raiden et al, 2001). The staffing and performance management activities aim to ensure that the right numbers of employees with the right skills and competencies are in the right place at the right time. Key concerns for management in construction organisations are team formation and deployment due to project-based nature of the industry (Hamilton, 1997; Cornick and Maher, 1999). Ideally, management of staffing and performance are simultaneously concerned with ensuring the best possible performance is achieved whilst facilitating employees’ career progression and offering them appropriate reward for their efforts.

Each of these interrelated HRM processes can influence the strengths or weaknesses of an organisation. The processes are influenced by several internal and external factors, which in turn provide opportunities and threats to the organisation (Maloney, 1997).
Challenges of managing people in project based environments

The internal factors that influence HRM processes in project based environments include

- the organisation’s strategic choice in terms of HRM (Iles and Mabey, 1992: 255; Druker and White 1995; Maloney, 1997);
- organisational structure (Hamilton, 1997: 99);
- organisational culture (Bate, 1992); and
- factors central to the individual employees within the organisation.

Ultimately, these factors contribute to the strategic business objectives of employee resourcing: the continuous achievement of organisational goals at a minimum risk whilst maintaining employee commitment. In addition to the factors internal to the organisation influencing the HRM processes, several factors external to the organisation affect the way HRM practices are organised. The challenges include those that apply to construction industry specifically and those, which apply to all business sectors. Common throughout all different business sectors are: 1) technological, legislative and demographic changes; 2) changes in peoples’ values and beliefs, quality standards and expectations; and 3) changes in the economic/labour markets. Particular challenges typical for the construction industry include:

- Unique one-off product (Chinowsky et al, 2000: 1; Clough et al, 2000: 2-3);
- Projects won at short notice (Hillenbrandt and Canon, 1980);
- Transient workforce moving between different work locations (Druker and White, 1995: 77);
- Client pressures (Respect for People Working Group, 2000);
- Male dominated, macho culture/climate (Maloney, 1997: 53);
- Short-term teams form and disband, and are mixed and changing in composition; and
- Changing skill and competency requirements (Clough et al, 1999).

There is a need to balance these competing external, organisational, project and individual priorities and needs, both at strategic (long-term) and operational (short-term) levels. Current employee resourcing practices often rely on the personal assessments of line management (Druker et al, 1996), which have the potential for inconsistencies, poor allocation decisions and hence, disillusioned employees through the violation of the “psychological contract” (Dainty et al, 2000). Understanding the psychological contract is vital to understanding employee responses to the employment relationship. Rousseau (1994, cited in Hiltrop, 1996), defined the psychological contract of employment as “the understanding people have, whether written or unwritten, regarding the commitments made between themselves and their organisation”. A breach, break or violation of the psychological contract will have negative impacts, such as reduced trust, job satisfaction and commitment to remaining with the organisation (or indeed industry as a whole) and the withdrawal of some types of employee obligation (Robinson and Rousseau, 1994; Hiltrop, 1996; Lester and Kickul, 2001). Thus, to ensure maximum productivity, it is crucial that the individuals’ preferences and expectations are taken into account throughout the resourcing process.

Given the highly complex and challenging environment, within which this research project seeks solutions, a preliminary set of interviews was used to establish a focus and direction for future work. These interviews present the main data on which this paper is based.

METHODOLOGY

An interpretative approach forms the overarching research paradigm for the project. A preliminary set of semi-structured interviews was carried out with managers and employees at various levels of an organisation in order to establish 1) current HRM strategy, policy and practice; 2) the skill requirements of the organisation; 3) the individual preferences of employees; and 4) information held on the skills and abilities of staff. As the research focused on collecting in-depth information from the respondents and on establishing a focus for future work, involving a single company was appropriate. Validation studies involving a number of organisations will follow. The research instruments were developed to explore the issues identified within the wider literature and those which emerged from previous interviews. ‘Snowball’ sampling was used to acquire sufficient number of respondents. The sample profile is shown in Table 1.

In addition to the qualitative interview data, quantitative data were collected via structured questionnaires. Blake and Mouton’s (1985) management style questionnaire was used to assess the
management style of the managers interviewed and an employee resourcing priority paired comparison test was developed to compare and rank order the employee’s individual preferences in relation to their deployment to a project team or organisational division.

**Table 1. Sample profile breakdown**

<table>
<thead>
<tr>
<th>Role</th>
<th>Appr.</th>
<th>Sex</th>
<th>Age</th>
<th>Famil. Status</th>
<th>Bas.</th>
<th>Tl.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Semi-abc</td>
<td>Exploratory</td>
<td>Male</td>
<td>Female</td>
<td>Under 25</td>
<td>25-35</td>
</tr>
<tr>
<td>Director</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Contr. Mngr</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Chief Surveyor</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Chief Estimator</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>HRM Staff</td>
<td>-</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Comm. Mngr</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Project Mngr</td>
<td>4</td>
<td>-</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Site Manager</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Site Agent</td>
<td>7</td>
<td>-</td>
<td>7</td>
<td>-</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Design Co-ord.</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Sen. Estimator</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Senior QS</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>QS</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ass. QS</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Engineer</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Gen. Foreman</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Work. Foreman</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38</td>
<td>6</td>
<td>39</td>
<td>5</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>

**PRELIMINARY RESULTS: The compatibility and conflicts of employee and organisational needs**

Several issues concerning the compatibility and conflicts between employee and organisational needs were highlighted within the interviews. The most common *external influence* on HRM practices mentioned by the respondents was client demands. Several managerial respondents also referred to difficulties in recruitment. The industry’s poor image was said to affect young peoples’ career decisions leading them to work for IT/law firms rather than ‘traditional’ construction organisations. The current labour market presented managers with further difficulties together with employment legislation impacting upon HRM.

With regard to *internal influences*, it was identified that the company’s strategic choice was to devolve HR responsibilities to line management. However, the company’s structure was strictly hierarchical despite the dynamic nature of the industry. The organisational culture on the other hand was described as “open and family orientated” with two-way communications at the heart of the operations by both, managers and employees. Although some employees referred to the existence of an internal “old school and boy’s network”. Rather mixed messages were received with regard to employee preferences. Managerial respondents stated that they attempted to accommodate employee needs and preferences, especially with regard to work location. However, employee responses varied; some strongly believed managers took their opinions into account, whilst others felt their needs and preferences were continuously ignored.

Surprisingly, *employee relations* issues were not considered important by the interview respondents. However, *employee development* on the other hand, was one of the key topics discussed within many of the interviews. Both managerial and operative respondents felt the company promoted training and strongly encouraged continuous development. Overall, however, despite management efforts in investing in future through management and graduate development, employee development appeared reactive rather than proactive in meeting organisational needs.

In examining the company’s *employee resourcing* practices and processes, *HR administration* was found to be a complex process. Several computerised systems and manual filing mechanisms were in use. *Staffing* responsibilities seemed to have been devolved completely to line management with no input
from HRM staff. As there were no records of employees’ performance, their skills and/or competencies, nor their qualifications or personal preferences, deployment decisions were based on the subjective assessment by line managers. The employees’ views on the company’s staffing practices confirmed the managerial responses. The formal aspects of performance management culminated in an annual appraisal system, which served mainly as a tool for developing a training plan for each individual employee and organisational division. The management style questionnaires supported these findings revealing that managers placed considerable emphasis on the shorter-term operational issues. The employee resourcing priority paired comparison test further revealed that employee needs were varied and differed according to each individual’s circumstances. This suggests a need for a flexible system that would allow for the various and differing individual preferences be taken into account in the resourcing decision-making.

CONCLUSIONS
In conclusion, it is clear that one of the company’s strengths, in terms of HRM, lies in the managerial aim for good people management practice. Although employees do not feel this is always realised, this forms a positive foundation for opening future opportunities through the development of more organised HRM practices. Strategic planning, effective administration and communication (Smithers and Walker, 2000) together with effective knowledge management, can contribute to minimise risk, whilst also carefully incorporating the employee voice into the decision-making. This, in turn, should contribute to the continuous achievement of organisational goals through competent, committed and satisfied workforce with fulfilled psychological contracts. A critical in-depth analysis of the company’s HRM practices will follow this preliminary evaluation. It will include modelling the current HRM practices and subjective decision-making processes. When complete, the analysis will be used to support the development of a strategic employee resourcing framework and an associated human resource information tool. Virtual resourcing will be used to simulate realistic projects and test the framework’s practicality once finished.

REFERENCES