Developing and sustaining high performance in the AEM sector: The role of high level skills

A report of research carried out at the University of Huddersfield on behalf of the West Yorkshire Lifelong Learning Network (WYLLN) and Kirklees Metropolitan Council (KMC)

Report Authors: Dr Eleanor Davies

Professor Stephen Swailes

Barbara Butler

June 2011

Kirklees COUNCIL

University of HUDDERSFIELD Inspiring tomorrow's professionals

West Yorkshire Lifelong Learning Network

Acknowledgements

We are grateful to West Yorkshire Lifelong Learning Network for funding this study, and in particular to Joanne Beaumont.

We would like to thank Judith Cork, Laura Forester-Green and Karen Quine for helping with arranging the appointments and conducting interviews with the companies. Thanks are due also to James Devitt, Sue Weston and Muz Mumtaz from Kirklees Metropolitan Council who helped shape the project design.

Our particular thanks go to the businesses whose staff gave up their time to be interviewed for the study.

The Authors

Dr Eleanor Davies

Eleanor is a Principal Lecturer in the Business School at the University of Huddersfield. She is a Chartered Psychologist and Registered Occupational Psychologist (HPC). Her research interests are in older workers and retirement. Recent research projects include a study into Engagement and Disengagement in older academic staff and determinants of successful retirement.

Professor Stephen Swailes

Stephen joined the Business School in 2010 to take up a new post as Professor of Human Resource Management in the Department of Leadership and Management. After graduating in chemistry he worked in a range of scientific and technical roles in industry before working on a range of management projects. He later completed a postgraduate Diploma in Management Studies and an MBA while working in industry. After moving into the university sector, he was awarded a PhD (Leicester) for research on the organisational commitment of professional employees. Before moving to Huddersfield, he was at the University of Hull.

Barbara Butler

After a first career in financial services, Barbara moved to the higher education sector and has held business-facing roles at the Universities of Cambridge, Leeds and Huddersfield. Barbara is interested in all aspects of university-business interaction and is responsible for developing collaborative activities between the University and external organisations.

Contents

The Authors .....
1 Introduction 5
Background 5
Research aims and objectives 5
Key audience 5
Research Design 5
Sample design 6
Sample profile 6
Analysis of findings 7
2 Growth 7
3 Workforce Skills: Development and Management 8
4 Older workers and retirement 9
5 Main conclusions and recommendations 11
Appendix: Interview Schedule .....

1 Introduction

Background

The Advanced Engineering and Manufacturing (AEM) Sector has been identified as a sector of high potential growth in the Kirklees area and it is a sector that Kirklees Metropolitan Council is keen to support through development and training investments.

The purpose of this report is to comment on the main findings from a qualitative study of ten organisations in the AEM sector and to draw implications from the findings for intermediary support organisations. The report will make recommendations.

The research is the result of a collaboration between West Yorkshire Lifelong Learning Network (WYLLN), Kirklees Metropolitan Council (KMC) and the University of Huddersfield.

Research aims and objectives

The principal aim of the research was to obtain insights into the growth potential for firms operating in the AEM sector in the Kirklees area.

Specific aims of the research were:

- to examine whether businesses in the AEM sector expected growth in the short to medium term and to explore whether growth is expected in terms of job creation
- to identify higher level skills requirements in the AEM sector
- to investigate the use and needs of training and development schemes in the AEM sector
- to examine the age profile of businesses in the AEM sector and identify whether there are any specific issues that arise from an ageing workforce within the AEM sector
- to explore the awareness of businesses in the AEM sector about the recent changes abolishing the default retirement age (DRA) and the expected impact of these changes on companies
- to make recommendations to training providers about the training needs within the sector.

Key audience

Key audiences for this report include WYLLN members (HE and FE colleges and training providers) and public sector bodies seeking to promote the region as a destination for inward investment and business growth, especially with regard to the AEM sector. The report will also be of interest to businesses in the AEM sector, although they are not intended as the main audience.

Research Design

The research used a wholly qualitative methodology made up of face to face interviews with ten companies. The interviews were restricted to organisations in the Kirklees area. The data was collected between February and May 2011.

It had been intended to conduct two interviews within each company: one at strategic level (e.g. Managing Director) and one at an operational level (e.g. Human Resource Manager or Operations Manager), but this proved to be impractical and was resisted by participant organisations. Therefore, a single interview was conducted with each organisation.

The interviews lasted between 30 minutes to 2 hours. Interviews took place at the company premises and were usually accompanied by a tour of the facilities for the interviewer.

A research team designed a semi-structured interview schedule, based on the expressed interests of the commissioning bodies that covered the areas of growth, skills and retirement. The interview schedule was then discussed within the research team and modified until all parties were satisfied with its content. This ensured that all parties were satisfied that their particular areas of interest were incorporated into the research.

Sample design

The research was designed to be exploratory and a purposive sampling strategy was used. Respondents were nominated by each of the main collaborators in the research (WYLLN, Kirklees Council and the University of Huddersfield). The selection criteria were:

- Manufacturing organisations in the AEM sector
- Located in the Kirklees area
- Spread of large, medium and small companies

The sample was selected to cover a range of product / process technology areas and a range of different sized firms.

Sample profile

	Role of Interviewed	**Nature of Business**	**Number of Sites**	**Number of employees**	**Turnover**
Company A	HR Manager	Diesel engines	29 world-wide	30,000 world wide	$13 billion worldwide
Company B	HR Manager	Industrial sealing products and gaskets	4 worldwide	130	£17.5m
Company C	HR Manager	Fireplaces and electrical appliances	2	280	£13m
Company D	Supply Chain Manager	Filtration	21 worldwide	2500 in UK	£300m in UK $10 billion worldwide
Company E	Managing	Numerical	1	9	£700k

	Director	control machinery			
Company F	Director and Head of Sales & Development	Power steering and braking systems	1	13	£1m
Company H	Group Technology Director	Gears, bearings, gearing and driving elements	5 worldwide plus joint ventures	450	£54m
Company I	Managing Director	Electro-mechanisms and precision instrument components	2	210	£15m
Company J	Director	Customised tooling	1	45	£2.7m
Company K	Project Manager	Joinery and fitting-out	2	170	£14m

Analysis of findings

The interviews were recorded digitally wherever possible and transcribed. The analysis was subjected to content analysis (matrix mapping) which involved sorting and summarising the verbatim material according to the key analytical themes. The charts produced from this process form the basis of the evidence reported in the following sections.

Given the exploratory nature of the research process and the small sample size, the purpose of the reporting is not to offer quantitative analysis of the findings by sub-group. The purposive nature of sampling process also means that the study does not offer statistical data relating to the prevalence of views offered. The aim of the research is to define and describe the emergent issues rather than to measure their extent.

2 Growth

Growth is an issue of central concern to national and local government as it is seen as a way of contributing positively to the economy, in terms of outputs and job creation. In this study, most companies had not seen increases in employee numbers over the past five years. In contrast, several companies reported employee reductions in the recent past as well as the contracting out of some activities to become more efficient. One company had closed its showrooms in a switch to on-line sales.

Companies are now solidly targeting increased turnover and sustainable profit growth as their primary concern. Most participants expected growth of some sort in the next 12 months. Typically this would

come from expanded overseas sales and in one case by acquisition of other companies into the group. Expansion into Europe was being targeted along with increased sales to China and the Middle East. Factors underlying future growth include upturns in market demand and new product development (NPD) which came through as a strong theme.

Job creation was not seen as a direct target although increased job opportunities flow naturally if new contracts can be won. The increasing drift of machine work to overseas contractors only acts to undermine local job creation. However, one company was expecting to recover to former pre-recession levels and increase from 1000 to 1200 employees and another expected to grow jobs by a modest amount this year.

Two companies in the SME category underlined the importance of access to finance to support the development and growth of their businesses. Banks which are monitored on failure rates have become risk averse over the last couple of years and the difficulties in securing lending facilities have restricted the ability of some organisations to take advantage of growth opportunities.

3 Workforce Skills: Development and Management

When asked about the competences and capabilities needed for future growth, technical expertise came over strongly in the responses, by which we take to mean core mechanical and electrical engineering skills which are likely to be under pressure when new contracts are obtained. Other skill sets identified as important by individual companies included marketing skills, financial management skills, global supply chain management skills (eg for international distribution) and strategic thinking skills.

One company made the point, which is probably generalisable, that, because of the difficulty recruiting experienced engineers, they now focus on recruiting people with the right attitude and outlook ('the right work ethic') to fit in with the business culture and train them. One company which recruited 11 apprentices this year has identified 350 core skills against which it benchmarks and it has created a Gear Academy as well as a Masters in Gear Technology with the University of Huddersfield.

When asked about the ease with which technical expertise can be found in the labour market, there was general agreement that recruitment of experienced engineers is difficult. Some advertisements had led to only a handful of applications and the largest company interviewed talked of the need of engineering to attract far more women to the profession. Recruitment shortfalls have led to a heavy reliance on internal development programmes. Regional issues were raised; one company felt that skills were more widely available in the south of England and some companies raised concerns about difficulties attracting engineers to the region. There were also some concerns about the content of degree programmes being too theoretical and lacking sufficient practice experience. Because of the difficulty recruiting experienced people, firms have turned to in-house development to meet the bulk of their training needs.

Given the importance of skills in the sector, companies were also asked how they managed the development of skills within their organisations and the extent to which they used internal and/or external training support. Few of the organisations included in the study had a formal development programme for their staff. This does not imply that business leaders were not aware of the value of skills development and a number of managers reported that it was an area that they needed to develop within their management practices. Intermediate steps of formality include the use of skills matrices,

but these tended to be restricted to technical aspects of jobs rather than managerial or other developmental skill sets.

Perhaps not surprisingly, the larger organisations in the study had more developed schemes, one organisation having a development scheme approved by the Institute of Mechanical Engineers. On the whole however, given the significance of key technical skills within the sector and the focus on internal development of training needs, this is an area which companies might benefit from improving.

Associated with this, managers were also asked about how they identify employees with high potential and the capability to become future business leaders. The larger organisations in the sample made use of appraisal schemes in which training and development needs are discussed with individual employees on an annual basis. These discussions lead into the skills development plans for the companies. Even the larger companies, however, reported that this process would benefit from being more structured, but that it was not necessarily a project that was high priority. Smaller companies rely on 'knowing' their employees and being sufficiently close to the shop floor to recognise which employees have talent which should be nurtured. Given the stated preference for developing skills internally, and promoting from within, the management of skills development is perhaps an area where businesses could benefit from support.

Finally, companies were asked whether there were any barriers to retaining staff. The principal concern regarding retention is that smaller companies find it challenging to meet the salary and benefits packages offered by larger companies. Smaller firms reported that they were able to attract graduate calibre employees, but once these employees have experience and greater skills, they become more difficult to retain.

Companies in this sector tended to have had a stable workforce over a period of years (periods of redundancies notwithstanding) but they reported that it is difficult to retain staff when larger companies are able to offer better salary and job opportunity packages. This issue was perceived to be of less concern for the larger companies who are part of a broader corporate group of companies and therefore able to offer a wider range of development opportunities.

4 Older workers and retirement

The final part of the study explored the issue of older workers and retirement. Manufacturing is often perceived as being a traditional industry that tends to have an older age profile than some other sectors. Companies were therefore asked about their age profiles. In the majority of cases, the workforce profile was considered to be 'mature' or 'maturing' and the management of older workers is relevant for most. Most organisations had workers of age 50+ and many had employees close to retirement. In one organisation however, the oldest member of staff was aged 40.

On the whole, companies took a positive view to older workers and were concerned that key skills and tacit knowledge would be lost when older staff members retired. They were also concerned that it would be difficult to replace some retiring employees. Whilst the value of some of the older workers was evident, managers observed that the retention of older staff can cause difficulties for younger workers, both in terms of the ability to recruit 'new blood' to the shop floor and also in terms of career development for younger staff. One organisation described this as the 'glass ceiling effect'. One manager said that he would like to be able to recruit new staff before older ones retire but that was not financially feasible without new business contracts being won.

One issue that arises out of the management of an older workforce concerns the process of retirement of staff and there have been significant legislative changes in this area recently. The coalition government brought forward the planned changes to abolish the default retirement age, making it unlawful for an organisation to compel an employee to retire. From April 2011, compelling an employee to retire at any age will be considered as age discrimination unless it is 'objectively justified'.

This is a very significant change in legislation and for the management of older workforces. We were interested in whether organisations were aware of the changes and what they perceived the implications of the changes to be.

It is positive to report that the employers in the study stated that they were broadly aware of the changes in the legislation and were at various stages of implementing the changes. Depending on the extent to which companies already had a developed retirement policy, the responses varied. Smaller firms with low staff numbers, with a young age profile, were aware of the changes, but did not have any formal policies relating to requirement and have therefore not made any changes. For other organisations, the changes made have been minimal: the removal of references to the 'default retirement age' and ceasing to write to employees who are approaching the age of 65.

Other firms however had well developed retirement policies prior to the change in legislation and these firms have undertaken a more integrated approach to adapting their policies and procedures. Examples of a more proactive approach included ensuring that health insurance benefits are extended to all employees up to age 70[1] (the level premiums double after the age of 65) and modifying the previous 'step-down' procedures which allowed people to reduce the number of days worked per week during a transition period prior to retirement. For these organisations, the abolition of the default retirement age makes the implementation of such polices more difficult to administer, but the employers felt that these difficulties were not insurmountable. One example of good practice was an organisation that runs a 'SAGA' club where employees who retire are able to return to work for a couple of days a week to transfer knowledge and provide continuity to the remaining staff.

Most of the organisations had a fairly limited perspective of some of the implications of the abolition of the default retirement age and did not foresee any major difficulties arising. In the short term, the recent changes were not likely to change the plans of existing employees who had already decided at which age they wished to take formal retirement.

On the other hand, there was limited awareness of some of the longer term issues that are predicted to arise from the changes in legislation, specifically in the area of performance management. In the absence of a fixed retirement age, the way in which an older worker finally leaves employment becomes a process which will need to be managed in a more explicit manner than before, particularly in relation to managing performance. Having fair and robust performance management systems is likely to be necessary for all employees (not simply older workers) to identify changes in employee skills over time. The use of appraisals may also provide a forum for an employee to discuss his/her work intentions to help with workforce planning issues. Only one respondent organisation alluded to the increased need to develop suitable performance management issues.

[1] Insured benefit exemption: The Regulations contain an exemption which means that it is not discriminatory for an employer to withdraw group risk insured benefits from employees over age 65. Employers should be mindful that the wording of their policies could be interpreted as offering benefits to all employees, of whatever age.

One organisation cautioned that changes to policies and procedures were only part of the solution. One of the areas that organisations need to develop is the capabilities of managers and supervisors to manage the performance management process and to engage in conversations with their employees about performance and potential deterioration of performance.

5 Main conclusions and recommendations

The current study has given some insights into the role of workforce development and skills in a small number of companies in the AEM sector in the Huddersfield area. After a difficult period which has seen job losses, growth is anticipated from overseas sales and production and this growth will be focussed on turnover and profit. Jobs growth in this sector is likely to be slow as companies target operational efficiency ahead of job creation.

Skills remain a key issue in the sector. Attracting high calibre engineers with appropriate levels of experience is a problem which is aggravated by the retirement of skilled engineers from the current workforce. Regional branding appears to be a factor in attracting and recruiting engineers to the Kirklees area and recruiting to fulfil new contracts will create difficulties for some companies. A study of the West Yorkshire regional brand in relation to employment could provide useful insights into ways of tackling the image of employment and living in the region. There has been work on regional branding from a tourism point of view but far less from an employment perspective.

New product development is likely to underpin much of the future growth seen in the sector. Further and Higher Education providers could usefully look at how much support for new product development features in business and engineering programmes.

The age profile in these organisations can be considered to be 'mature', but this is not seen to be a major source of concern. Older workers are valued due to high levels of skills and experience and the changes to the retirement age legislation mean that some of these staff may continue to work for longer. There is more limited understanding of medium term implications of the changes, particularly in the area of performance management. Support from training intermediaries for companies in managing performance appraisals could help to develop this capacity for firms in the sector. A study of the ways that retired employees can help in talent development programmes could also provide useful insights and solutions to skill shortages.

Appendix 1 Interview Schedule

University of Huddersfield / Kirklees MC / WYLNN

Business growth and workforce development in the AEM sector

POINTS TO MAKE BEFORE STARTING THE INTERVIEW

University of Huddersfield and Kirklees Metropolitan Council are anxious to do what they can to support growth in the region.

This is a joint research project to understand the needs of local companies in the Advanced Engineering Manufacturing (AEM) sector.

The project looks at issues of workforce development and planning and what companies think they need to support for future growth. The research intends to develop a better understanding of:

- the specific business support needs for AEM companies in Kirklees with the potential for growth
- workforce development and succession planning issues in AEM sector companies, and
- gather information to assist with the design of appropriate higher level skills development and business support interventions

The questions cover three main areas

- Growth
- Workforce development and training
- Workforce age profile, succession planning and retirement

All information given in interviews along with the identity of participants will be kept confidential.

As part of the research design we would like your permission to audio record each interview - this way information and ideas are captured in full for analysis.

Interviews will be transcribed and a research report produced. The findings of the research will be used to inform KMC's Business Support Strategy.

If you have further questions about the purpose or conduct of the project please contact Barbara Butler at the University of Huddersfield.

Business growth and workforce development in the AEM sector

Interview schedule

Part 1: Growth

1. **Do you anticipate that your company will grow in the next 12 months?**
    a. **If yes, in what areas of the business do you expect growth to occur?**
    b. **Do you have any preferences for growth to turnover / profits / jobs /market share (domestic / international)?**
    c. **If you are planning for growth, what factors will help make it happen?** ***(change in economic conditions, market demand, innovation, product development (internal or external), reversal of downward trends)***

If you do not plan to grow, what are the main reasons?

2. **Looking back, has your business experienced a period of expansion or growth over or during the past 5 years? If yes,**
    a. **When was it? (Eg 2008-9)**
    b. **How did the growth affect the business eg in terms of turnover, jobs, profits, market share?**
    c. **Can you provide some details about the reasons/factors that led to or encouraged this period of growth in your business? Greater investment, Increased staff numbers, other?**
    d. **What challenges did it face from the growth period?**

If the company has not grown in the past 5 years, what are the main reasons?

Part 2: Workforce and skills.

1. **What capabilities/competences do you think are vital for the future sustainability and growth of your business? e.g . management, marketing, technical expertise**

2. **What is your assessment of the current and future availability of these capabilities and competencies within your current workforce?**

   What capabilities and /or competence gaps do you have now or anticipate?

3. **Turning to how you resolve your skills gaps and develop the workforce…**

   a. **How well do you think you will be able to recruit people with the skills and competences you need for growth? (If you foresee problems, please explain)**

   b. **Training and development**

      - **How would you normally source training and development (e.g. in-house, consultants, colleges and universities?)**
      - **How do you feel about using local colleges and Huddersfield University to meet your training and development needs?**
      - **Do you see any gaps between what you need and what they provide?**

Part 3: Succession planning and retirement

1. **How would you describe the age profile of your workforce? (eg, young, reliant on people nearing retirement)**

   - **Does the age profile pose any special issues?**

2. **Thinking about managing your most talented employees and future business leaders…**

   - **How does your company go about identifying employees with leadership potential?**
   - **Do you operate any formal development programmes for high potential employees?**
   - **Are there any barriers to retaining current and potential business leaders?**

3. **Is your company aware of the recent changes to the 'Default Retirement Age'? If yes,**

   - **Has your company made any adjustments to its retirement policies and procedures?**

- **Does your company expect to face any difficulties in this area? (eg. Dealing with older workers whose performance is declining? Managing older workers? Concern over age – discriminatory practices)**

4. **What support would your company find helpful in the area of managing older workers and managing without a retirement age?**

This interview has focussed on growth and the workforce…

Are there any other areas that you think are important in relation to growth that we haven't covered? (If so please explain).

Are there any issues for KMC or the University can support your business? (If so please explain).