

# TRAINING NEEDS ANALYSIS IN AN SME IN THE IRISH CONSTRUCTION INDUSTRY

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A Training Needs Assessment programme is currently being implemented, with the assistance of external consultants, in a small to medium size firm in the Irish Construction Industry. The training requirements of the firm to meet its business needs were determined as an outcome of a structural analysis and a strategic review carried out on the firm. The identification of training needs of individual staff members result from a structured process utilising a Training Needs Assessment Instrument incorporating a measurement technique for prioritising skill deficiencies and a Personal Development Assessment Instrument for measuring specific needs in the area of Personal Development. In addition to the formulation of the company and individuals' training plans the process addresses issues relating to corporate strategy, organisational structure and development, role clarification, human resource management and management systems. The process supports the contention that training provision should be based on the business needs of the firm rather than in an unstructured 'menu' driven manner.

Keywords: corporate strategy, organisational analysis, skills analysis, training needs, personal development.

## INTRODUCTION

It is widely acknowledged within the construction industry that human resources within an organisation are a major source of competitive advantage. However, planning for training and development in firms is not always approached in a structured or strategic manner rather it is undertaken in response to specific problems. This can be particularly valid in small to medium sized enterprises (SMEs) where often the lack of a training function and the scarcity of resources results in the firm taking an 'ad hoc' approach to the provision of training.

Mühlemeyer and Clarke (1997) liken an approach to training as ordering pre-packaged offerings from a travel brochure. This they assert is a waste of money, resulting in lost time and feelings of frustration as the link between skills acquired and those required for the workplace is not clear.

Schraeder (2002) suggests that the first step in the planning process should be to have a mission statement that accurately reflects what the firm wishes to achieve in practice. This allows the objectives of the firm to be clarified and quantified.

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Strategic planning can identify the 'critical success factors' that enable firms to gain competitive advantage in the construction market. These success factors determine the capabilities or competencies required in the firm. In turn, skills are needed to underpin competencies. Skills may relate to organisational, managerial and technical skills. A forward looking approach to skills analysis and provision is necessary.

Hall (1994) describes a functional capability as relating to the ability to carry out specific activities and this ability depends on the knowledge, skill and experience of the employee. He cites an organisation's cultural capability, one that incorporates attitudes, beliefs and values, as being a contributor to competitor advantage. High quality standards are an example of a firm's cultural capability.

Hamel (1994) defines a core competence as 'a bundle of constituent skills and technologies' that stems from an activity or an ability to do specific things. The concept of core competencies takes a skill-based view focussing on those competencies that lie at the centre of competitive success. Hamel applies three further tests for a competence to be considered 'core'. It must provide a fundamental customer benefit; it must not be a widely held competence across the industry; and it should be capable of being applied in new product or service markets.

These concepts can usefully be applied to the management of the training function in SMEs and underline the approach to and structure of the overall training needs assessment process described below.

## **TRAINING NEEDS ASSESSMENT PROCESS**

The training needs assessment programme is currently being carried out in the JSL Group, a small to medium, construction firm located in Galway, a city with a population of some 75,000 on the west coast of Ireland.

### **Profile of the firm**

James Stewart commenced building in Galway in 1902. He died in 1934 and his three sons, who had worked with him, formed a limited liability company in 1936. Sean Stewart, the present Managing Director joined the company on qualifying as a Civil Engineer in 1963. He became M.D. in the early 1970s. James Stewart Ltd was incorporated into the JSL Group in 1991.

The company in relative size would have grown and contracted in line with the performance of the Irish economy and particularly the West of Ireland economy. Size in relative terms would have grown say 150% – 200% in 2 years and equally have contracted by 50% – 80% in an even shorter period as recession hit (on more than a few occasions in 100 years). Turnover has increased from €5 million in 1997, to €10 million in 1999, to over €20 million in 2002 (projected).

Presently, there are 28 staff members in the firm, as shown in Fig.1. In addition, there are a number of long-term site employees. The core business of the firm is: as General Contractor in the industrial/commercial/offices/schools sectors; as a house builder for one-off houses over a certain size; as a developer; and in civil engineering where structures are involved.

JSL is dependent on the large amount of repeat business it wins from clients. The company also wins new business on its record of producing quality work, carried out on time and within budget. It does not take a hard adversarial commercial view in negotiations, but takes a partnership view with clients.

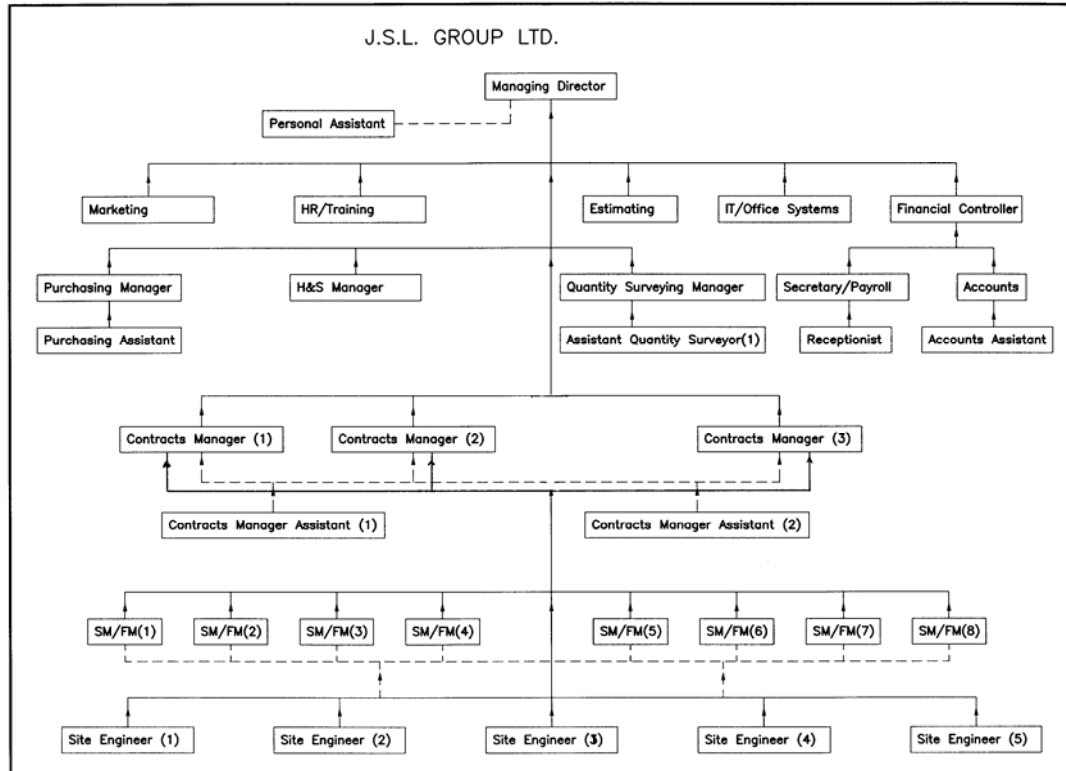


Figure 1

The market place for a company such as JSL is a very diverse one and varies from year to year with the market trends – Government contracts may be in a growth phase one year while private, commercial or other contracts dominate at other times.

The range of works the company must be in a position to undertake in terms of size, location, nature and complexity is considerable. Contracts as diverse as a racing course grandstand (€m.); a 15,000 cu. m. reservoir on the Aran Islands; a television station and the restoration of a Norman castle have been undertaken in recent years and this requires on and off-site management staff with extensive skills.

### Background to the Programme

#### *The National Context*

The changing face of the Construction Industry in Ireland continues to impact on firms at all levels within the industry. The turnover of the industry has increased from some €5 billion in 1994 to over €17 billion in 2001.

In the United Kingdom, the training and development problems in the industry have been identified, specifically the lack of training provided in order for employees to benefit from new technologies and the lack of career structures for staff to develop and fulfil management roles ('Rethinking Construction' Report, 1998).

As in other European countries, the importance of training is becoming an increasing priority from a national perspective in Ireland. According to research conducted by the Expert Group in Future Skills Needs (Forfás 2001) the Irish Labour Market will remain stretched to capacity throughout this present decade. This means there will be an on-going demand for upskilling of the existing workforce and training and retraining will be in increasing demand.

National issues in relation to training that are being addressed presently include:

- Developing a National Framework of Qualifications (National Framework 2002)
- Developing a Society of Life Long Learning
- Future Skills Needs
- Awareness Campaign of Need for & Benefits of Training (particularly in SMEs)
- Training Managers in the Basics of Training
- Focus on HR Issues

With regard to the demand for construction workers, the factors that will exert most influence are the requirements of the National Development Plan (2000-2006) and the demands that the need to address shortages in the housing stock will place on the construction labour market.

Other factors that will have an impact on training will be increased legislation affecting areas such as Health and Safety, Industrial Relations and Environmental Issues. The number of skilled construction workers qualifying in Ireland over the forecast period will be approx. 26,000 less than the number required to achieve the level of projected output over the period. This shortage consists of project managers/site supervisors, professionals, craft workers and other skilled workers. Among the recommendations put forward to deal with issues affecting the Construction Industry are:

- Increasing the level of training programmes in project management and supervisory skills.
- Examining the changing roles of managers in the industry and the implications for education and training provision.

#### *Impact on the JSL Group*

The Stewart Group is being proactive in regard to these issues rather than being forced to make changes when the need becomes acute. The firm recognises that the nature of the work is changing and firms need to be in a position to respond to change by continually up-skilling staff in line with the future business needs of the firm. There is also awareness that the ability to respond to change is dependant on the full involvement and co-operation of all staff members.

Training of staff was always and continues to be a priority for the company. In earlier times and indeed up to the early 1950s, the company would have trained a regular complement of tradesmen in the apprenticeship system. The State took over much of this training in later years.

As a firm of the size of JSL Group grows and contracts quite quickly, the greatest requirement in the present construction industry which is the most difficult to meet is the need for on-site and off-site managers. In an expansionary market an SME, such as JSL, can find the numbers of staff required in a functional area, such as site management, more than doubling in a period of 2-3 years. If staff can be kept longer in the company by expanding their capabilities and augmenting increasing experience with additional training and the broadening of the range of acquired skills, then this growth can be far greater and more readily absorbed. Existing staff maintains the ethos of the company and new staff are more quickly trained in that ethos.

The adoption of management and information technologies throughout the company has resulted in the need for on-going training for staff of all ages. Marketing, more effective management control systems and human resource management, which are emerging requirements for the company, are best supported by training and retaining of existing staff.

The company has identified the need to support senior management by developing back-up staff for them. Back-up staff, particularly for technical management staff, are being recruited with certain technical qualifications and are then encouraged and required to develop their role in the company. This operation will hopefully allow expansion of the volume of work that can be undertaken in a more controlled and less disruptive manner.

#### *Particular training issues in an SME*

In SMEs the HR or Training Manager function is normally the responsibility of a manager who also is responsible for other functional roles. In some cases, the managers have acquired little formal training in managing the training function. Training in an SME needs to be very focussed to achieve optimum results and to make best use of scarce resources. External industry specific training provision can be limited and deficient particularly on a geographical basis. Non-industry specific training can demotivate staff and there is difficulty linking the outcomes of such training to the work situation in the construction firm. The option of firms coming together to source common training needs has potential and the JSL Group supports these initiatives on an-going basis. Training is now one of the criteria for pre-qualification for selection as main contractor and this can act as a barrier to an SME such as the JSL Group in acquiring work. A large number of managing directors of SMEs are owner managers with little formal management training.

#### *Aims of the programme*

The setting up of the training initiative arose from the identification of both the structural and organisational strains showing within the firm and those arising particularly from the expansion of the company and its success in winning extra contracts. Fitting the relatively large number of new staff into the existing structure and allowing existing staff to both expand their roles in the company and their own personal development were also identified as critical.

The training needs assessment programme is the first step to ensure that the company and every individual staff member is fully briefed on immediate and future training needs both for the individual employee and the company as a whole. The aim of the programme is to develop a planned approach to training and development within the company ensuring that all training is carried out in the context of the future business needs of the company.

#### **The Training Needs Assessment Process**

There are a number of distinct components in the programme design and these are set out in Figure 2. Each step in the process forms part of a continuous loop, continuously changing and being impacted upon by the external environment. Political, economic, social and technology environmental issues are ever changing and will continue to influence the assessment process.

#### *Briefing and Information Session*

In November 2001 all staff participating in the programme attended an information session that provided a full explanation both of the process and of the purpose for conducting a training needs assessment. This also afforded the staff the opportunity to clarify aspects of the process so as to establish a level of commitment to the training needs analysis.

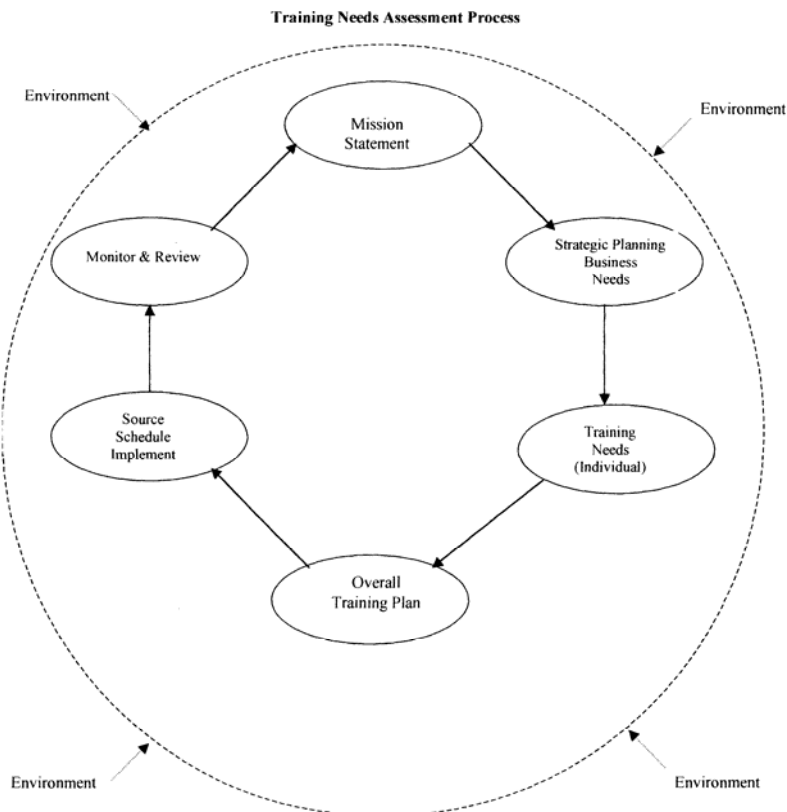


Figure 2

### *Strategic Planning Workshops*

The strategic planning workshops were held over two days in December 2001 and January 2002. These were attended by the eight members of the senior management team, including the managing director, with the aim of preparing a clear mission statement and objectives for the firm that would guide the training assessment programme. These were organised as structured sessions using a defined workbook format.

Some of the key issues resulting from the review that directly impact the development of the firm were:

- Changes in the way work is obtained,
- Trend towards pre-qualification and classification of firms,
- Increased use of Design & Build and Project Management,
- Innovative financing methods for construction projects,
- Shorter project durations.

The impact of effects of growth on the JSL Group have resulted in:

- A substantial company in terms of turnover and profit,
- An improved market and customer base,
- A reputation for quality and delivery on time,
- A more formal organisation,
- A firm where transition has neither been structured or planned,
- A geographical spread of work that has been client driven.
- The key strengths of the firms were identified as reputation, financial standing, flexibility, competitive ethos and the experience and capability of the staff.

Barriers to the further development of the firm were identified as:

- Lack of clarity and gaps in the management structure,
- Lack of a formal marketing function,
- Team development and internal communication,
- IT implementation,
- Lack of career paths and plans for staff,
- Management of subcontractors,
- Management systems including site costing,
- Human resource strategies and systems.

The development of a strategic plan for a three to a five year period dealt with:

- Key markets,
- Desired market size,
- Critical success factors,
- Management structure, management team and management succession,
- Additional staff and staff roles,
- Key functions of Estimating, Quantity Surveying and Procurement,
- Information and communication systems.

The major training requirements to meet the business needs of the firm were identified in:

- Cost management and control,
- Quality systems,
- Information Technology – strategy and technologies,
- Management of sub-contractors,
- Management development and team building,
- Marketing.

#### *Training Needs Assessment*

The Training Needs Assessment Instrument (TNAI) was used as the framework in determining the training needs of the individuals within the firm. The instrument was developed by the Construction Industry Federation together with a group of transnational partners within the EU Employment Initiative PERLE/NOW. (Construction Industry Federation 1999). The Training Instrument comprises four sections: workbook, coping resources inventory, individual interviews and summary of training needs

Interviews were carried out with all of the individuals shown on the organisation chart ranging from managing director to site engineer. All interviews took place between February and May 2002.

The duration of each interview was 2 - 3 hours and sought to clarify the role of the individual within the company; the skills, current and future, appropriate to this role; the development of the role; the extent to which the individual has acquired the required skills; and prioritising the deficiencies in skills identified.

During the interview the individual and the trainer agreed on the level of competence achieved in a particular skill. Skill profiles were prepared in advance for each category of employee. Each skill is assigned a score of 1 to 10. The level of competence needed by the individual in the role is then determined, again on a scale of 1 to 10. The training need for each skill is determined by subtracting one score from the other. The training need is then classified as priority, future or low.

This individual analysis of training needs results in proposals for training/development for each individual in the firm. These when combined with the training needs identified at firm level to suit the business needs of the company form the overall training plan. As an outcome to this phase, training programmes, in various formats, to meet the training needs will be identified and/or organised.

#### *Coping Resources Inventory (Personal Development)*

The training assessment process is based on the premise that personal development is regarded as the foundation to all training and development. A standardised Personal Development Assessment Instrument, the Coping Resources Inventory (Hammer and Marting 1987), examines and measures five separate levels of development, i.e., cognitive, social, emotional, spiritual/philosophical and physical. A Psychological Questionnaire is used for this analysis and the Psychologist returns the interpreted results, privately and individually to each staff member.

#### **Report on the Assessment Outcomes and the Implications for the firm**

At this time, a draft training plan has been issued, reviewed, and is now being prepared for final issue. The draft plan includes the documented strategic review, individual training plans, and a training plan matrix for each category of employee. The individual training plans contain role descriptions and identify issues relating to the role and prioritise training needs. The remaining stages of the programme will be to source, resource and schedule the training plan; to monitor the plan in operation; and to review and update the plan at selected intervals.

Already, the work carried out in meeting and interviewing management and staff has had direct, positive results. Participation by staff in the process has had motivating effects. All staff interviewed have responded very positively on a personal level and in their approach to their everyday work. Some younger staff who may have considered moving on, after a set period, have stayed, indicating their satisfaction with the action taken by the company to encourage personal and role development. Specific problem areas have been identified in certain positions and functional areas and improvements have been planned and are being implemented concurrent with more detailed action plans for training being developed. The benefits, both tangible and intangible, have a potential to impact greatly on the future performance of the company. The realisation of this potential impact is contingent on the quality of the implementation programme.

## **CONCLUSIONS**

The Training Needs Assessment programme currently being implemented in the JSL Group adopts a planned and structured approach to the planning and provision of training. Training that will provide the firm and its employees with the necessary skills to meet the business needs of the firm is identified. This will enable the firm to compete advantageously based on its capabilities to outperform other firms in areas critical to success in the industry.

The requirement for the programme arose from the potential impact of skill shortages, both at the national and firm levels, on the future growth of the firm. The training process is designed to be dynamic and skill requirements evolve from the mission statement and strategic plan of the firm. The success of the process relies on a high degree of staff participation and on the recognition that personal development underpins all training and development activities.



Tangible outcomes of the process include training plans at functional and individual level; recommendations on organisational gaps and needs; role clarification and role development; and agreement on key areas critical to the success of the firm. Implementation, monitoring, review and updating are key activities in this continuous process.

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