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Understanding Employer Networks

Annexe 1: Case Studies
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Intelligence > Investment > Impact

Understanding Employer Networks

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Annette Cox, Tom Higgins, Rachel Marangozov

Institute for Employment Studies

Zoey Breuer and Richard Garrett

UK Commission for Employment and Skills

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1   Background to the case studies

1.1   Introduction

This annexe provides detailed accounts of each of the case study networks investigated as part of the Understanding Employer Networks study. Each case study follows a common structure outlining the background to the network, how and why the network was established, its funding and governance, the types and number of employers involved, the network's activities and its impact on employer skills and growth.

The case studies involved approximately five to seven interviews per network, including network leads/representatives, funders, learning providers and employers taking part in network activity. The interviews enabled an in-depth examination of how the employer networks developed and functioned, and how they were viewed by employers. The case study research also provided more detail on network operations, functions and activities.

The main Evidence Report XX: Understanding Employer Networks draws on evidence from across the study which included a literature review, online mapping exercise, small scale online and telephone survey, as well as the series of eight case studies investigating the role of employer networks in contributing to skills development and innovation in the UK.

1.2   Definition of an 'employer network'

A working definition of an 'employer network' was agreed for the purpose of this study and is set out below:

> A network through which employers and businesses can offer and receive support, information, advice and business opportunities. Employer networks can be sector-focused, geographically-based, and either address sector-specific skills needs or have a wider business and management remit.

The definition was developed by examining classifications of networks used within existing literature and early results from the mapping exercise and functioned as a tool to filter literature and potential case studies during the project. It was intended to reflect the full scope of networks that were of interest, therefore including networks operating on the basis of sector or geography, and including those with a remit focussed on skills or broader objectives, and a mixture of services and activities.

1.3 Choosing the case studies

The choice of case studies was made following the identification of the main network typologies which emerged from the literature review and mapping exercise. The case studies were selected to try to ensure representation of:

- networks with a focus on skills and innovation

- supply chain networks

- more than one GTA type network to explore different types/forms of GTA and understand where initial engagement in the network is driven by reduction in costs or where it is driven by access to quality of learning, range of experiences, location or other factors

- a mix in the size of networks, measured by number of employers participating in any form

- a mix of sectors, which resulted in inclusion of priority sectors including advanced manufacturing/engineering, digital and creative industries and health and social care

- a mix of networks which have different levels of employer participation and activities

- a mix of network structures, leadership and operational models and approaches

- a majority of networks which have a core focus on skills or training

- networks where participation is targeted at the firm, not to the individual

- a focus on networks which cater for UK firms, although participation could be open to internationally-owned organisations

Informal networks were considered for the study, as the wider research literature shows that they can exert considerable influence over employer decision-making. The nature of informal networks means that they can be undocumented and unpublicised; this created some challenges in identifying these networks. Some informal networks were considered as potential case studies for the research but their activities and focus were not sufficiently well articulated to justify their inclusion.

The following chapters provide the full case-studies for each of the eight networks we explored.

2 Tallent Automotive Supply Chain Network

2.1 The set-up and focus of employer networks

Main objectives of the network

This case focuses on the supply chain led by Tallent Automotive Ltd which is a global supplier of chassis. The main site in the UK designs, develops and manufactures parts for the automotive industry.

In managing a supply chain Tallent aims to maximise its own performance by ensuring that their suppliers deliver quality parts on time and at the best price. The objectives were described by Tallent managers as industry standard Key Performance Indicators; quality, performance, cost of parts, delivery (on time and to schedule) and management standards (TS196949 and ISO14001). The network is intended to provide information, advice and guidance to suppliers to enable them to meet the objectives of both Tallent and the ultimate customers which are the major brand car assembly companies.

Key drivers / initiators

There are two main ways that supply chains are set up:

- 'grey box' approach in which the customer becomes involved in the design of parts and nominates suppliers they would like to use

- organic growth over time where supplier relationships develop through open competition and over a period of time. New suppliers emerge if they can compete on cost and innovation.

The supply chain that is the focus of this case study is one which has grown and developed over time. The products made by the supply chain have changed over time as the one which started from Tallent's site originally manufactured make-up compacts.

2.2   Key characteristics of employer networks

Background and characteristics

This network is a supply chain, in which the hub organisation, Tallent, sits under the final customer with other suppliers sitting beneath it. At the top of the chain are the original equipment manufacturers (OEMs), which assemble finished cars using automotive components made by Tallent. OEMs are referred to as customers. Tallent is a Tier 1 supplier for these OEMs and sells directly to them. A Tier 2 supplier sells products to Tallent and a Tier 3 sells products to a Tier 2. Tallent has a supply chain covering companies across the UK and overseas. There is no defined legal status of this supply chain network. It is managed through individual contractual relationships between Tallent and each supplier.

Each contract contains quality standards which can impose training requirements on staff within suppliers. All suppliers are required to have the awards ISO9001 and TS196949. TS196949 is the quality standard for manufacturers in the automotive industry. Those in the supply chain who are stockists should hold the ISO standard. It is easy to know if a supplier has the standard as they have to produce their certificate for Tallent and sign contracts to say that their quality systems meet the Tallent requirements. Tallent also audits its suppliers. It is important for Tallent that their suppliers meet the quality standards as if there is a problem with a component received by the OEM then Tallent has responsibility for addressing it. The target for product quality is zero defects. The supply chain companies receive a monthly vendor report which gives a rating based on performance. Tallent scores each company out of 100 with points based on delivery, concerns, closures, short shipment, of which 35 points are scored for quality.

For suppliers who also perform heat treatment on components, OEMs have insisted that they also hold the quality standard CQ19. This standard specifies which treatments each supplier can do. There are also some specifications and standards that suppliers must work to such as paint specifications and different engineering specifications. This ensures that parts are guaranteed when they are used in a vehicle.

2.3   Funding

Tallent has received no government funding which has directly affected the supply chain and is not aware of any funding received by its suppliers. All the funding for meeting quality standards is provided by each employer, with Tallent providing advice and guidance on how to achieve the standards required.

Tallent employs Quality Managers who have responsibility for setting up new suppliers and monitoring the performance of the supply chain companies. These individuals act as a source of information and advice, and help share best practice between Tallent and its suppliers. Similarly, the supply chain manufacturers also have Quality Managers who focus on ensuring that they meet the KPIs for their Tier 1 supplier, Tallent. One supplier has increased the number of quality managers it employs as it sees this as an important way to grow; because as quality improves so does performance, which can be used as a source of competitive advantage to win more business.

One Tier 2 supplier estimated the cost of maintaining the TS standard as approximately £3,500 per year. The supplier felt that this is cost effective as through achieving the standards it can ensure that their manufacturing processes are robust. When recently audited it took one person out of their role for 2-3 months to prepare for the audit. The suppliers are aware that they need to work to and achieve certain standards in order to operate within the industry.

2.4   Membership

The Tallent group has 97 direct Tier 2 suppliers, including companies in the UK, Holland, France, Germany and China among others. Those in the UK are generally smaller companies than those based outside the UK. The Tier 2 suppliers are varied in size and supply different commodities. There is no minimum size requirement to be part of the supply chain; membership is based on solely on a company's ability to deliver.

The amount of suppliers in the chain tends to remain stable with only four new suppliers in the past eight years. There are two reasons for this. The first is that the chassis components do not tend to change much over time or vary between OEM. The second is that OEMs and Tier 1 manufacturers are seeking to minimise the number of suppliers because fewer suppliers are easier to manage with fewer deliveries to organise and less administration. OEMs have a KPI for reducing and stabilising their supply base.

There has been some impact from the economic downturn as some Tier 2 suppliers ceased trading. Others cut down their staffing levels and are now struggling in keeping up with demand now that has increased. Where suppliers have struggled due to stretched resources there has been an impact on quality and these companies now face significant challenges in returning to their previous operating level.

2.5 Network governance

Tallent does not separate the cost of supply chain management from other operating costs. Two staff have a dedicated role in supply chain management and it also takes up a proportion of the time of management staff. The firm estimates that it costs less than 1 per cent of their turnover to manage. By comparison, Research and Development costs account for approximately 2 per cent of their turnover. One of the directors at Tallent justifies the cost from the perspective of risk management, and believes that it would cost business if the firm did not manage and support the supply chain.

This supply chain network operates with a hub and spoke model; with limited interaction between the suppliers, as information and advice is generally provided directly from with the Tier 1 supplier to each organisation depending on its needs. This means that the support offered is usually tailored and very specific to the needs of the individual organisation and could take a variety of forms. Tallent operates from two sites in the UK, each of which has a different type of relationship with their suppliers. One site has a more formal relationship with suppliers while the other site has a less formal relationship and more frequent face to face meetings.

2.6 Functions and activities of employer networks

Focus and type of activities

The main activity of the network is quality monitoring both for Tallent and its suppliers. This takes place primarily through bilateral contacts with key staff involved from each organisation. Other activities include ad-hoc visits by suppliers to Tallent to learn from their processes but this is not a formalised arrangement.

Much of the learning and support for suppliers that provided is project-based. When a new project starts, consultations take place between Tallent and each supplier on a timing plan. The supplier drafts a control plan to uphold quality standards which Tallent reviews including any training requirements. Tallent also conducts failure modes and effects analysis (FMEA), a procedure where there is analysis of potential failure modes and a system of classification by the severity and likelihood of the failures. This can serve to highlight training needs among staff in the Tier 2 suppliers and responsibility for meeting these lies with the suppliers.

Within each supplier including Tallent, the staff member appointed as Supply Quality Engineer has to be a TS196949 auditor with engineering qualifications and project engineers are expected to hold a relevant degree, which is required by OEMs. Suppliers must provide a commitment to this in writing at the beginning of a project but Tallent does not ask for written proof of individual qualifications because they have known the

suppliers and the individual staff members for so long that they know who is qualified. If a new project leader is appointed, information on their background is sought. When sending out invitations to tender for new work, Tallent usually seeks quotes from firms they already know which have suitably qualified staff.

Once a project is running, daily performance checks are held. A concerns database is accessible to customers, suppliers and internal staff, which allows them to voice problems and alert other companies to issues arising. These concerns are emailed to the Supply Quality Engineers and as a result, a parts and process audit may be required, which in some cases, may lead to a need for further staff training. During a parts and process audit the Supply Quality Engineer examines the control plan showing the sequence of operations, checks that staff are following the processes, that records match and whether operators are adequately trained. The focus of the audit is on outcomes of training in terms of operator competence, rather than how that competence is achieved via content or format of training. To make the audit process easier when it is a critical part or key process Tallent requires photographs of operators on the control plan. This means that when the audit is conducted, it is possible to recognise whether the right person is operating each machine. Tallent regularly visits its supplier to examine processes, investigate any failures and assess counter measures put in place to prevent future problems.

One supplier reported that their reject rate for components was one per month. This number is continuing to reduce but in reality, the firm believes that there will always be some rejects due to human error. The impact of quality problems is significant because of the cost implications of rework, contractual sanctions imposed by customers and their reputation.

Member participation

Tallent mostly has individual contact with each supplier in preference to organising group meetings. Contact and participation in activities to maintain quality and timely delivery are mandatory to comply with the terms of contractual arrangements so in this sense there is no discretion available to participant suppliers. For larger projects, group meetings are arranged where Tallent runs through the overall project timings and requirements, highlighting any skills or training implications and giving suppliers the opportunity to ask questions about product and process requirements.

As well as quality standards, other demands placed on the Tier 2 suppliers by their customers include scheduling and costs. Tallent maintains low stock levels so suppliers are expected to keep stock at their own premises ready for when it is needed and demand can change on a weekly basis. Cost is the other main demand; suppliers have to keep their costs down to be competitive.

2.7   Impact of employer networks on skills and growth

Network outcomes and impact

The benefits to supplier development activities for Tallent are that it can help keep costs down to ensure its own competitiveness, timely deliveries and ensure product quality. For one supplier, being part of the supply chain has improved the skill base and processes adopted within their organisation. Managers believe they have learned a lot from working as a contractor to Tallent through adopting processes they have seen the customer used. By adhering to quality standards such as TS196949, focussing on continual improvement and learning from system failures and quality problems, suppliers are able to improve their processes. This creates the possibility of being able to move from Tier 2 towards Tier 1 status in terms of the type and quality of the products they deliver. By being aware of the potential demands that could be placed on them by the final customer, operating in a similar manner and demonstrating their capability through performance, in the short-term, they also hope to win more work in the future. It is clear that this diffusion of good practice across the supply chain offers the potential for firms to be able to move into higher value added work.

One supplier clearly identified other ways in which being part of a supply chain was beneficial. In an industry where there is no real branding or marketing of the components which are manufactured, membership of a recognised supply chain enables the supplier to become well-known as a quality supplier. This is important where new work is based on word of mouth. Another benefit is that by being part of a supply chain the firm can buy goods at more competitive rates, through participating in a bigger overall purchasing contract. This in turn means they can keep their costs low and can sell their own product at more competitive prices.

Tallent perceives a general skills shortage in engineering, in the UK and in particular in the North East where employers in the local supply chain are trying to recruit similar types of staff from a small pool. Tallent are not trying to address this through their supply chain, but instead are working with local schools, with the Sector Skills Council and other business forums and partnerships to try to help boost the supply pipeline. It is possible that Tier 2 suppliers may benefit from the promotional activities of their Tier 1 customer.

2.8 Conclusion

The learning and development mechanisms at work in the Tallent supply chain arise out of the informal learning exchanges resulting from formal contract management processes in a highly competitive industry with high quality standards. While participation in the network is compulsory as a function of the contractual relationships between organisations, the implications for participation in particular forms of skills development are loose and indirect, with a focus from the customer on quality of outputs and certification of quality mostly focussing on the organisation, and a lesser focus on the qualifications held by some of its key staff. The informal nature of the learning arising out of business-to-business relationships means that no formal definition, plan or costing of learning activities takes place. The central mode of learning is from the Tier 1 supplier to each Tier 2 supplier in a hub and spoke model with no learning reported between Tier 2 suppliers.

Tallent believes that its work with suppliers indirectly improves management processes and individual skill levels. It has improved supplier performance through improving delivery standards, reducing the incidence of quality problems and reject parts. To maintain contractual relationships the supply chain has to deliver the best product as cheaply as possible in a highly competitive sector. Although suppliers have contracts, these can be terminated easily so Tier 2 suppliers need to maintain their reputation. This reflects an 'arms length' type of contractual relationship governing skills development, in which training of individuals is a second order priority.

3   Welsh Contact Centre Forum

3.1   The set-up and focus of the network

Main objectives of the network

The WCCF is a membership organisation open to directors, managers and supervisors of all contact centres in Wales, along with a smaller group of suppliers to the contact centre industry e.g. recruitment companies, technology and IT providers and office supply firms and stakeholders e.g. Welsh Government, sector skills councils or employment service organisations like Remploy.

The WCCF has a broad aim of supporting and strengthening the contact centre industry in Wales, in particular by facilitating co-operation and information sharing amongst employers and the delivery of vital pre-employment training for the industry.

Legally the Forum is a not-for-profit limited company and employs a core team of four staff. The Forum is led by the managing director in collaboration with a board, comprising senior employer representatives with global as well as UK and Wales responsibilities. The board and managing director are responsible for determining the overall strategy of the WCCF and the events and activities it runs.

Key drivers / initiators

The WCCF began in 1999 as the Cardiff and Newport Call Centre initiative, an inward investment programme backed by a partnership of local authorities and Training and Enterprise Councils (TECs). Between 1999 and 2003, it expanded to include other local authorities and the Welsh Government.

Its initial aim was to encourage companies to base their call centres in Wales. At first, it was entirely publicly funded and had no formal legal status. One element of the original body was an employer roundtable, where existing contact centre employers were invited to help the Government understand the needs of the industry better. Over time this employer forum grew into a force in its own right and the WCCF gradually developed into a more employer driven body.

In 2004 the WCCF became independent of Government as an employer-led organisation. Independence from Government was intended to build the credibility of the Forum in the eyes of potential employer members and give employers more freedom to develop the activities of the Forum in ways that would be beneficial to them. In its current form the WCCF still receives some funding from the Welsh Government, equivalent to roughly 30% of its turnover.

The drivers of the network developed over time. While initially focussed on attracting inward investment to Wales as a public policy aim, the WCCF shifted towards dealing with problems faced by existing contact centre employers as employer involvement grew. The most important of these were issues around recruitment and retention. In discussion with each other, employers discovered they were all facing similar problems, in particular attracting suitably qualified and motivated staff and losing staff at a high rate. This helped encourage the development of an employer-led network.

In terms of the individuals or groups involved in the development of the WCCF, the Welsh Assembly Government was obviously crucial in the early stages. The main drivers of the move to making the Forum independent were the managing director and members of the employer forum. The first employer board was largely drawn from the members of the original employer forum who were most enthusiastic about developing the network. Over time selection of board members has become more structured and this is discussed in more detail below.

3.2   Key characteristics of employer networks

Background and characteristics

The WCCF is difficult to categorise according to standard network typologies. It has elements of a geographical cluster given its focus on the industry within Wales and a supply chain due to the involvement of supplier companies. Since becoming independent of the Welsh Government, the WCCF has been established as a not-for-profit limited company, a model that was chosen to signal that the Forum was commercially oriented (i.e. not a charity or social enterprise) while reinvesting surpluses for the benefits of members, rather than generating a profit for itself.

3.3   Funding

Funding for the WCCF come from five main sources:

- 30% of the organisation's funding comes from the Welsh Government. This allows the Forum to offer free membership to all contact centre employers in Wales.

- Suppliers are charged a membership fee according to their size.

- Events run by the Forum can be a source of income either through charging for entry or sponsorship

- Services provided to members, particularly training and consultancy

- Occasionally the Forum is commissioned to produce pieces of research.

The key change to the funding model occurred when the WCCF became an independent body. The Welsh Government has a Service Level Agreement with the Forum to ensure funding is only spent on operational costs. The funding is provided on a monthly basis, and the relationship is regularly assessed to ensure it is providing value for money. The main criteria are whether the money is being spent correctly and the WCCF's ability to help the Welsh contact industry grow, although there are no formal mechanisms or criteria for making this judgement.

The WCCF currently employs four staff: the managing director, a training co-ordinator, finance administrator and a members' business advisor. In addition to this there is a team of eight freelance consultants and trainers who work for the WCCF on a regular basis. Activities such as PR are outsourced. To give an example of the kind of workload associate trainers might take on: training courses vary in length from two days to longer courses with single days spread over several months. Preparing and designing short, two day courses requires a week to a fortnight (depending on whether the course builds on previous provision or is brand new) while longer courses can require up to a month. Staff reported that the core team is quite stretched and a large amount of the success of the Forum was attributed to the willingness of the managing director and others to meet with employers on a one-to-one basis. Greater resources and the ability to employ more staff would reduce the strains on the core team and make it easier to offer a more services to members. However, having to run the operation on a tight budget helped focus the activities of the WCCF on what would genuinely bring benefit to members and, by extension, generate income for the Forum. This process has led the Forum to be both lean and extremely focussed on its members' needs. It was widely acknowledged that the management of the Forum is very effective and lean. While a greater level of funding may have been helpful, in the longer term this may have had a detrimental effect on the development of the WCCF. The earlier public funding helped establish the Forum as a "brand" at the outset. Though it was not conceived as such at the time, the period of public funding could be retrospectively interpreted as seed funding which helped develop the relationships that would eventually form the employer-led WCCF.

3.4   Membership

There are currently 198 core members of the WCCF and another 40 associate members (suppliers). Any contact centre employer can join the Forum with no membership fee. The WCCF believes membership rates among contact centre employers in Wales is close to 100%, as it is not aware of any employers who are not members but accepts that some very small employers may have been missed. The range of employer sizes is broad and includes both small and very large contact centres, with the average member size is 400 seats. The WCCF is more selective about its choice of associate members. It is intended that associate members will remain in the minority among members, and the key aim is to ensure a good diversity between different types of supplier companies, including recruitment, technology and office supply companies. The costs of membership for associate members vary by size, from £199 plus VAT for organisations with four or fewer employees, to £450 plus VAT for a business with five to ten employees and £800 plus VAT for eleven or more employees.

Membership has stayed relatively constant over recent years, mainly because the high membership rate amongst contact centre employers means any new growth will tend to come from new employers setting up call centres in Wales. In particular, there was no major impact in the recession. Although a small number of contact centres went out of business these have been replaced by new centres being set up.

3.5   Network governance

The WCCF is led by the board which includes nine employer representatives and the managing director which meets five times a year. Board members primarily represent their employer, although there is a scope for particularly valuable individuals to remain on the board even if they change jobs. Board membership is fairly stable. New board members are selected by the existing board according to a range of criteria, particularly if an individual can bring additional knowledge about the industry that is otherwise lacking. Additions to the board have to be agreed by the existing board members. Generally this is done by invitation; the board undertake a regular skills gap analysis to identify if there are aspects of the industry where they lack knowledge. If gaps are identified, the board will look to recruit additional members. Occasionally they receive requests from individuals wishing to be on the board, and these are considered in terms of what the proposed member would add to the current capacity of the board. The main aim is to ensure the board broadly represents the diversity of companies and activities within the sector.

The board reviews the WCCF's strategy on a regular basis, the decision making process was characterised as iterative and experimental. The board constantly looks for opportunities to expand and develop existing activities and services.

Interviewees largely felt the system worked well. The only major issue noted was that, aside from the managing director, all the board members had "day jobs" which took up a large portion of their time. There are times when some board members are unable to attend meetings; however an individual is only permitted to miss two of the five meetings a year. It was emphasised that despite these issues the board actually functions well. The main learning point appears to be that employer board members have to be committed to the network and prepared to put a considerable amount of additional time and effort in on top of their regular jobs. For the WCCF it has been important to get the "right kind of people" on the board, as well as individuals who have the requisite knowledge of the sector.

Input from regular members is also important to the WCCF. It helps that the board is made up of employers who are representative of the overall membership but the Forum constantly makes efforts to collect feedback and recommendations from non-board members. This is particularly crucial given that a significant proportion of the Forum's funding comes from services and activities paid for by members. Members felt that their views were being taken on board, noting, for example, that feedback forms were provided at every event run by the forum and that the WCCF's staff were easily contactable.

There are a number of channels for communicating with members with the main ones being the quarterly forums, e-mail and through the website. Members reported receiving e-mails on roughly a weekly basis and felt this system worked well. The WCCF felt there is, however, scope for improving the communication arrangements, particularly trying to ensure members get information via e-mail that is more directly relevant to them. Currently the forum is planning to invest in a new Customer Relationship Management system to allow them to better target communications to members. The main reason this had not been implemented in the past was a lack of resources.

Given the WCCF's emphasis on information sharing there are also a number of ways for members to communicate with each other. Face to face opportunities include quarterly forums, director's roundtables, best practice visits and more social events such as the Welsh Contact Centre awards. Interestingly, the WCCF facilitates networking at more junior staff levels through its Team Leaders Forum. Additionally there are specific networking groups for shared service and financial service employers. Online resources for members to communicate with each other include LinkedIn groups, the capacity to ask anonymous questions via the WCCF and an online chat forum. Members particularly noted the importance of social events such as the awards ceremony in facilitating contact between members, because these are not explicitly "networking" events they constitute a more informal way of getting to know other people in the industry.

3.6 Functions and activities of employer networks

Focus and type of activities

The WCCF provides a wide range of opportunities for networking and information sharing, they include directors' dinners, executive roundtables, task & finish groups, team leader forums, quality groups, a workforce planning roundtable and best practice visits.

Additionally the Forum is itself a provider of support and information to members for example by providing intelligence reports on a range of issues (including technology, labour market conditions and funding opportunities) and consultancy. This includes making members aware of experienced staff who are due to enter the jobs market when another call centre has had to make redundancies. A crucial part of its work is the advice, current industry data and practical support it provides to the Welsh Government and other key stakeholders. In the case of the Welsh Government, the Forum regularly briefs ministers and senior civil servants across several departments to aid the development of policy and strategy on issues such as inward investment and skills development. Its contribution also includes practical support in attracting inward investors and in providing pre-employment training to ensure new and growing contact centres have the people they need. In addition it also works with Sector Skills Councils to develop and update training frameworks for the industry and collaborates with schools and the careers service to create a longer-term pipeline of suitable staff. Its stakeholders also include employment support organisations such as Remploy, Job Centre Plus, EHRC, Serco, Working Links and Job Match.

Promoting and "celebrating" the industry is also a key part of the WCCF's role, for example combating negative portrayals of the industry and running the Welsh Contact Centre Awards. Additionally, the WCCF maintains elements of its original role in inward investment. Companies considering opening a contact centre in Wales are able to receive a personal visit from the managing director. These kinds of activities cover a broad range of areas including skills. For example sharing information on best practice can particularly focus on workforce development and training issues while intelligence can include signposting training providers. More directly in relation to skills, the Forum runs training particularly aimed at SMEs who are unlikely to have the capacity to run internal training programmes. These courses tend to be fairly short and focus on topics like customer service skills and team leading. The WCCF has worked with training providers to help develop new courses for the industry and also assists the Welsh Government in targeting funding for training. Additionally the WCCF has collaborated with Jobcentre Plus and Work Programme providers to deliver pre-employment training to the unemployed. The programme includes guaranteed interviews at WCCF members.

The members we spoke to particularly valued the opportunities for information sharing and networking provided through the Forum. These were seen as effective ways of learning from the "best practice" of others and developing ways to solve common problems across the industry. It was noted that the team leader forum, which aims to help team leaders from across the industry learn from one another was introduced at the direct request of members who wanted to give their team leaders development opportunities.

There has been a skills and innovation element to the WCCF's activities from very early on. It was emphasised that the Forum had not set out to be a training organisation, rather the development of a skills focus came in response to employer demand. One of the key problems for the industry has been the recruitment and retention of suitably skilled staff. Helping managers learn about best practice management techniques, particularly developing good quality systems for the training, development and progression of staff has been a core part of its mission. The direct training provided by WCCF particularly focuses on small and often bespoke training courses focussed on specific areas which are of concern to members. There is high uptake of WCCF training among smaller employers who may lack the capacity to develop their own internal training programmes.

The content of courses is heavily driven by employers. The WCCF develops courses on issues that have been identified as particularly relevant to employers through forum discussions and from employer feedback. Popular subjects for shorter courses currently include "Service to Sales" to improve operatives abilities to persuade customers to purchase additional products and courses on the use of social media. Additionally the Forum offers more general courses with more fixed content, this includes the Team Leader Development Programme and the pre employment training. For more general courses employers are approached to identify preferred training content. For bespoke courses, trainers have a face to face discussion with a representative of the contact centre to determine their specific needs.

Member participation

The activities run through the network are largely determined by the board. The purpose of having an employer board with diverse representation from across the industry is that they will be able to develop activities that are of relevance to employers. However, the WCCF also seeks feedback more broadly from members. In particular feedback on the success of activities is formally collected and collated after every event. Informally, the managing director is regularly in contact with members and actively seeks feedback. It was generally felt that this process has been successful in generating relevant activities.

The most popular activity appeared to be the annual Contact Centre Awards, which was described by one employer as "The most inspiring event in the Welsh Contact Centre industry". The awards were commended for helping to celebrate and improve the image of the industry as well as being an event where individuals at all levels of different organisations get to know each in an environment which is less formal than a normal networking event. It was also noted that the team leader forum is very popular among employees at that level. Overall, however, there did not appear to be any activities which were notably unpopular, it was emphasised that the WCCF would only run activities that members felt were relevant.

There are some activities which are designed for specific groups within the Forum such as the Shared Services and Financial Services Forum. Additionally, the main participants in training provided by WCCF tend to be smaller employers who lack the capacity to run their own programmes. It was during the current difficult economic climate, training has become slightly more popular than consultancy activity although the reasons for this were not entirely clear.

Delivery and outlook

Members wishing to access training and consultancy services pay an additional fee per session for this. Training and most consultancy is primarily provided by freelance Associates contracted in by the Forum, this has historically been more cost effective than employing trainers and consultants directly.

The emphasis of training provision through the WCCF is on short, flexible courses on specific and pertinent topics. Trainers are able to draw on the wealth of information available through the Forum best practice events. The organisation of training is designed to fit around the specific needs of individual employers so bespoke courses can take place at times to fit in with employer needs and at whatever locations the employer wishes. Due to its organisation and the kind of courses being offered, the WCCF can usually meet these needs relatively easily.

The main benefit members get from the activities of the network is information that they would otherwise not have access to, in particular information about the experience and best practices of other companies in the sector. More strictly in terms of skills there are also clear advantages from being able to access WCCF training. Compared to commercial or public sector training providers WCCF are able to offer very flexible, tailored and demand led training which draws on, among other things, the expertise of the network. This latter aspect was noted as particularly important, because trainers at the WCCF have access to information that external training providers would struggle to collect.

3.7   Impact of employer networks on skills and growth

Network outcomes and impact

One of the key achievements of the Forum has been to break down the barriers to co-operation and joint working within the contact centre industry, in particular an unwillingness to discuss mutual problems with competitors. Co-operation and best practice sharing is felt to have had a notable impact on the contact centre industry in Wales. Interviewees noted that many of the problems which the Welsh Contact Centre industry faced when the Forum began are now much less severe, in particular recruitment and retention of skilled individuals, a negative public image and the quality and structure of training and development within firms. While it was not suggested that the WCCF is the only reason for this change, interviewees felt that it had made a significant contributions.

Additionally, members noted that co-operation within the industry threw up numerous commercial opportunities. This was particularly valuable for supplier companies who are able to advertise their services to contact centres at WCCF events while also getting a better understanding of the needs of their customers.

The Forum is believed to have played a key role in helping the growth of the Contact Centre industry in Wales. The Forum's ongoing role in attracting new business to Wales is widely felt to be important. The Forum provides potential employers with a source of independent, credible information about the conditions for contact centres in Wales. Additionally by providing support and guidance to businesses in their early stages, the WCCF helps new organisations get a foothold in the market.

The main means of monitoring the Forum's performance is through member feedback, the majority of which is very positive. It was noted that the Forum only received two complaints in the last year.

The experience of participating in the WCCF had led some members to seek to set up similar bodies elsewhere. Although the WCCF works with employers who have sites in Wales, many of these companies also operate outside Wales. These connections have led to establishment of the South West Contact Centre Forum by members of the WCCF who also operate in the South West of England. The SWCCF charges all members a fee and currently has mainly larger employers as members, though this is partially reflects the nature of the industry in the South West region. Secondly, although employers themselves were aware of the benefits of having a regional industry network, they requested assistance from some of the personnel involved in the WCCF to set up the network and one of the WCCF's associates is now the managing director of the SWCCF. On their own, the companies lacked the time and capacity to undertake the tasks required to initiate the network.

3.8   Conclusion

The WCCF appears to be an organisation which is valued by its members. The Forum appears to have had a long-term positive impact on the contact centre industry in Wales. The fact that some members have sought to set up similar bodies elsewhere indicates its perceived value.

One of the key success factors for the Forum is the offer of free membership for core members. This is part of the reason for the very high membership rate across the Welsh contact centre industry. Interviewees commented that without free membership it is likely that the WCCF would probably be much smaller and dominated by larger employers. The high membership rate in turn explains much of the appeal to supplier organisations. The fact that the vast majority of contact centres in Wales are members of the WCCF makes membership an extremely enticing prospect for supplier companies who count contact centres among their major customers.

The second critical success factor that repeatedly cropped up in interviews was the "quality and drive" of the Forum's management. Many interviewees pointed to the importance of the managing director and the team who have worked extremely hard to make contacts and build relationships with employers to develop the Forum and sustain and grow it over the years. It was commented that had the managing director been less committed to the success of the forum it is likely the organisation would not have the size and impact it does today. Similarly the role of the board has also been crucial. Having an employer board with diverse representation from across the industry is felt to have helped ensure the relevance of the activities run by the forum.

Clearly the public funding has been important to the WCCF. However it is interesting to note that public funding, while substantial, does not form a majority of the Forum's income. Since becoming independent of the government, the Forum has had to generate the majority of its income itself. As noted above, this has led to the WCCF working on quite tight margins which in turn appears to have been a useful discipline, making the Forum pay close attention to cost effectiveness and relevancy.

The WCCF case study uncovers some interesting lessons for network set up. It is important to note that the current shape of the Forum was not the one envisaged at the outset of the project, when employers were asked to share their views on the needs of the contact centre industry to help influence an inward investment initiative. It was only over time that this developed into a collaborative learning network. The Forum initially helped employers to see the benefits of co-operation in an industry that had previously been characterised by insularity amongst employers. This highlights the fact that building networks from scratch is a long term project and suggests that it may be helpful, where there are few existing relationships, to consider means of relationship building. Similarly the history of funding of the WCCF shows considerable funding upfront followed by a requirement to find its own sources of funding as it began to grow. While this approach to funding may limit growth and expansion, it appears to strengthen the focus of network activities.

4 Offshore Petroleum Industry Training Organisation (OPITO)

4.1 The set-up and focus of employer networks

Main objectives of OPITO

The overall aim of OPITO is to deliver skills and workforce development initiatives and activities which ensure a competent and safe workforce supply for the oil and gas industry. OPITO does this through aiming to match the demand for skills from the industry to the supply of skills from education and training providers. Founded in the UK, in 1979, OPITO has always provided a focal point for skills development in the oil and gas industry – a focal point which stems from its origins as the Petroleum Industry Training Board (PITB). Since then, OPITO has evolved to meet the needs of the oil and gas industry. A unique employer and trade unions owned not for profit organisation, OPITO uses commercial business models. These generate funds in return for the supply of products and services that are focussed on ensuring the availability of a safe, skilled and effective workforce both now and in the future.

Key drivers / initiators to the set-up of OPITO

One of the original key drivers to the creation of OPITO was the need to provide Emergency Response standards to the offshore industries. In its early days, there were no common industry standards to develop and train the offshore workforce. Safety representatives' training was also unregulated which affected the ability to gain robust workforce engagement to help create a safe workplace. The driver for OPITO's registration and quality assurance system emanated from Lord Cullen's recommendation for the industry to have an independent central registration system of all emergency response training following the Piper Alpha tragedy in 1988.

In its previous guise of the PITB, OPITO was funded through an employer levy system so that the cost of training was shared evenly between employers in the industry. The source of OPITO's funding has changed fundamentally since then, with industry funding its activities to date through trading models based on quality, cost and time.

OPITO business models are self-sustaining and were created to ensure that OPITO operated and behaved in the same manner as its employer stakeholders. OPITO does not receive any donations or levy funds from the industry. The UK industry makes an annual contribution of approximately £9.5 million to support the work of OPITO in the UK and ensure it has the capacity required to serve the needs of the UK industry.

4.2   Key characteristics of employer networks

Background and characteristics of OPITO

Founded in the UK, in 1979 as the PITB, OPITO is owned by equal industry partners Oil and Gas UK, the International Association of Drilling Contractors (IADC) and the Inter Union Offshore Oil Committee (IUOOC). OPITO is a self-sustaining, not-for-profit organisation which currently operates in 38 countries around the world. It has offices in Aberdeen, Dubai, Kuala Lumpur and Houston USA.

4.3   Funding

The OPITO group employs 65 (45 in the UK) staff, with a total of 6 operating companies and a charity (the offshore Training Foundation (OTF) group), it has an annual trading income of approximately £13 million per year. All surpluses generated through business transactions are reinvested into the business, which amounted to £0.5 million for OPITO UK in 2011. International surpluses are similarly invested but separate from the UK business. The UK staff roles include those responsible for developing industry standards, engaging with employers and staff responsible for running projects to attract young people into the oil and gas industry as well as policy and research staff. Funding from commercial activities is used to provide key services around engagement, influencing, careers and attraction initiatives. OPITO does not receive government funding. A key source of finance is managing the OPITO Approved training network that delivers training to the OPITO (Industry) standards. Each person trained to OPITO standards has their personal training details recorded within the Vantage Central Register, which is maintained by OPITO. A registration fee of £25 is charged, and this funds the UK business infrastructure, management of data, quality assurance for training provision and the maintenance and development of standards amongst other activities. There were around 105,000 UK registrations in 2011.

4.4   Membership

There is no formal membership for OPITO. Its training and services are open to all employers in the oil and gas sector who wish to train their staff in health and safety standards and the current fee is £25 per person trained. Registrations are predicted to be stable through 2012 and in line with 2011 figures which reflected a relatively active market. Training registrations are based on industry demands. New standards or the modification of existing ones are driven by changes to working practices, identification of hazards or emerging industry needs, but the drivers for change comes from employers. The cost of registrations has only increased by £4 over the last 12 years and this increase was agreed by the UK board to cover the additional activities deemed necessary by the industry.

4.5   Network governance

OPITO is owned by equal industry partners Oil and Gas UK, IADC and IUOOC. This is reflected in the composition of the Board of Directors, which also includes several of the largest employers in the industry. A member of the regulatory body, the Health and Safety Executive, is an observer to the Board. The Board meets quarterly and determines OPITO's overarching strategic priorities and direction, which are reviewed every year. They deal with the 'nuts and bolts' of OPITO's business, such as performance, compliance, budgets, risks and targets. As one Board member stated, OPITO is very keen that the Board looks and feels like the oil and gas industry and its employers.

This equal, tripartite ownership of OPITO works well and interviewees offered several reasons for this. First, there has been genuine buy-in from all parties from the start, giving them all an equal 'voice' and place at the Board table. This includes the trade union and employers. As one interviewee stated, industry input 'doesn't represent tokenism, but real ownership of the agenda.' Second, the fact that OPITO is not-for-profit helps to keep the focus on skills and on meeting industry needs, instead of on making profits, or on meeting other vested interests. Finally, the individuals involved at Board level are described as passionate and driven people who are committed to delivering quick and effective interventions to meet industry's needs.

However, decision-making processes are not all driven by 'top down' decisions from the Board of Directors. The specific work and activities of OPITO regarding standards, training and identifying skills needs is very much driven and influenced by employer input which is fed up to Board level. These processes and structures through which OPITO seeks employer input are detailed in the section below.

4.6   Functions and activities of employer networks

The focus and type of OPITO's activities and industry input into these

OPITO's activities focus on three broad areas: standards and accreditation, education and industry skills and workforce development initiatives to help employers create a safe and competent workforce.

Skills and training

There are currently 35 OPITO-approved training centres within the UK that deliver training and assessment to OPITO standards. They deliver a number of training and assessment courses in emergency response, hazardous activity and occupational competence. OPITO also manages the industry's apprenticeship scheme through the provision of turnkey services starting with data gathering and analysis, recruitment, welfare management and ending after four years with qualified technicians via the Upstream Oil and Gas Industry Technician Training Scheme (UOGITTS). UOGITTS is the industry response to addressing the need for a competent, stable and flexible technician workforce as operators and contractors constantly seek to replenish the technician population for hydrocarbon processing and operations. The apprenticeship scheme is fully funded through industry sponsorship, with sponsoring companies having funded it to the value in excess of £100 million since it started in 2001. OPITO manages the quality of the scheme from recruitment, interview, aptitude testing, college placement, welfare and workplace placement. To date, approximately 1400 apprentices have been recruited.

Standards and accreditation

OPITO develops standards according to industry demand. These standards are not mandatory but are held to be examples of good practice advised by the offshore industry. Standards are maintained and designed through the involvement of industry workgroups which involve all relevant interested parties - employers, employees, technical specialists and Health and Safety Executive (HSE) representatives. OPITO does not own these standards but acts as a custodian on behalf of the industry.

The maintenance of training standards is managed through the industry body, the Standards and Approval Committee (SAC). It reports directly to the OPITO board who are the stewards of the industry (OPITO) standards, where it seeks ratification of changes or acceptance of new standards.

OPITO has also developed UK National Occupational Standards (NOS) in consultation with industry. The awarding bodies in the UK have then developed the assessment requirements for qualifications based on NOS.

Education and industry skills

OPITO restructured itself in 2007 to become a focal point for skills, learning and workforce development. The restructured organisation operates the apprenticeship scheme and continues to update and develop industry safety standards. It does not provide training itself, but rather acts as a conduit between employers, potential recruits and education and training providers. However, an important part of its work also includes working with schools, colleges and universities to promote the study of science and engineering and the industry as an attractive career choice. The primary aim of the restructured OPTIO is to offset future skills shortages in the industry. Activities include:

- Day-long events where young people meet people employed in the industry to ask them questions about their job, the industry and the work involved

- Employer 'roadshows' where industry employers promote their work and run a series of skills challenges to engage young people and get them interested in STEM subjects

- Workshops with young people to raise awareness of the breadth of job roles in the industry and the fact that they require lawyers and IT specialists as much as they need technicians

- A recent online portal which provides the latest news, jobs and insights into the industry.[1]

A large part of the organisation's role is to attract new talent into the industry and to promote the industry as a potential career choice. To this end, OPITO directly invests around £1.5m per annum in educational projects, such as promoting STEM uptake, engineering and science clubs, attending career events and organising interactive events. Some examples of these are outlined below.

OPITO develops and leads the following events around the UK:

Petro Challenge - this event uses an innovative web-based learning tool where students in teams of 4 represent a virtual exploration company looking for oil and gas in a newly opened province. This exercise aims to teach pupils the range of skills required to embark on this type of complex project in the high stakes world of oil and gas exploration.

Energise Your Future - aimed at pupils between the ages of 14 and 19, and currently held in Aberdeen, Norwich and Newcastle, these highly interactive events draw together a wide range of companies within the Oil and Gas sector to showcase careers and the various entry routes available. Over 3000 school pupils have taken part in these events over the last 18 months.

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[1] www.myoilandgas.com

OPITO works with partnership organisations to bring:

- A calendar of Oil and Gas based engineering challenges in the East of England. Students aged 16-19 years studying STEM subjects can tackle an Easter Engineering School, Half Term Challenge or Engineering Summer School.

- Engineering Earth's Future, where **s**tudents aged 14-16 years work in teams and actively compete with each other to produce a winning solution to a Science, Technology or Engineering problem related to the Oil and Gas Industry.

- STEM-ED Scotland is a partnership to champion world class education in STEM. Our Education Manager contributes both at strategic and focus group level to this partnership which is supported by the Deans of Science & Engineering in Scotland and involves senior representatives from universities, industry, specialist teacher organisations, professional bodies and publicly funded agencies.

OPITO sponsors:

A range of countrywide education initiatives in collaboration with key educational partners such as Lab in a Lorry, TechFest SetPoint, Maths in the Pipeline, STEMNet in the East of England, EDT Go4SET in the East of England, ROV MATE Challenge, Earth Science Education Unit (ESEU) and research projects with leading universities.

OPITO attends:

On behalf of the industry both school and regional careers events to educate pupils about subject choice and its relevance to future career paths, raise awareness of the vast range of careers and the variety of routes available in this sector.

OPITO influences:

The Scottish curriculum to ensure that oil and gas content is embedded into the new Curriculum for Excellence and linked to qualifications.

Industry input

Industry employers input into OPITO's activities through the following ways:

- Representation on the Board of Directors.

- Participation through technical forums and workshops where employers provide their technical expertise to develop standards. Approximately 30-40 companies have been involved in these and meet regularly.

- Feedback from employers on how standards have been received, how well they are working and whether they need further work.

Overall, these processes have worked and continue to work well. However, there is acknowledgement that engagement with industry is an ongoing task for OPITO and one which is essential if OPITO is to continue to successfully identify and meet industry skills needs.[2] To this end, OPITO has established a forum to strengthen links with key employers to help identify skills needs. These employers are subject to continual survey and from this, future project plans regarding skills and training will be worked out.

There are several reported benefits for employers who participate in these activities. First, they get access to high-quality training and OPITO approved providers. OPITO have robust measures in place for training providers to meet in order to gain their approval and these are consistently monitored. Second, employers get to influence and shape the development of industry standards and help flag up their skills needs/ gaps. This ensures training and skills development and the future of OPITO's work remain directly relevant to their needs. Third, employers can develop their staff to consistent standards that are recognisable and credible across the industry. Fourth, employers know that the training and standards are very much focused on the needs of the oil and gas industry, and have not been convoluted by the interests of other sectors (as might be the case with the work of some sector skills councils that cover a number of different sectoral interests). Fifth, employers have access to Emergency Response and hazardous activity safety training which mean they can meet their statutory duties to protect their employees in the face of potentially hazardous work. Finally, employers recognise that their input into identifying and filling future skills gaps is essential if sustainable solutions are to be found to future workforce development.

Delivery and outlook

OPITO continues to effectively match the demand for skills from the industry to the supply of skills from education and training providers. This has required strategic level engagement with government, industry employers, learning and training providers, education and academic partnership organisations. OPITO intends to continue this way of working in its expanded work.

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[2]   OPITO UK Business Plan, 2012

4.7   Impact of employer networks on skills and growth

Network outcomes and impact

The key outcomes and impact of OPITO's work are detailed below.

To date OPITO has built strategic relationships with targeted regional education authorities, select universities, colleges and schools through which **industry context and skills needs can be directly embedded into the curriculum.** OPITO has received a warm reception from those involved so far and the Curriculum for Excellence provides a strong framework under which to achieve better alignment between education supply and industry demand. To date, OPITO has directly engaged with 2000+ 15-18 year old pupils in eight UK locations through career and attraction events; OPITO online interventions in 2011 have also been downloaded by a total of 1.2 million 11-18 year old students, representing a 29 per cent increase on 2010; and OPITO's It's Your Future Young Ambassadors program has engaged over 1,600 pupils across Aberdeen/Shire, East of England and London.[3] In a recent review of post 16 education in Scotland, the Scottish Government commended OPITO as "an outstanding example of a body which speaks to the system on behalf of employers and ensures that the people going into their sector are well prepared".

UOGITTS has become a leading apprenticeship scheme in the UK, with a successful completion rate in excess of 90 per cent. Average recruitment is around 120 per year and around 1400 apprentices have been recruited to date. This provides a feed of around 100 - 120 high-quality new technicians and process operators into the industry each year.

The desire for common standards and consistency has resulted in OPITO standards being adopted UK-wide and internationally. While OPITO does not have international standards, its standards are adopted in other countries as the choice of governments and employers. This reflects the **high-quality training and standards** which OPITO manages and develops alongside industry.

OPITO continues to influence the policy agenda on industry skills, future investment and occupational standards. For example, OPITO has secured a presence on the newly formed Energy Employers' Skills Committee which reports to First Minister's Energy Advisory Board. This will drive industry-led skills initiatives and secure government support and funding through the Scottish Energy Skills Investment Plan. Also, from 2012 onwards, the UK Commission for Employment and Skills will enable OPITO to develop and review national occupational standards directly through their quality procedures, meaning total autonomy for the organisation and Sector.

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[3]   OPITO UK Business Plan, 2012.

There are several key factors which have contributed to OPITO's success in developing and meeting skills needs in the oil and gas industry. Clearly the industry need for safety standards as well as consistency among these standards has driven the work of OPITO in its early days. However, OPITO's success since then has been in gaining the genuine buy-in and involvement from industry/employers, the trade union and the other industry partners. In this sense, **OPITO is truly industry owned**. This has been achieved through **sharing common goals** around skills development and a sole focus on the needs of the oil and gas industry. **Leadership** and having the right people on board has also ensured successful buy-in, not just because some employers represent the largest industry employers but because Board membership also reflects people who understand the industry and its needs. The realisation among the industry more broadly that it has to find more sustainable ways of **meeting future skills shortages** drives continuing employer engagement with, and buy-in to OPITO's work. Finally, a successful track record of delivering high-quality training and work around occupational standards has built up a great deal of **respect and credibility in the industry** for the work of OPITO, and this also continues to drive employer involvement with the organisation.

5 Teesside University Business School Leadership and Management Foundation Degree

5.1 Set-up and focus

Main objectives of the Teesside/ NECC collaboration

In 2006, Teesside Business School started working with the North East Chambers of Commerce (NECC) on a leadership and management foundation degree. The aim of the degree was to develop an understanding of the skills in leadership and management at a line manager level that were of clear relevance to the organisations they were associated with, and the 'real' issues they dealt with. Individuals attending the course were to develop personal competences that would enable them to positively manage working relationships with others and better deal with problems in the workplace.

These objectives of the leadership and management foundation degree have not changed fundamentally over time. The main focus has remained on developing leadership and management skills, with Teesside Business School going on to develop several leadership and management foundation degree 'pathways' off the back of this original programme to allow for sector/client specific content and input into the course.

Key drivers / initiators

Key drivers of the foundation degree

The key driver for setting up the leadership and management foundation degree was to meet regional business needs for leadership and management skills. The NECC identified a clear skills gap in leadership and management because many of its employer members were reporting that there were not enough people in their companies or the local labour market who could be put in charge of managing others. There was also a clear need to respond to this skills gap quickly. The drivers of the leadership and management foundation degree, therefore, were very much demand led in that both Teesside University Business School and NECC were responding to the needs of local businesses.

Facilitators to setting up the foundation degree

A number of facilitators were also at play in setting up the foundation degree. The **wider policy environment** at the time was very supportive of encouraging greater links between HEIs and industry – for example, the Lambert Review (2003), the Innovation White Paper (DTI, 2003), and the Leitch Review (2006) which stated that 40 per cent of the UK adult population should be qualified to Level 4 or above by 2020. This policy dovetailed with the Government's reduction of university spending, more emphasis on private-sector contributions, a more 'progressive' university funding regime as well as a growth in the number of foundation degrees. Some Government funding was made available to facilitate greater links with industry and Teesside University secured £5.1 million of such funds for employer engagement and workforce development.

Another facilitator to setting up the foundation degree was the **dynamic and effective leadership** of both the Vice Chancellor of Teesside University and the CEO of NECC. Both individuals had a previous working relationship which they could build on (the Vice Chancellor is a Council Member of the NECC) and this facilitated the set-up of the foundation degree. Also, both the Vice Chancellor and the CEO of NECC shared a common vision of the role of business in HEI. The leadership of the NECC was also able to draw on its position as a large Chamber and an influential 'voice' of business in the region to gain the input and feedback of its members into course design and content.

The **'business friendly' response of Teesside University Business School** acted as another key facilitator to setting up the foundation degree. NECC were looking for flexibility in the design, content and structure of the foundation degree which would create an accredited academic course but one with a totally practical and business focus. Having already approached one HEI and found them to be too rigid, Teesside University Business School offered much greater flexibility and were reported to be more 'business friendly' by NECC. The Business School also managed to set up the foundation degree in just four months and several interviewees acknowledged that most HEIs would have taken much longer to respond to similar business needs. Again, leadership would appear to have played an important role in this, with the business-minded outlook of the Vice Chancellor being cited as a key strength among interviewees. One interviewee described him as 'quite a risk-taker for a HE leader' in that he does not view learning in a solely traditional/academic way, but is open to, and encouraging of links with business and industry.

Finally, **funding** was a facilitator to setting up the foundation degree. Funding came from a number of sources. Teesside University Business School funded the developmental work required to set up the foundation degree and Foundation Degree Forward provided some seed funding. At the start, some funding was made available to delegates[4] and employers through Business Link, but this has since ended. Core government funding for the foundation degree covered some of costs of the foundation degree on an annual basis but this comes to an end in 2012 and as yet, it is not clear how these costs will be covered in the future. The remaining costs were covered by employers, who would pay a fee for each of their employees to attend the course over the two years.

5.2 Key characteristics of the Teesside/ NECC collaboration

Background and characteristics

As a type of 'employer network', the set-up of the leadership and management foundation degree in December 2006 can be characterised as both geographically based (in its involvement of the NECC and Teesside University) and as a HEI collaboration. It has a specific focus on a particular skills need (leadership and management).

5.3 Funding

The costs of running the leadership and management foundation degree, and the time taken to do so, are not readily available because many of the staff who work on it (either in a teaching or management capacity) do this as part of their wider 'day jobs' within the university. Similarly, the employers interviewed did not cost for their input into helping to design their respective versions, or 'pathways', of the foundation degree, either because they valued the opportunity to influence the content and design of the programme, or because they had already experienced clear business benefits from having had previous cohorts of employees who had been on the programme.

Apart from the core funding from Government, costs of the foundation degree are covered wholly by employers and this funding model has not changed since 2006. As the Government's core funding comes to an end in 2012, however, this funding model will have to change in the future with either the employer or individual employee contributing more to the course fees.

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4   Learners on the Foundation Degree and associated 'pathway' programmes are referred to by the business school as 'delegates'.

5.4 Employer participation

Being a foundation degree run by a HEI, there is no formal 'membership' to this programme. The foundation degree is open to all employers who wish to train their staff in this area and the current fee for employers is £1,225 per employee for the two-year course. Since 2006, the number of employers participating in the foundation degree programme has increased. To date, 80 employers have put their employees on the leadership and management foundation degree. These include mostly larger and medium-sized companies and a few SMEs from a range of different sectors. The foundation degree is aimed at current/ aspirant supervisors and managers seeking customized learning in order to deliver immediate added value to their organisation.

It is not yet clear what impact the end of Government 'core' funding will have on the numbers of employers participating in the foundation degree. One interviewee speculated that the additional costs might have to be shared between employers and individual employees.

5.5 Governance of the Teesside/ NECC collaboration

The leadership model for this partnership between business and Teesside University has changed since the foundation degree was established in 2006. Initially, the NECC drove the foundation degree forward, as many of their members reported that there was a clear business need for basic leadership and management skills within their organisations. It was regional businesses, therefore, that determined and drove forward the focus on leadership and management skills. From this, NECC began to scope out potential partners in HEIs to design a suitable training programme, eventually partnering with Teesside University Business School on a contractual basis.

It was originally envisaged that the NECC would continue to lead the partnership and take increasing responsibility for the delivery of the programme. However, staffing changes at the NECC and a consequent lack of interest in taking up this responsibility has meant that Teesside University Business School continues to be responsible for all aspects of the programme, apart from recruitment which is a shared responsibility. Other employers are still involved in the design of their respective 'pathways', but delivery has remained the main responsibility of Teesside University Business School. Although this model was not the one originally envisaged, all partners agree that is the best delivery and leadership model at present and the NECC still play an important role in recommending and promoting the foundation degree to its members. As a result, the partnership between the NECC and Teesside University Business School remains a close one.

The leadership model throughout these changes can perhaps best be characterised as a partnership model between local business and a HEI. In the first instance, this was a partnership between employers (as represented by the NECC) and the business school. However, as the programme became established, this became more a partnership between individual employers in the region and the business school, with the NECC stepping away from programme delivery and playing more of a role in promoting the foundation degree among its members. Employers who use the foundation degree do not have a need to interact with other employer 'users' of the degree since many of the programme's pathways are tailored to be client and sector specific.

Employer input into the design and delivery of the programme (and its 'pathway' variants) has been a consistent and defining feature of the foundation degree. Whenever a new 'pathway' to the programme is developed, it is designed in consultation with the employer to ensure relevant content and design. In this way, although the business school leads on delivery, they also draw on the steer and input of their end customers (local businesses) for the content and format of the programme, as well as how the programme is delivered. This continued employer input into the shape of the foundation degree and its pathway variants is a key strength of the programme and one which is discussed in more detail below.

5.6   Functions and activities of employer networks

Focus and type of activities

The leadership and management foundation degree is structured as per Table 5.1 below:

Table 5.1: Structure of the leadership and management foundation degree at Teesside Business School

Stage 1					
Module	Self Analysis and Career Development	Effective Team Building, Coaching and Mentoring	Understanding Company Dynamics	Managing People	Managing Finance	Customer Service Excellence and the Competitive Edge
Credits	20	20	20	20	20	20
Stage 2					
Module	Critical Thinking and Problem Solving	Quality and Operations Management	Managing Change	Enterprise and Leadership	Leading and Managing Organisations	Learning contract
Credits	20	20	20	20	20	20

Source: Teesside University Business School, 2009

Since the approval of the original leadership and management foundation degree in 2006 a number of 'pathways' have been developed. They are distinguishable from the original foundation degree through the use of the bracketed title below[5]:

1   Leadership and Management (Public Sector)

2   Leadership and Management (Contact Centre Management)

3   Leadership and Management (Ports)

4   Leadership and Management (Hair, Beauty and Spa Therapies)

5   Leadership and Management (Building Services)

6   Leadership and Management (Equality and Diversity)

7   Leadership and Management (Educational Administration)

8   Leadership and Management (Events Management)

Each pathway has been developed in consultation with the employer, or 'client' of the business school, or with the business school's partner colleges. The pathways usually differ from the original (Table 5.1) in terms of 60 credits of learning, allowing increased employer specific content and context. This has included the introduction of a Pathway module in Stage 1 and a Work Based Project in Stage 2. Both these allow the original programme to be tailored according to the needs of the delegates and their employers.

A continuing focus on leadership and management skills is driven by an ongoing business need for these skills in the region and the fact that the region has very low HE participation rates. Many businesses in the North East employ people who do not necessarily possess formal educational qualifications but who would benefit from gaining leadership and management skills in order to progress within the organisation. To some extent, the focus on these skills and on employer input into the design of these courses is also driven by the fact that Teesside University aspires to be the most business-friendly university in the region.

Member/ employer participation

As detailed above, initial employer input into the programme took the form of a number of business meetings between the NECC, Teesside University Business School and a number of the NECC's employer members. Thereafter the NECC had further input by boosting the first cohort with ten of its own staff, with the aim that this would help them better promote the programme to its members. Overall, this worked well as it provided something of a 'test' cohort' from which lessons could be learned at relatively low risk and cost.

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5   Teesside University Business School (2009)

Since the original programme was approved, some employers have had further input into the design of the pathway programmes. The first three pathways listed in section 5.6 were developed with North Yorkshire County Council, Orange and PD Ports respectively. Overall, this input of employers has worked extremely well and employers have been appreciative of the opportunity to shape the programme to make it more relevant to their business needs. In some cases, this has included employers becoming directly involved in aspects of the teaching itself. At PD Ports, for example, senior executive board members participate for the final day of the programme so they can feed more relevant, work-based examples into the teaching process. Feedback from delegates indicated that they are appreciative of this as it lends more context to their learning experience.

As section 5.7 details below, there have been a number of benefits to employers of having this level of input into the design, delivery and content of the programme.

Delivery and outlook

The first three pathways listed in section 5.6, as well as the original leadership and management degree developed with the NECC are entirely managed by Teesside University Business School and are delivered via a block, Masterclass approach utilising Virtual Learning Environment (VLE) and 'blended learning' as distinctive features. These awards also include a number of special features, including professional profiling tools, guest lectures and enhanced employer involvement and workplace mentors.

The rest of the pathways have all been developed by the partner colleges of Teesside University Business School. These awards are delivered and managed by these partners and while the core modules are the same, the delivery is much more traditional in nature and some of the 'work based' features are not included.

The original foundation degree in leadership and management has been designed so that each of the twelve modules can be delivered over an eight week teaching block. Each masterclass consists of a 1.5 day workshop delivered by experienced academics and/or senior practitioners who have substantial experience of the academic discipline through teaching, research or consultancy. While delivery of these modules was designed to be sequential for the delegate, they could flexibly continue to access the learning if other pressures on their time meant they missed a particular masterclass. 'Dipping in and out of the degree programme', as one delegate put it, meant that he could juggle family life, full time work and the foundation degree.

However, this flexible model of delivery was perhaps the greatest challenge to the setting up of the foundation degree because the business school had never before delivered such accessible, bite size learning modules. Yet, this flexibility was essential if the programme was to meet needs of more mature learners and employers who could little afford their employees taking significant amounts of time to undertake the degree. As one interviewee stated, Teesside University found itself very much 'out of its comfort zone' in trying to flexibly accommodate employers needs, partly because some of their processes were overly bureaucratic and partly because traditional university timetables and fixed terms did not allow for a roll-on, roll-off approach to programme delivery. Changing this encountered some resistance among academics and staff at the university and it was felt that a cultural shift was needed among staff to achieve this flexibility.[6]

This challenge was overcome through a number of ways. As detailed in the section above, the NECC put forward some of its own staff in the first cohort which allowed the business school to test this new model of delivery and some of the content at low risk and cost. Secondly, being a demand-lead programme helped to strengthen the case for greater flexibility within the university and this, in turn, helped the programme leader to pull together an effective team of people from across the university to deliver the programme. Finally, because the vice chancellor was fully supportive of the need to respond to business needs, change was made possible in areas where resistance was encountered. Again, this facilitated wider buy-in to the programme among staff and academics.

5.7   Impact of the collaboration on skills and growth

Outcomes and impact of the Teesside/ NECC collaboration

The outcomes and impact of the Teesside/ NECC collaboration are identified below:

High rates of delegate satisfaction, retention, completion and progression. Many more graduations and progressions have been achieved on this course than the national average, where traditional delivery methods have led to low completion and progression rates.[7] Student feedback via satisfaction surveys are also consistently high (above 90 per cent) and about half of all delegates on the leadership and management foundation degree go onto do the Honours degree. Employers and the business school also report greater confidence and motivation among delegates after completing the course, with many going on to progress within their organisations and bring new skills and perspectives to their job roles.

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6   Smith et al (2011)
7   Teesside University Business School (2009)

Effective engagement with employers. Teesside University won the Times Higher Education Outstanding Employer Engagement Initiative Award for the foundation degree in leadership and management. This has boosted the business-friendly reputation of the university and led to some positive changes within the academic culture to flexibly accommodate business needs.

A sustainable and replicable model. Since approval of the original leadership and management foundation degree in 2006, a number of 'pathways' have been developed, three of which are managed entirely by the business school and are bespoke programmes for their respective employer clients. The collaboration with NECC has also offered a model for HEI and employer engagement elsewhere in the country. Around half a dozen other chambers of commerce have used this model to form similar collaborations with their local universities. Although these other collaborations have not reportedly worked as well as the Teesside University and NECC one, interviewees put this down to the fact that other HEIs were finding it more challenging to provide the flexibility that employers were looking for, both in terms of delivery, content and design of the degree.

Business benefits for employers. Employers cited a number of business benefits to participating in the foundation degree in leadership and management. First, it was flexible in its delivery, with staff taking only 1.5 days off every eight weeks to participate. Participation could also be via the e-learning portal, 'Blackboard', and was often interactive in its format, involving specialists and practitioners from the business community as well as academics. In this sense, the course was not all 'chalk and talk' as one interviewee put it, Second, the service was local and 'on our doorstep', as one employer described, as well as being subsidised and so cheaper than some training providers. Third, the foundation degree was tailored to business needs, with many employers having input into course design and content. As one employer noted about participating in the foundation degree, 'we get more out of it than we input'*.* Examples of business benefits which employers noted included:

Improved business practices. One employer noted that employees who had completed the degree had improved the company's level of customer service, as well as an improved communication structure within the organisation as people had a much better understanding of each other's roles and what they involved. Another delegate reported that, after learning more about quality and performance on the degree course, he had proposed a new quality assurance system to his employer which had subsequently been adopted.

The same employer also noted that staff were applying more **leadership and management skills** and not just technical skills. This meant they were no longer just doing their jobs but were questioning the way things were being done, or looking for way to improve things for the better.

Two employers noted that **staff have more confidence** in their decisions and in their ability to do their jobs. Many of these did not previously possess formal HE qualifications and were often intimidated by others who had. However, after attending the course, many gained greater confidence and some even progressed within the organisation to a higher position. One delegate had been given more responsibility within the organisation as a direct result of attending the course and another delegate noted that he's received improved feedback from the people he line manages since starting the course.

An innovative collaboration and product. There was a great deal that was new and innovative in setting up the foundation degree, both for the NECC and for Teesside University Business School. While this was not the first time the business school was collaborating with industry, it was the first bespoke and market-drive product that it had been asked to design. Businesses had approached them and told them what they wanted in a leadership and management programme and this required exceptional flexibility on the part of the Teesside University Business School in designing and delivering the course. It was also an innovative collaboration for the NECC as they had only ever previously supported engineering apprenticeships at Levels 2 and 3. As a result of this fresh collaboration, the partnership was able to produce an innovative product. The leadership and management foundation degree 'broke the mould' in terms of delivering learner-friendly, employer-friendly, accredited learning that could be delivered in 'bite size' modules that would suit both employers and delegates.

5.8   Conclusion

In terms of outlook for the future, there was a feeling among some interviewees that perhaps more could be done to promote the foundation degree and its benefits to a wider set of employers, and also to other sections of Teesside University which were used to running more traditional and less flexible academic courses.

Overall, however, there was a feeling among all interviewees that the foundation degree in leadership and management had exceeded all expectations, both among the business school and among the NECC and employers. This was particularly the case among some employers who had previously had negative experiences of trying to work with HEIs and finding them too inflexible. These employers reported that they encountered exactly the opposite at Teesside University Business School and that their responsiveness to their needs had brought real benefits to their employees and to their businesses as a result.

5.9   References

Teesside University Business School (2009), *Periodic Programme Review FdA Leadership and Management*.

Smith, P J, Poppitt N J and Scott J M (2011), 'Changing the mindset: An innovative work-based learning programme within an English higher education institution', Sustaining growth through human resource development, 12th international conference, May 25-27 2011, *Compilation of Proceedings*. Gloucester: University of Gloucestershire, pp. 537-552.

6 Microsoft Partner Apprenticeships Programme

6.1 The set-up and focus of employer network

Main objectives of the network

The Microsoft Partner Apprenticeships Programme was set up in 2009 with the aim of supporting companies which are permitted by Microsoft to sell its products to offer Apprenticeships. The scheme forms part of the wider Microsoft Partners Network, which constitutes Microsoft's "value chain". The majority of Microsoft's products are sold through partners rather than directly by Microsoft, amounting to approximately 96% of Microsoft's revenue.

The Apprenticeship scheme is run by Microsoft with funding from NAS and training provided by several private training providers including QA Training. Microsoft's main role is to handle the administration of Apprenticeships, making it easier for employers in the network to take on Apprentices. Microsoft and training providers are both involved in recruiting, engaging and supporting employers involved in the scheme. Three Apprenticeships are currently offered through the scheme: developer, technical support and technical sales versions.

Key drivers / initiators

There were three main reasons for Microsoft's decision to initiate the Partner Apprenticeships Programme. Firstly Microsoft had strong commercial motivations. The Partner Network is of crucial importance to Microsoft given the high proportion of the firm's revenue which it generates. The Apprenticeship scheme was seen as a way of further strengthening ties with Partners. Microsoft's consultations with employers in its network identified some enthusiasm among employers for an apprenticeship-type model in the IT sector but found most individual employers lacked the capacity to manage the process of taking on apprentices individually. The Apprenticeship scheme was therefore seen as a service Microsoft could provide to Partners which would incentivise their continuing relationship with Microsoft. Furthermore the firm hopes that encouraging skill development in the value chain will help Partners become more effective, which should translate into commercial benefits for Microsoft.

Secondly the Apprenticeships scheme contributes towards Microsoft's Corporate Social Responsibility (CSR) goals in particular the aim of helping to reduce UK unemployment through Microsoft's "Britain Works" programme; it is regarded as part of Microsoft's engagement with public policy. During the previous government's promotion of Apprenticeships, Microsoft investigated the scheme and decided to become involved.

Finally the scheme is seen as a response to some of the skills gaps and recruitment issues faced by the IT sector. Traditionally new entrants to the sector have overwhelmingly been university graduates with computing related degrees. The reliance on this source of labour has thrown up a number of challenges. Firstly the sector is beginning to mature and there is a need to identify ways to expand the number of young people entering the sector. Secondly there have been longstanding concerns regarding the job-readiness of recent graduates who often have a more "academic" skill set and tend to need additional training to familiarise them with the needs of a commercial IT company. Finally some roles, particularly at the middle and lower levels of IT companies, are skilled jobs but not particularly suited to graduates who often have very high expectations about job content. The Apprenticeship scheme helps to overcome all of these difficulties by creating a new route into the industry for individuals without Higher Education qualifications, and providing them with practical, vocationally oriented training.

The main instigator for the scheme was Microsoft. However, various employers from the Partner Network, notably those who had a particularly strong relationship with Microsoft, were involved early on in designing the programme. Both the sector skills council for IT & telecoms, e-skills, and QA Training supported the initial creation of the scheme. Funding for training comes from NAS, amounting to approximately £12 million since the start of the scheme in 2010. This money goes direct to the training provider. Microsoft takes on transaction costs associated with aspects of administrating the scheme, particularly dealing with NAS and training providers. Employers take on the costs of employing the Apprentice.

6.2   Key characteristics of employer networks

Background and characteristics

The Microsoft Partner Apprenticeships Programme was developed in 2009, with the first wave of Apprentices starting in early 2010. The network has a national scope, although due to the structure of the UK IT industry, partners tend to be more densely concentrated in the South East, and is based largely within the IT sector.

Microsoft Partner Apprenticeships has characteristics of both a supply (or "value") chain and GTA network. The network builds upon the longstanding Microsoft partner network which is the main channel through which Microsoft products are sold in the UK. In this context the Apprenticeship scheme can be seen as having characteristics of a supply chain network. However it is important to note that the Partner Network is not a straightforward supply chain in the sense that one firm is simply purchasing from another, rather the network is characterised as more 'symbiotic' – while Microsoft is the larger firm, there is a high level of mutual dependency in the relationship which means Microsoft is less able to exert pressures on smaller firms down the chain than might be the case in a "classic" supply chain network. This has implications for the design of the Apprenticeship scheme.

The Apprenticeship scheme also has characteristics of a GTA, with Microsoft undertaking the functions of the GTA by handling the administration and organisation of training on behalf of participating employers. However, the network is not a formal GTA and funding for the training primarily comes from government rather than employers.

6.3   Funding

Cash funding for the training is provided by NAS, amounting to around £10,000 to £12,000 per Apprentice. Microsoft handles the administrative side of organising the training, as well as a certain amount of the employer engagement work. Employers primarily take on the cost of employing the Apprentice. This funding model has been in place since the inception of the network.

The organisation and running of the network is a substantial task. Both Microsoft and training providers have responsibility for the administrative side of the scheme and employer engagement. Microsoft has a two person team working directly on the Apprenticeships scheme, along with a four person employer engagement team. This is in addition to the broader Microsoft Partner Network apparatus. QA, the main training provider for the scheme, employs 6-7 staff in its engagement team, which is mainly responsible for promoting the scheme to potential Apprentices, and a further 17 staff engaged in recruitment and relations with employers. These staff work on both the Microsoft Partner Apprenticeships Programme as well as QA's broader Apprenticeship provision. Currently each employer account manager has approximately 50 employers; this is regarded as manageable but would benefit from being reduced. Interviewees believed that levels of public funding should reflect the importance and costs of employer engagement in this kind of scheme.

6.4   Employer participation

There are Apprentices at roughly 300 Microsoft Partners from a total network of 300,000, with over 1100 Apprentices in total. The scheme is still relatively new and Microsoft are actively seeking to engage with more partners. The expectation is that employer participation in the Apprenticeships scheme will grow over the next few years through a combination of promoting the scheme and further interest in Apprenticeships within the IT sector. There are also some plans to develop Apprenticeships in additional areas which may appeal to a wider range of employers. There are no specific costs beyond those associated with employing an Apprentice. Participating partners come from a variety of firms, but are predominantly small to medium sized. In the broader partner network, there are different levels of membership and members can enrol with no charge or purchase subscriptions for additional levels of membership linked to volume and type of products sold. The Apprenticeship scheme is aimed at all members of the network.

6.5   Network governance

Microsoft effectively leads the network, though there is a high degree of collaboration with other parties involved including the training providers and participating employers. Additionally, employers reported having a considerable amount of interaction directly with the training provider. There is less evidence of interaction between different participating employers. As such the model of leadership is nominally hub and spoke but with both the lead employer and the learning provider contributing to the hub function.

Within Microsoft the Head of Skills & Economic Affairs is responsible for the Apprenticeship programme. The scheme also forms part of the broader Britain Works programme, a corporate social responsibility initiative aimed at contributing to reducing unemployment in the UK. Britain Works has sponsorship at board level within Microsoft.

There are no formal mechanisms for partner involvement; instead this takes place through face to face and online dialogue and more occasional ad-hoc events. The informal engagement essentially involves relationship management by the employer engagement team at Microsoft and training providers to ensure participating employers have a satisfactory experience, identify any issues that might emerge and any scope for improving the scheme. The ad-hoc events include partner network events with a broader focus at which Apprenticeships are marketed as well as consultation events where partners are invited to help design the Apprenticeship content. Microsoft believes that any major change to the scheme would require consultation with those partners taking part. A considerable amount of feedback, particularly on a day-to-day basis comes through the training providers. Employers interviewed commented that they tended to have more regular contact with their training provider than Microsoft. Employer feedback informs

continual developments in the delivery and content of the course by training providers, so it is crucial that training providers have the capacity to handle and react to constant communication with employers.

The absence of formal mechanisms for employer participation such as committees or regular meetings is regarded as a virtue of the scheme given that one of the core aims was to make employing Apprentices a less time consuming activity for partners. There are specific examples of partners influencing the design and organisation of the scheme. At the beginning of the scheme a number of Partners were invited to a consultation event to help design the initial Apprenticeships, which led to the inclusion of a developer Apprenticeship along with those for sales and technical support. Early complaints from partners about the service they were receiving from the training provider initially selected by Microsoft led to the contract with that provider being terminated. Employers generally felt this fairly informal and collaborative model of leadership worked quite well. One employer commented that Microsoft could potentially become more directly involved in the manner of the training provider but that this was not a major issue.

Communication between partners largely involves Microsoft-sponsored efforts to use existing participants as ambassadors to promote the scheme to others. However partners also meet at consultation events. One employer reported voluntarily promoting Apprenticeships to their own supply chain. Within the broader Microsoft Partner Network employers interact through online communities which are well developed in the IT sector and at network events organised by Microsoft.

6.6 Functions and activities of employer networks

Focus and type of activities

While the broader Microsoft Partner Network includes a number of activities, the Apprenticeships scheme's entire focus is on providing Apprenticeships. The Apprenticeships scheme is not the first or only skills related project attached to the Partner Network.

Employer services and participation

Microsoft characterises its main role as handling the organisation and administration of the apprenticeship training. Many smaller employers in its value chain do not have the organisational capacity to handle the administrative side, for example arranging funding or negotiating with training providers. Microsoft takes on these kind of tasks on behalf of the partners, for example securing funding from NAS and working with training providers to develop courses (albeit with input from partners). Microsoft also assists on a more local level, for example helping identify suitable travel arrangements for Apprentices. Microsoft

was initially planning to use FE colleges as training providers but found that organising this was impractical for a national scheme and so instead chose to work with a national training provider. Training providers also handle administrative elements of the scheme, which includes assisting with the recruitment of Apprentices, particularly for smaller employers who lack capacity to undertake the necessary recruitment process, and organising the time and location of classroom-based training.

Co-ordination of training for apprentices has also been challenging for training providers. Classroom-based learning has to take place in a location which is accessible for apprentices from a number of different firms and at a time when it is convenient for employers to release apprentices. Training providers in the IT industry typically run short courses, where they have scope to set the time and location of the training. Arranging the training for apprentices requires considerable administrative effort and flexibility on the part of the provider and can sometimes lead to sub-optimal class sizes where only a small number of employers in a particular geographic area are signed up to the scheme. This is a particular difficulty of a national sector-based network where employers from any part of the country can participate.

Employer engagement in the scheme is both important and resource-intensive. Though it was difficult to estimate the contribution that employer engagement made to the costs of the scheme, training providers felt it was significant. They also pointed out that funding simply covered the costs of training and did not necessarily take into account the costs of engaging with employers. The nature of the Partnership Network means that Microsoft has a considerable amount of influence over partners but no direct control of the kind that might be present in a more typical supply chain network. As such, Microsoft has to spend a considerable amount of time persuading partners to offer Apprenticeships and managing relationships to ensure partners are satisfied with their participation in the scheme. Microsoft does have certain "levers" it can use to encourage participation, including its administrative support for Apprenticeships, free training provision and the prospect of becoming a Microsoft certified vendor. Additionally, employers reported feeling that participation in the scheme was "important" to maintain their relationship with Microsoft. However, these factors alone are not enough to secure large scale employer participation, so face-to-face engagement and relationship management remain important. This covers both encouraging employers to sign up to the scheme and providing ongoing support during the Apprenticeship training.

The Apprenticeship format is still new to the IT industry, where employers typically opt for shorter, more specific courses for employees who already have relevant qualifications and experience. Therefore a degree of uncertainty was reported among employers about the benefits of investing in longer term training for individuals new to the industry through apprenticeship schemes. This means that a considerable amount of effort is often required to persuade employers to sign up to the scheme. Initial conversations with employers often have to improve their understanding of the scheme and apprenticeships more generally, explain what support they would receive, deal with concerns about whether they would be able to manage an Apprentice and convince them of the potential benefits.

Ongoing support and advice for employers and Apprentices is a crucial part of the scheme. This can cover a wide variety of topics including feeding back on progress and development of apprentices in classroom-based training and advice on how to handle apprentices who are underperforming at work. Maintaining ongoing relationships and regular communication has been a particular challenge, for example although QA have always had employer account managers they have had to absorb a much greater workload for the Apprenticeship scheme. An even greater change has been for tutors and assessors who have been required to engage more with employers and participants beyond the teaching or assessment environments.

Delivery and outlook

The scheme offers companies three kinds of Apprenticeship in sales, technical support and for developers. The Apprenticeships (at the time of reporting) last 9-12 months depending on the specific strand and also vary in the extent and kind of off the job training that is offered. For example, both classroom and e-learning options are available depending on the type of apprenticeship and the circumstances of the partner and apprentice. In addition, partners receive assistance in a range of other areas including recruitment of Apprentices and paperwork associated with Apprenticeship funding and arrangements with training providers.

Delivery of the training is undertaken by private training providers, of which QA is the major national IT training provider. According to QA, a key element of delivery has been ensuring Apprentices develop some usable skills as close to the beginning of a course as possible. This has developed particularly in response to employer feedback that firms wanted to see their Apprentices developing skills "upfront" so that they could be reassured their investment was worthwhile. Furthermore many smaller firms cannot afford to employ an individual who is non-productive for the first few months of a new job.

There have been some difficulties in co-ordinating training so that apprentices from several employers can receive class room teaching in the same place at the same time. To try to cater for some isolated employers whose apprentices would have particular difficulties attending classroom training, there are some e-learning options available. However, Microsoft is keen that e-learning is only used where absolutely necessary, and where possible Apprentices should receive face to face tuition.

Interviewees felt that the system for delivering training was currently working well. The main exception was the problems with the initial training provider which lacked the capacity and experience to effectively engage with employers and organise the scheme.

All interviewees expected the scheme to grow over the next few years as Apprenticeships become more widely recognised and understood as a training and recruitment route for the sector. They also anticipated that new pathways for different job roles would be created. None of the participants anticipate that the scheme will become self-financing, and both employers and Microsoft are proceeding on the basis that continued public funding for Apprenticeships will be available.

6.7 Impact of employer networks on skills and growth

Network outcomes and impact

The employers interviewed were highly enthusiastic about the scheme. The main benefit was being able to employ and train young people at a much reduced cost. Without the Apprenticeships Programme, Partners stated that they would have been unlikely to recruit young people without higher level qualifications. Their apprentices had been enthusiastic and the training prepared them well for the roles they took on. The Programme has so far been successful in strengthening links between Microsoft and its Partners and employers were highly appreciative of the service Microsoft provides.

With regards to monitoring and evaluation, Microsoft collects information on starts and success rates on the scheme from training providers. Additionally Microsoft and training providers stay in regular contact with employers to ensure they are satisfied with their experience of the scheme. Currently 85% of apprentices complete their apprenticeship and 80% go into newly created jobs.

Microsoft reports that employer feedback has been positive. Apprenticeships have a function in providing new entrants to the industry with skills which are job specific and highly practical. This was contrasted with many new entrants coming into the industry through the "traditional" route of a computing-related degree, many of whom have a more "academic" skill set with more limited experience of using programmes in commercial environments. Typically graduates required a period of adjustment and additional training

when they join a firm. The scheme was also enabling firms to recruit individuals from more diverse backgrounds, rather than typical graduates, although the benefits of this diversity were not yet fully articulated.

More broadly, interviewees felt that the programme had helped raise the profile of Apprenticeships within the IT industry and that there is now a greater level of interest in apprenticeships following Microsoft's participation in such a high profile scheme. One employer noted that they had begun promoting apprenticeships to their own supply chain.

6.8   Conclusion

Although the Microsoft Partner Apprenticeship Programme is still a relatively new initiative, it has so far achieved some considerable success. The completion rate is high so far, as is the recruitment rate for qualified apprentices. Employers are highly enthusiastic about the scheme.

There is clearly considerable scope for the scheme to grow further, given that participation stands at 300 out of a potential pool of 30,000 Partner Network members. It was noted that training providers will also have to increase the levels of staff involved in employer engagement. It also may be challenging to sustain the impressive completion and recruitment rates as the number of employers grows. The growing amount of interest in the scheme within the IT industry has led to a perception that the apprenticeship model could become more widely used, but interviewees asserted the importance of sustained public funding for expansion.

In terms of key success factors, the scheme is unlikely to have engaged employers without significant public funding, as this has removed the burden of classroom training costs for SMEs, who retain responsibility for costs in the form of wages and supervision of apprentices. Employers were clear that this is one of the main benefits of the scheme. Microsoft support and branding provides the scheme with credibility and allows the scheme to draw on Microsoft's influence within the industry through the Partner Network. In particular the scheme built on existing relationships through the Partner Network, and all the companies involved have relationships with Microsoft which pre-date their involvement with the scheme. At the start of the scheme Microsoft benefitted from being able to call on key Partner Network members who had particularly strong relationships with Microsoft. Interviewees felt that any similar apprenticeship scheme would have been much less successful without Microsoft's backing. The nature of the apprenticeship providing free practical training which can be used by employers for a new non-graduate employee with considerable additional support and limited administration costs, has also been important. Employers particularly appreciate the low level of involvement required in administration of apprenticeships. Consulting and involving employers in the design of the

scheme and paying attention to their comments when the scheme is up and running is also important. This helps identify both new opportunities and problems that need addressing as well as ensuring that the activities being offered are relevant to the group being targeted.

The key challenges around the scheme have largely involved the employer engagement and administration of the scheme. Both Microsoft and training providers have invested more effort in engagement than envisaged at the outset of the scheme. Very few employers sign up to the scheme without a considerable amount of persuasion and information about the benefits before they are willing to commit, making this is an expensive and time consuming task. Given the extent to which Apprenticeships are a largely unfamiliar model in the IT industry, managing to persuade employers to take on apprentices with the associated costs in wages and management time represents significant change in employer behaviour. The initial training provider contracted by Microsoft lacked the ability to cope with the demands of employers and QA, one of the current training providers, felt they had quite a steep learning curve in the early stages of their involvement. The other area which has been a challenge has been co-ordinating training to bring Apprentices at different employers together at the same time in the same place. The Apprenticeship scheme has undoubtedly been successful despite these challenges but they serve as useful pointers to others wishing to run a similar scheme.

In relation to delivery there have been three key lessons. Firstly there is a need for flexibility and support to employers and apprentices in terms of where and when training takes place to prevent accessing classroom-based learning from becoming a barrier. Secondly, it is important to ensure that practical skills development begins as close to the beginning of the course as possible so that employers quickly see results from participating in the scheme. Thirdly ensuring employers have ongoing communication with tutors and the training provider is important to ensure employers are aware of the progress apprentices are making and identify any problems as they emerge.

Overall the initiative has made an indirect impact rather than direct impact in terms of raising employer investment in skills, as the SMEs are providing the context for work-based learning to take place, supported by Microsoft providing administrative support and marketing. The longer-term impact on skills development is unclear. Firms hiring apprentices are providing them with a platform for future careers within the industry, but it is not yet known whether they will provide further training to aid individuals to build their careers. Apprenticeships appear to be attractive to SMEs in the sector, once they understand the scheme, and it is a potentially useful response to some of the broader skills and recruitment issues faced by the industry.

7   e-skills UK and the ITMB degree

7.1   The set-up and focus of employer networks

Main objectives of the network

This network is a collection of employers and universities who, along with e-skills UK, have collaborated to create and deliver a new degree; 'Information Technology Management for Business' (ITMB). The aim of this degree is to create students and graduates who have the mix of skills that the employers in the network identified as lacking in other students and graduates.

> I think this is quite unique in that there's a real focus for why you get together and it draws the universities, the employers and the students together with one common goal.
>
> *Employer (1)*

> It's about giving people enough project management skills and enough technical skills, enough skills to be self aware and how to work with groups of people of different styles, and this is what we do, and ITMB is a great fit for that because we're both working in exactly the same direction, we both want to identify people who are passionate about business technology and give them a good career in the IT sector in the UK. Our vision and strategy are very much aligned.
>
> *Employer (3)*

This network therefore, is focussed on improving the skills of a third party; the students, rather than the employers or universities. These employers have come together as they have the same recruitment needs.

Key drivers / initiators

The original employers who helped to form this network were already part of an existing network: the e-skills UK governance structure. This network initially came together as a project as a result of feedback that e-skills UK was getting from their employer board members that the graduates they had been recruiting did not have sufficient knowledge relevant to the role that they were hired to do, lacked good interpersonal skills and graduates were often taking longer than desired to positively contribute to the company. As well as specialist IT staff, they required graduates with consultancy skills who would know how to use technology to derive real value for the business, graduates to be recruited into roles such as project management, business development, technology consulting, business technology roles such as business intelligence and information management.

What we're looking for really are people who have some business knowledge but also have some technical skills to be able to work with IT vendors like software warehouses. They don't have to do the coding themselves but they have to understand what our technical partners are doing so they can ensure that those projects are delivered with high quality.

Employer (3)

Employers wanted a cross-disciplinary degree programme that reflected the changing nature of IT work in the UK. They also wanted to tackle what they saw as poor communications between Higher Education (HE) and Industry.

The employers decided that they would like to do something about this skills gap that they had identified. Together, employers defined a blueprint of what the ideal graduates recruited into an IT department would look like – what skills and knowledge they would have. Employers reported that this was a straightforward process as they had common goals for the types of graduate that they would like to create with this degree.

The blueprint was then turned into 'learning outcomes' and 'skill requirements'; a language which universities would recognise. Three universities initially turned this blueprint into a programme which became the BSc 'Information Technology Management for Business' (ITMB) honours degree. The blueprint gave flexibility for the universities to develop their own ITMB course content, within the boundaries that the employers had created.

One university reported that they got involved as they wanted to respond to the changing needs of the IT industry and this collaboration with e-skills UK and employers fitted with the policy push at the time of closer collaboration between HE and industry.

The ITMB route fitted very neatly with the previous undergraduate Information Management course that we ran before. All that we've done is to take what we had before as a starting point, and we've polished it up, we made it current; we've got all the facilities that e-skills UK offer, and we have many of our own obviously. We've tried to make it into something that is high quality and we try to make sure that that remains current to what the market demands, the workforce demands, the employer demands, by going down this ITMB route.

University (1)

e-skills UK secured funding from the Department for Education (DfE) and the Higher Education Funding Council for England (HEFCE) to fund the initial network activities and the creation of the blueprint. It was a requirement of the funding that there should be a certain number of employers and universities involved which they met, but there were no requirements to set up a formal network with a particular legal status. There was also a requirement from the funders that there should be a good geographical spread across England (as HEFCE is the funding council for England only). e-skills UK was also keen that they had universities of different rankings and mission groups involved to help increase diversity in the IT sector.

7.2   Key characteristics of employer networks

Background and characteristics

As a Sector Skills Council (SSC), e-skills UK has employer-led governance with employer-led boards. Board members represent the IT and Telecommunication industry leading organisations and IT managers from organisations outside the sector. Some of these board members helped to establish this project in 2005. e-skills UK, the SSC for Business and Information Technology takes the lead in this 'multi-employer, multi-university consortium', though the programme that results from this network is very much employer-led. Initially the project focussed only on English universities due to restriction in the funding but the network has now expanded to include one Welsh university and future plans include rolling out the degree in Scotland and Northern Ireland.

One university who got involved in delivery took just over a year to get the course up and running from the first approach by e-skills UK. The university received word that their course content had been validated in December and had to work hard to ensure that prospective students were made aware of the course before the 15th January UCAS deadline for applications to university.

For another university this ITMB collaboration differs from other employer collaborations they are involved with as it is a pre-set package that they deliver and so requires less strategic involvement from senior staff.

> With the ITMB thing it was something that's much more pre-prepared and the university was then given the opportunity of participating within something. So the only real question was did it fit the provision that the institution covered, did it fit the sort of students that we take on, and it did. And it's been successful. It's a high quality programme, we get good results with it, so it's straightforward.

> *University (2)*

7.3   Funding

The network was established with initial funding from HEFCE and DfE. The HEFCE funding was from the Strategic Development Fund. This fund was very flexible and could fund projects which could prove they had a clear benefit, this particular project had a number of key agenda priorities that it matched; working with employers, promoting employability of students, increasing the number of STEM students and it helped to forge links between the government backed Sector Skills Council and HEFCE.

The initial funding was provided for a fixed period. The network is now funded via the universities that are involved. Each university pays a fee of £250 per student per year to e-skills UK to contribute to the running of the network and the employer activities. To develop the new course and set up the systems to deliver the ITMB degree, universities which joined prior to 2008 were given a grant from HEFCE, which was managed by e-skills UK. The grant acted as a cushion to help with upfront costs for the university. The Universities which joined after 2008 received no HEFCE funding at all.

> It paid towards resources, it paid towards the institutionalisation of admin and those sorts of things. It gave us a cushion for amendments. Some of the upfront costs didn't appear on our budget, all of that sort of stuff is kind of useful.

University (1)

Universities are happy with the current level of fees that they pay as they are seeing a return for that fee in employer engagement and good graduate employability rates. However, they would be reluctant to pay an increased rate. Universities face many uncertainties at the present time due to rising student tuition fees and a reduction in funding from government and so are wary of any additional costs incurred.

> The end result is that every time somebody tries to put a charge like that on us, then we will at least review it, and in a lot of cases, that answer is going to be no.

University (1)

There is substantial support from the employers involved who have contributed over £600,000 a year, generally in-kind support. This would include attendance at networking events, representatives delivering lectures, attendance at network meetings and also hosting events and sharing materials. Some employers contribute financially by sponsoring activities, including events or competition prizes.

e-skills UK also provides some financial support as the income from the universities and contributions from employers is not enough to support all activities. e-skills UK is looking at other ways that it can introduce fees for their services but this is something that the employers reported to not be in favour of. They anticipated difficulties if e-skills UK tried to lock-out recruitment from the ITMB degree to only employers who paid a fee or tried to take a fee from employers who recruit from the degree.

> We believe in the ITMB programme, we believe in the ITMB students and we believe in the ITMB vision. Even though e-skills UK want to try, we're not clear how they're going to start to charge companies for recruiting from ITMB in a way that doesn't go against the whole purpose it was set up for in the first place.

Employer (3)

7.4   Employer participation

There are two types of participants in the network; employers and universities. There are 60 companies that participate with the development and delivery of the ITMB degree. These are mainly large employers, many international, with few small and medium enterprises involved. Some employers have been heavily involved since the beginning and continue to be heavily involved. There are other employers who have become more, or less involved over time.

> [Our level of participation] hasn't changed over the last couple of years to any great extent, over the first couple of years it grew and I gained confidence that actually this is a worthwhile investment, and actually now I'm starting to see placements and the graduates coming through to employment. So it's the confidence that it actually delivers real results.

Employer (1)

One employer who became part of the network once it was already established and delivering to a cohort of students but before anyone had graduated from the degree explained that demand-led degree design seemed like a good proposition.

> The reason that we're engaged with ITMB is that we are a company doing IT management in the UK IT sector. ITMB is a degree programme that is looking to build and develop graduates passionate about a degree in the IT sector.

Employer (3)

Along with the employers there are also 14 universities who form part of the network and who are involved in delivering the ITMB degree. This number has grown since the inception of the project in 2005, when three universities were involved in delivery. The network could be described as an exclusive model as universities have to be invited to become part of the network.

It is intended to be exclusive because there's no way we can suddenly spread it across all the universities and give the universities the attention they would need and also the level of employer interaction that they would also need for the course to be accepted.

<div align="right">SSC</div>

There are plans to increase the numbers of employers actively involved and the number of universities by a few, whilst retaining the close relationships and monitoring that the network and e-skills UK can offer in the current form.

7.5   Network governance

e-skills UK leads the network and facilitates regular meetings and boards. Even though the programme has been running for some time they continue to have an Employer Strategy Forum which meets monthly by phone or face to face and helps to make sure that the degree programme still meets employers' needs. There are also other smaller steering groups which employers are invited to. The network has quarterly meetings with the course directors of the universities to get together to share best practice.

The network operates as a hub-and spoke model. There is little formal communication between employers or universities outside of the ITMB events and meetings, though they may meet under the banner of other networks they are part of, such as a graduate recruiter's network. There is an e-skills UK ITMB community space for anyone involved in ITMB. It is an online network designed to help students, graduates and employers get the most benefit from the programme. Employers reported being happy with this model and the level of communication as they have the option to keep in touch if they want to and there are formal and informal methods for employers to give feedback if they feel more communication is necessary.

There was great support for the network being led by e-skills UK. Universities can be complex organisations for employers to get access to and find the right person to help them, equally, employers are diffuse and this make it difficult for universities to start collaborations, therefore there is an argument for a broker to help facilitate these relationships. As an SSC, e-skills UK had a particular function independent from universities and employers:

I think what I particularly like about e-skills UK is that they listen to the employer group that turn up at each event and look and listen for what we are able to offer, and then look to match that up with their specific needs which I find is an interesting way of focussing on the results. They get the results but they work to us rather than asking us to work to them.

<div align="right">Employer (1)</div>

Completely independent and facilitated, if you like, and you know there's no hidden agenda, there's no politics on the agenda of somebody trying to make themselves look good or something like that. They are professional, they are independent, they clearly have the IT sector as a whole on the agenda.

Employer (2)

7.6 Functions and activities of employer networks

Focus and type of activities

There are a range of activities that employers can take part in or contribute to, as part of the ITMB degree programme. e-skills UK has produced a 'menu' of 25 activities, which provides an overview of the activities that employers can be involved in as part of the network. This ranges from allowing the company logo to be used as part of marketing materials to helping to determine the strategy of the ITMB programme as part of the Employer Strategy Forum. All employers can help to shape and support the ITMB degree programme through:

- Collectively helping universities decide on course strategy in their specialist fields

- Offering advice and support to ITMB lecturers

- Sharing their expertise with students in Guru Lectures (where industry leaders give talks and impart their knowledge and expertise to students) and events

- Acting as contacts to help students find jobs

- Providing students with business mentors on team-based project work in order to develop transferable skills.

- Giving direct feedback on students' CVs and interview technique

- Enabling students to visit companies to meet industry leaders and employees, helping them to make informed career choices as a result

- Playing an active role in the students' development throughout the course.

Employers who are more heavily involved through the ITMB Employer Strategy Forum make a number of commitments to be involved with this. These commitments are:

- **Relevant to the industry**: Employers 'work together to ensure their collective views represent industry as a whole' (ITMB: The Employer Menu). They commit to working together to ensure that the learning outcomes and skill requirements of the ITMB programme are relevant and current to industry and review these to make sure they remain relevant to the IT industry sector in the future. The learning outcomes and skill requirements are reviewed every three years in order to reflect changes in the sector.

- **Inspirational gurus**: Employers support the 'Guru Lecture' programme by providing speakers to pass on their industry experience, up to date knowledge and views. Approximately once every two weeks an employer representative will deliver a lecture at one university which is broadcast live to the other universities.

- **Working and networking events**: Employers support events at which ITMB students, lecturers and employers get together and network. These started as national events but as the cohort of students has increased they have split the events; one north, one south. All the universities and all the students are invited to the events which are organised by e-skills UK. At the events, there are a mix of presentations, skills sessions, business games, competitions between universities for 1st, 2nd and final year students which employers judge. A recent prize for a competition at an event was the opportunity to run one of the organisations for a day. This gave the winner a real opportunity to contribute their views and influence the way the business operated. There are also mock interview days held at an employer's offices which are run like selection days. This is an opportunity for students to get feedback on their interview technique and get advice with their CV's. . These are also opportunities for employers to collaborate and work together.

  > It's talking to the students, going out to the campuses, giving them hints and tips on how best to sell themselves in the graduate market and things like that.

  Employer (2)

- **Graduate and placement programmes opportunities**: Employers make a commitment that any Graduate and Placement programmes within their company will be communicated to all ITMB students through the universities and the e-skills UK online Community.

- **Industrial mentors**: The employers in the forum aim to provide an industrial mentor for each ITMB course. The industrial mentors typically work with just one university and visit once or twice a year.

- **Industry training materials**: If appropriate, employers may offer their own internal training materials or courses to participating universities to benefit ITMB students, staff or both.

Employer participation

The level of participation by employers is often determined by their level of graduate recruitment; employers who take on only a handful of graduates each year are more likely to be less involved in the network activities than employers who recruit many more. There are however, one or two prominent exceptions to the rule, where employers have invested considerable time and expense for skills they can only hope to benefit from in the future.

Employers can choose which types of activities they get involved with – for example choosing to host or sponsor an event. e-skills UK prefers the employers to be able to choose the way that they get involved so that they will be more likely to gain more benefit from their involvement and therefore maintain their involvement. e-skills UK plots a calendar of events and at the Forum asks for help from employers. There is no minimum level of involvement as it can sometimes be beneficial just to have their brand associated with the degree. There is no penalty if an employer chooses to not do an activity. There is a 'core' of employers who are heavily involved but many more who are involved in some of the activities and who have taken on ITMB graduates. For example, at the last Northern event there were 50 employer representatives from 25 organisations.

> We're getting extremely good support from the employer community in terms of backing the programme and extremely good support from the employer community in terms of resource because they are willing to carry events like that.

SSC

The typical level of involvement from an 'active supporter' means:

> At various events I've hosted sessions, invited colleagues of mine to do key note speeches, lectures, taking part in mock assessments into exercises or student events.

Employer (1)

Delivery and outlook

Delivery of the skills element for this network is carried out by the 14 universities that deliver the ITMB degree. Each university designed their course content in consultation with the blueprint document produced by the Employer Strategy Forum paying attention to the defined learning outcomes and skills requirements. There are four components that must be covered in the course content; technology, business skills, projects and interpersonal skills gained through team-working. For each of these four components the university has between 5-10 per cent leeway on a threshold of 25 per cent; this enables the universities to tailor their course to suit their needs.

An independent academic goes through their course modules to make sure the universities are delivering the course requirements and recommends whether the course should be endorsed by the network. The endorsement is an e-skills UK endorsement but it is ratified by employers. During this process, employers ask pertinent questions about the course content, structure and proposed delivery and show a genuine interest and make suggestions about potential improvements.

> Every so often they have to be validated in terms that they are meeting the learning outcomes and the syllabus that we have set. We also validate new universities who want to start doing the course.

Employer (2)

> We went on to the Employer's Strategy Forum meeting and then, we had several comments from employers that they wished to make, and that was totally right and totally fair enough. So we went away and made the changes to what we proposed that they asked for, and there we were. It was very straightforward.

University (1)

This process gives e-skills UK and the network as a whole, confidence that as a university starts to deliver the ITMB degree for the first time they will meet the required standards. This endorsement lasts for five years; at the end of this period, the university must go through a re-endorsement process which helps to ensure that the existing courses continue to meet the current learning outcomes and skills requirements.

7.7   Impact of employer networks on skills and growth

Network outcomes and impact

The employers involved in this network at the beginning had to take it on trust that they would see a benefit to their involvement as they would not recruit the students for at least three years. The number of graduates from the ITMB had been increasing each year; there were eight graduates from the first cohort in 2008, increasing to 24 in 2009, 128 in 2010 and 195 in 2011. Employers now recruiting graduates and interns from ITMB degrees are starting to reap the benefit from their involvement.

> They were supporting the programme for four years without seeing any of the product. Over the last three years they have been seeing the product and they now want more of it.

SSC

> They are all very high performing. So, we're really pleased with them. They get all this employer input, the undergraduates, and the whole point of the ITMB degree is that the degree gives them skills which we would otherwise have to train once they started with us as graduates. So it gives them a very fast start as graduates, and also, it should give them an advantage in the recruitment process.

Employer (2)

The impact of the additional course activities that sets the ITMB degree apart from other degrees is widespread for students and the employers.

Relevant to industry; the employers, universities and e-skills UK have collaborated to design a degree that is highly relevant to industry. By working from the template created by employers, the universities and the ITMB students can be confident they are covering the right topics and acquiring appropriate and relevant skills which are in demand by industry. The delivery of the degree includes much more team working than in other comparable degrees which helps promote interpersonal skills. Although they cannot directly compare to other degrees, confidential data shows that the ITMB degree graduates get higher degree classifications than other IT graduates and have better employment outcomes. One university for example has a 100 per cent destination rate from the ITMB degree – meaning that all of their graduates from this course go on to the destination[8] of their choice within six months of graduation. They attribute this to the substantial involvement of employers in the design and delivery of the degree.

Inspirational gurus; students can benefit from the experience of people currently working in the industry to gather a continually developing picture about real-life issues and challenges. They are an opportunity for the students to ask questions and take contact details for the industry speakers.

> They get the exposure to the companies, they get the exposure to the Guru lectures, they get the exposure to the website, and they get the links through Linked In and all of those sorts of things, that we wouldn't necessarily have thought of.

University (1)

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[8] This destination may be further study or employment.

Working and networking events; these provide an opportunity for the students to show their skills to employers through competitions and workshops. They can meet graduates from the ITMB degree who have gone on to work for the employers. The events are also an opportunity for employers to get to know the current cohort of students and for the students to better understand what they as an employer can offer. Being involved in the ITMB programme is good for some large companies who need to recruit IT graduates but who are not IT companies and not known for recruiting IT graduates – such as large retail companies and large accounting companies. Employers can use the events as a way to inspire the students that they are a good company to work for. Employers are reporting to e-skills UK that they like the events and would like more of them. The events are a useful way for employers to network with each other but they are also useful for meeting and getting to know the students.

> I think it's very good for both the student and the employer because in my mind it reduces the risk of recruitment. I mean, from their perspective they've met the person before, actually several times, so they know the person more and therefore it's not going to be we're offering you a job etc. based on one set of interviews… And from the student's perspective, it gives the student an opportunity to know more about the company, more about the culture of the company and therefore when they do apply, I'm confident they will apply knowing what to expect.
>
> *SSC*

> It's good because you can go to student events and you can actually see them and say oh, they look good, as opposed to people who just apply through the website and you don't know them at all. You can build networks with the students who you think have been good, and all employers do that.
>
> *Employer (2)*

> Really we provide support by sending our managers to the ITMB events, really to support the ITMB message that ITMB is something employers really do want, really are passionate about and of course it's good visibility for [us] as well to inspire the students as well that [we are] a good company to work for.
>
> *Employer (3)*

Graduate and placement programmes opportunities; ITMB students are advised of all opportunities within employers. Employers state that they benefit from having students and graduates on placements with them as it can become a more efficient way of recruiting graduates. The employer effectively gets the period of the placement to see if the graduate would be the right fit for the organisation.

Increasing diversity; The ITMB degree has a greater proportion of female students than other IT degrees. On average, 15 per cent of students on IT courses are female, for the ITMB degree 35 per cent are female. Employers in this sector are concerned about the gender imbalance in their current workforce and in university course, with this degree e-skills UK has tried to address this. This has been achieved through the design of the degree which is comprised of 25-35 per cent of learning hours dedicated to technology, 25-35 per cent to business skills, 20-25 on projects and 20-25 per cent on interpersonal skills gained through team-working. By moving away from the pure computer science degree model they have been able to appeal more to females.

Recruitment; One of the main benefits of this network as identified by e-skills UK is giving employers potential and new recruits with the skills they want. Some employers allow ITMB students to pass through some recruitment stages automatically but this preferential treatment is not practised by all of the employers involved. However, the course content and activities connected with the course should ensure that these students and graduates have the skills and knowledge required by these employers which sets them aside from other students and graduates. One employer felt that even if they do not recruit directly from the ITMB degree by attaching their company brand to the degree the graduate and students will have a positive experience with their brand which would be good for them in the long term.

> We do let them skip a round in a recruitment process because they are ITMB students, but otherwise they go through exactly the same as everyone else does.
>
> *Employer (2)*

> We don't have any special commitment to ITMB students. It's just they're well suited to this type of work, but at the end of the day we'll always take the candidates who do best in our aptitude tests and interviews. We'd like to think ITMB students could be that but there are certainly no plans to increase the number of ITMB students we have…At the end of the day, when you've got someone who has that background and that skills like ITMB, it does help them deliver more, earlier. They can hit the ground running
>
> *Employer (3)*

> It's been running for a few years now and we're seeing a lot of alumni of ITMB students coming through. We're lucky to have had that line of ITMB students coming in and doing their internships here and they've gone on to convert those to full time assignments as well. So it works, they're doing a good job and the proof of that pudding is in the eating: by virtue of the fact there is a degree programme, there is an aligned framework agreed by the universities and the employers. The reality is, it works.
>
> *Employer (3)*

Employer networks; Being part of the network is beneficial to employers, bringing knowledge sharing, a better perspective on the sector and the graduate and student population. Employers have also learnt about how they can position themselves as graduate recruiters as compared to other graduate employers who are also part of the ITMB degree network

> It's very interesting to sit with other employers and talk to them, you know, because these are our competitors as well. But it's all extremely positive, and we work together. So, I think for us it's very useful and good to have a network, you know, networking with other organisations for undergraduate schemes.
>
> *Employer (2)*

> So there's a lot of learning there on what we want to stand for in terms of how we position ourselves for students looking for these types of jobs. Why should they pick us versus one of the other big or small employers who are all asking for skills to do exactly the same kind of work? So that's very interesting.
>
> *Employer (3)*

The Universities involved have also found it beneficial to be part of this network. The universities who got involved in delivery reported that they instantly gained in 'standing' with the employers involved.

7.8   Conclusion

The network of employers, universities and e-skills UK is meeting the aims and objectives that it set out when devising the ITMB programme.

> We're very confident that the universities can honestly say we are delivering a degree programme which is absolutely relevant to the IT industry at this moment in time.
>
> *SSC*

> Whenever I look at the learning outcome and skills review, that is very, very closely matched to what we do here and that's very deliberate. We helped to design it and shape it in such a way so that it is the same, so we know that we're getting students in that are familiar with the types of work that we do because they've been taught it and done group work and things at university which specifically focused on IT management and project management and all the rest.
>
> *Employer (3)*

> It's quite an amazing thing for a group of employers to get together and devise a degree scheme and actually roll it out across a number of universities. It's actually a major, major achievement.
>
> *Employer (2)*

> A great opportunity for us in the employers sector to work with universities, to structure a degree course that satisfies the university needs but at the same time is satisfying our needs, and at the same time is actually attracting a group of energetic students to study the course.

> *Employer (1)*

Employers are working together, although they are essentially competitors for the same graduates they know it is for the common good; like increasing diversity.

> So I think there are learnings in there, definitely, in terms of what we know about ourselves and in how we can work better with other employers for the greater good.

> *Employer (3)*

e-skills UK would like to see the ITMB degree continue to grow by increasing the number of universities delivering the degree and increasing the number of students at each university. e-skills UK is hesitant about growing the number of universities by too many – they are aiming for another 3-4 to be involved as part of the network in order to preserve the close relationship that the universities have with employers and e-skills UK. Last year a Welsh university joined the network and e-skills UK hopes to expand into Scotland and Northern Ireland now that it is past the initial funding which restricted it to England only. Employers have also expressed concerns about expanding the number or type of universities involved as they would like to ensure that the ITMB graduate will still meet their selection requirements, for example some employers have UCAS points as a minimum requirement for job specifications.

e-skills UK hopes that it will be able to 'sell' the degree model to other universities as although there is a big upfront commitment required from the universities; designing the programme, writing modules and marketing the course, the benefits to the university justify this outlay. With the increase in tuition fees from 2012/13 it has been argued that employability is becoming more important to students when considering which course and which university to study at. The opportunities for developing employability skills and the employment outcomes for graduates from this degree will be a selling point for any university offering this course.

> Those are things that they are prepared to pay for because they think they'll get tangible benefit from that.

> *SSC*

As long as the degree continues to be directly relevant to employers' needs the universities will continue to support and deliver the degree.

> We've had a hard look at a lot of our provision, like a lot of people, the ITMB course is working well and gets good results, why wouldn't we keep working with it and developing it? These days, with the emphasis and absolute focus that we have on employability for our students, as long as the ITMB and those sorts of courses come with a clear added advantage in employability we'd be daft not to take them.

University (2)

Universities also felt that the degree and collaboration is meeting the objectives e-skills UK set out to meet.

> [The ITMB degree has] delivered a set of graduates with a greater degree of relevancy to the needs of industry that can start operating quicker, to meet employer's needs earlier on in their employment. It's made training more relevant to that. It almost certainly has brought closer contact between bits of the IT industry and academics and it's probably bettered the employment prospects of a number of people that have been through the system.

University (2)

One university highlighted that there is little knowledge about ITMB outside the department responsible for delivery and little knowledge at a senior management level. The benefits of ITMB should be promoted more widely and this is something that e-skills UK could take a lead on.

A critical success factor in the continuing success of the collaboration is that the employers involved have the same recruitment needs and therefore a common goal. One employer thought that this was what made this network successful and that without this clearly defined goal the network would not continue.

> There needs to be a common theme in terms of sharing the learning and approaches, and I think it's much harder to get a company to that place. It works for recruitment because it's all very simple. All the companies have said every year we try and recruit students with business and IT skills and so we all have got that common vision and common goal which is why we can come together and collaborate and work on a way of fundamentally changing how that works in the UK

Employer (3)

Another critical success factor is the representatives for the employers. It can be about finding the right people in the organisation – the employer or the university that will take this way of working and commit to it and be proactive.

They have succeeded in bringing together employers, the university and students into a single framework. I think that's quite an amazing job so that's the biggest success.

Employer (1)

Employers that were interviewed for this case study were unanimous in attributing the success of the ITMB degree to the leadership of e-skills UK; it has acted as an 'independent central point of contact'.

It's the way they work with people, it's that they listen to what people are willing to do and then look to see how that fits into what they want, what everyone one else wants to do rather than taking it the other way around and saying right, I've got, this is the answer, this is what I want you to do. They do that by understanding we've all got different opinions, and different thoughts, and spend time listening to us to see where we might want to play in the big picture which I think for me that's why it's worked.

Employer (1)

It's brilliant. It would not happen, none of this would happen without e-skills UK. You need someone like that who is in the middle to organise everything. You really do. So it's absolutely invaluable.

Employer (2)

Around the table you've got a lot of different companies who have all got broadly speaking the same ambition and the same idea for the type of work that we do and the type of graduate that we would want, and really e-skills UK has done very well facilitating all of the companies coming together and expressing that in a common language which can then be turned into the ITMB programme... realistically if there wasn't an external company like e-skills UK doing it, it wouldn't have happened.

Employer (3)

8 Rolls Royce Advanced Manufacturing Research Centres

8.1 The set-up and focus of employer networks

Main objectives of the network

There are seven Advanced Manufacturing Research Centres, five of which are in the United Kingdom. Collectively, these form the AxRC network. The centres aim to develop advanced manufacturing technologies through collaboration between universities and industry. The centres are:

- the Advanced Manufacturing Research Centre (AMRC), UK

- the Advanced Forging Research Centre (AFRC), UK

- the Manufacturing Technology Centre (MTC), UK

- the Nuclear AMRC, UK

- the National Composites Centre (NCC), UK

- the Commonwealth Centre for Advanced Manufacturing (CCAM), USA

- the Process Technology Research Centre (PTRC), Singapore.

Although the centres operate independently, some research is undertaken collaboratively between the various centres that form the AxRC network. Several member companies belong to more than one of the centres, which complement each other's activities.

This case study will focus particularly on the AMRC and the AFRC as networks in themselves. The AMRC, established in 2001, is managed by the University of Sheffield, and has 68 industrial members[9]. These include multinationals and SMEs in the aerospace sector and other areas of high value manufacturing. The AFRC was established more recently, in 2009. It has 17 industrial members[10] and is managed by the University of Strathclyde.

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[9]   22 Tier 1 members and 46 Tier 2 members – see section 8.4 for details on the membership tiers.
[10]   Six Tier 1 members and 11 Tier 2 members.

Both the AMRC and the AFRC focus on technological research and development. The centres aim to bridge the gap between academic research and industrial practicalities, providing the equipment and other resources required to test and introduce new advanced manufacturing techniques. Such research requires physical infrastructure and research capacity which individual firms do not necessarily have. Industrial members play a crucial role in driving the centres' core research programmes, findings from which are shared among all members. Companies (members or non-members) may also fund firm-specific research.

The centres are relatively new and their core objectives have remained stable so far, although AFRC is broadening its scope a little, in response to member demands and membership of the High Value Manufacturing Catapult, a group of seven partners funded by the Technology Strategy Board[11].

Key drivers/initiators

The **AMRC** was the first in the AxRC network and acted as a model for the six other centres. It was first established following talks between staff from the University of Sheffield), a local cutting tool manufacturer), an official from the then at the Department of Trade and Industry and Boeing. The research centre was a way for multiple companies to pool their resources to invest in longer-term research and development than would have been possible for each firm individually. This is reflected in the AMRC's "vision document" which summarises its strategy.

The AMRC vision document

- To maintain a world class community where research, design, manufacture and study interact effectively to put technology into practice

- To have a manufacturing capability for showcasing best practice, tools and techniques associated with materials forming

- To be a global centre for the benchmarking of tools and techniques for aerospace manufacturing

- To develop knowledge-based simulation tools and techniques

- To incubate and spin out technology to raise the performance of both local and national manufacturing companies

- To develop vocational engineering student programmes

Source: the AMRC

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[11]   https://catapult.innovateuk.org/high-value-manufacturing

The objectives of the AMRC tied in with policy objectives at the time, which helped secure funding.

> About that time a white paper entitled Opportunity for All in a World of Change, was published by the DTI. The government decided to establish University Innovation Centres to coincide with the white paper. We were successful in bidding for funding and received £5.94 million to establish the AMRC… Once we had the money, we were able to use that to draw down a further £2.72 million from the ERDF [European Regional Development Fund] which was used to build a workshop on what was to become the Advanced Manufacturing Park. This provided sufficient funding, along with generous private sector donations of equipment, to establish and run the centre for three years. It all started from there.
>
> *Manager, AMRC*

The centre built on existing relationships. Technicut, the small cutting tools manufacturer which played an important role in the set-up of the network, had a pre-existing relationship with the Department of Mechanical Engineering at the University of Sheffield. Before the AMRC was founded, Technicut had sponsored a number of Sheffield PhD graduates who subsequently started work with the firm. This and other research collaborations eventually led to Technicut contributing financially to the AMRC in its early stages.

Technicut, through its Commercial Director, Adrian Allen (now the AMRC Commercial Director) was also well-networked in Boeing. Getting this multinational firm on board was a significant draw for other members.

Since this time, the AMRC's funding base has broadened, although direct funding from members is still an important source of income. The funding streams that they apply for tend to allow them to be fairly flexible (for more detail, see the section on funding, below).

The **AFRC** followed in the footsteps of AMRC to some extent. This project was initiated following discussions between Rolls-Royce, Strathclyde University and Scottish Enterprise, building on strong existing links. Rolls-Royce was a key initiator because it has a Scottish plant which makes aircraft turbine blades, for which forging and forming are crucial activities. Rolls-Royce identified that such processes would benefit from greater scientific examination.

The practicalities of setting up the centre required considerable involvement from a number of different parties.

> There were a number of things that came together to turn it into an actual entity… If any one of the three key stakeholders had decided to walk away, the whole thing would have fallen down. The key thing was to have a strong industrial partner. In our case, that was Rolls-Royce. The other thing was to have, in our case, a university that was equally dedicated to pursuing the establishment of such a centre. Then the third part of the equation… was that we needed a building, because we couldn't really do what we wanted to do within an existing university building. So… senior management within the university and within Rolls-Royce jointly approached Scottish Enterprise. [Rolls-Royce was important because we needed] to have an industrial partner that we could use as a catalyst to bring on board additional members.

Manager, AFRC

The early involvement of multiple industrial partners was seen as crucial by those directly involved with the network as well as by Scottish Enterprise as the main source of capital funding.

> It became fairly clear early on that, in order for the project to proceed, we needed a number of industrial partners. At that point both Boeing and Mettis Aerospace were approached and became involved… Scottish Enterprise effectively only released the funding once we had those first… members signed up. Timet joined very shortly after that, so that those four companies are the founding companies of the centre.

Jeff Brooks, Research Director, the AFRC

£16 million[12] of capital funding has been provided through Scottish Enterprise, to provide the building and equipment required to get the centre up and running. One funder saw the centre as a way to improve engineering capacity in the region.

> We tended to agree with [Rolls-Royce] that it made a lot of sense. [A collaboration like the AFRC] had potential to do significant things and there were companies within Scotland that – not necessarily immediately, but over time – could benefit from improvement in that sort of technology. So it looked as though it was a mechanism to develop a capability within Scotland that could produce leading edge technology in a specific area of engineering that had, potentially, reasonably wide application.

Funder of the AFRC

Scottish Enterprise does not expect to provide ongoing support into the future, although it is still involved with the AFRC, as the capital funding stream will end this year. Member companies now provide an important source of ongoing funding, and as such the centre is strongly demand-led. (See section 8.3, "Funding", for more details.)

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[12]   Of this, £7m was provided by the Scottish Government through Scottish Enterprise, and £9m was from Scottish Enterprise funds.

8.2 Key characteristics of employer networks

Background and characteristics

All the centres in the AxRC network are industry-higher education collaborations. The AMRC is a collaboration between the University of Sheffield and industrial partners who form their membership. The AFRC is a collaboration between the University of Strathclyde and industrial partners. Rolls-Royce is a member of every research centre in the AxRC network.

The AMRC was established in 2001 and is a unit of Sheffield University. The AFRC was established in 2009 and is a unit of Strathclyde University. Both aim to develop capacity in high value manufacturing. The AMRC is particularly focused on aerospace, although not exclusively so. Both networks have some emphasis on regional development, although multinational companies are members and a member firm of the AFRC that we spoke to did not feel excluded from activities despite the fact that they were not based near the AFRC's home in Strathclyde.

8.3 Funding

For the **AMRC**, roughly one third of funding comes directly from industrial sponsorship (through membership fees and individually-financed projects); one third from public funding, principally through the Technology Strategy Board[13] and one third through collaborative projects. The AMRC has also received funding from Yorkshire Forward, which will soon come to an end. However, the termination of Yorkshire Forward does not pose an existential threat to the AMRC. The impact of the loss of Yorkshire Forward funding has been compensated by financing through the High Value Manufacturing Catapult[14], a network of seven research centres (five of which, including the AFRC, are in the AxRC network) funded by the Technology Strategy Board.

Ongoing funding of the **AFRC** is provided in three main ways. An approximate breakdown for this year is given below, although the exact split will vary from year to year.

- membership fees (£1.2 million per year)

- direct funding of research projects (around £0.5 million per year; expected to increase slightly next year)

- public funding for collaborative programmes, from sources including the European Union and the Technology Strategy Board (around £2 million per year; expected to decrease slightly next year).

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[13] According to its website, www.innovateuk.org, "The Technology Strategy Board is an executive non-departmental public body (NDPB), established by the Government in 2007 and sponsored by the Department for Business, Innovation and Skills (BIS). The activities of the Technology Strategy Board are jointly supported and funded by BIS and other government departments, the devolved administrations, regional development agencies and research councils."
[14] http://www.innovateuk.org/deliveringinnovation/catapults/high-value-manufacturing-catapult.ashx

As a significant portion of funding comes from private companies, activities remain demand-driven (see section 8.5 "Network governance" for more detail on mechanisms for this). Nevertheless, public funding is clearly important for both centres, in terms of capital funding as well as ongoing costs. The directors that we spoke to felt that the existing public funding streams allows them to work freely and does not interfere with the direction of the member-driven research programme. The employer members that we spoke to seemed happy with the centre's work and its demand-led nature.

Some funding can of course be linked to quite specific requirements. A director of the AMRC had found that regional funding can be valuable to enhance activities but (as might be expected) tends to be less scalable than national funding.

> Technology Strategy Board funding is very flexible. We can operate where we want and TSB takes into consideration our partners and the needs of the supply chain. Regional funding is by definition restricted mainly to working with regional companies. National financing is by far the most flexible funding we receive

Manager, the AMRC

Ongoing costs of co-ordination and workforce

The **AMRC** has a workforce of 180, employed by Sheffield University but funded through streams raised by the AMRC as a separate unit. Of these, 150 are manufacturing/engineering research staff while 30 are support staff including quality assurance, finance, administration, and security staff. Members send in staff to work at the facility so that roughly ten to twenty people may be visiting from other companies at any one time, mostly working on demonstration projects.

> When we say demonstration projects, that would be a piece of equipment, a component that a company [at the top of the supply chain] is actually making. It's actually a real part where we are demonstrating new machinery. [Member companies' employees] come in and work with us on it and then they take it back into the company and implement it.

Manager, AMRC

Overall, staff costs at the AMRC are around £5 million per year. Other ongoing costs include capital investment in equipment (also roughly £5 million per year). Materials and other overheads require a similar annual investment.

The turnover of the AFRC is approximately £3.5 million. The **AFRC** employs 35 people through Strathclyde University. Like the AMRC, the AFRC hosts employees from member companies on their site.

> We do have staff on site who are not AFRC employees: they are employees of the member companies… We have three co-ordinators who are full-time employees of their company who are based here in Strathclyde. Their job is to co-ordinate the work that we are doing for their company.

Manager, AFRC

8.4   Membership

Any company in the relevant industries may (subject to board approval) join the AMRC and/or the AFRC as either a Tier 1 or a Tier 2 member. So far, all members of the AMRC and the AFRC are private sector firms due to the make-up of the sector.

Tier 1 membership costs £200,000 per year. A representative from each Tier 1 member can take up a seat on the board (although not all members choose to do this). The board approves and ranks projects which are suggested by members for the core research programme.

Tier 2 membership costs £30,000 per year. A single board member represents all the Tier 2 members collectively. Tier 2 members have access to outputs from the generic research programme.

These prices were set at a level which aimed to ensure that members would be genuinely engaged with the research centres – based partly on an assumption that Tier 1 members will be large organisations to whom £200,000 is a significant sum of money and Tier 2 members are smaller organisations who will value the £30,000 contribution.

The AMRC allows contributions in kind for membership payments; the AFRC, by contrast, asks that Tier 1 members pay cash so that running costs can be covered reliably.

Member companies range from SMEs to multinationals. This mix was valued highly by an SME member that we spoke to.

> Being an SME… the forum that the AMRC provides for us to be able to engage on a collaborative basis with these multinational organisations, is an opportunity which wouldn't be afforded through any other vehicle that exists within the UK.

Manager, Member Company

Larger members also set great store by the fact that the network contains companies from the whole supply chain, including small companies. A large multi-national engineering company has been an important driving force in rolling out the AxRC model, and believes that the centres can expand capacity in the sector.

> It benefits us to have suppliers nearby, and therefore upskilling the UK supply chain is hugely important to us… [Proximity means] shorter lead times, less inventory, more flexibility, better responsiveness and these kinds of things. So the centres and I have encouraged lots of small companies to join… [SMEs] learn from us and then they contribute to our profitability by providing us a better product at lower cost.
>
> *Manager, Member Company*

The prospects for both centres in terms of sustaining membership seemed bright. The economic downturn does not seem to have had an effect on membership. The directors of the research centres told us that existing members have been retained: advanced manufacturing has (broadly speaking) not been badly hit by the downturn. The member companies that we spoke to shared the view that staying in the network was sustainable. (For more information about the impacts on and benefits for firms, see section 8.7 "Impact of employer networks on skills and growth").

Membership of the AMRC has seen significant growth since the centre was founded in 2001. Although there may well still be room for expansion, one director suggested that focussing resources on a limited number of companies may be most effective given their current model.

> Eleven years ago we had half a dozen members and that's now grown to 68. We shall add more tier 1 members, but there probably is an upper limit. I don't think we've reached it yet, but if you're providing the in-depth help that we give at the AMRC then there is a limit to the number of large companies one can work with.
>
> *Manager, AMRC*

The AFRC is very new, so the medium- to long-term trajectory of growth is less clear than for the AMRC. Already, though, its member count has exceeded the targets laid out in its original business plan, and there are imminent plans to expand the main AFRC building to cope with the high demand for its services. The membership base is likely to grow further in the future, because the centre is likely to broaden its area of interest, in part as a result of joining the High Value Manufacturing Catapult. This is likely to be welcomed by employers who can use the facility to support the development of their suppliers.

A director of the AFRC also highlighted that, although growth in member numbers is desirable, this needs to be managed carefully when firms come from the same industry.

> This isn't the case with the current membership, but the challenge with membership-based or consortium-driven organisations is that, as they expand, the potential for conflicts of interest between existing members and potential new members… increases. So we are looking at how to increase membership, but make sure that it's a profitable membership rather than there being any conflicts between existing members.
>
> *Manager, AFRC*

8.5   Network governance

The governance structures of the AMRC and the AFRC are very similar, because the AFRC largely followed the established AMRC model in this respect. Each centre has a main board and a technical board.

Each Tier 1 member is entitled to send a representative (usually a senior manager) who sits on the **main board**. Some firms may send an additional observer who ensures continuity. The main board also contains a representative of the university at which the centre is based, and one individual who represents the collective interests of the Tier 2 members.

The AMRC main board also includes a representative of SMEs in the region – partly because of regional funding which has emphasised the need for the centre to link in with smaller businesses in the geographical area. Additionally, a representative from the Australian Advanced Manufacturing Research Centre[15] (AusAMRC) sits on the main AMRC board as an observer[16].

The AFRC main board includes a director from Scottish Enterprise as a significant funder, although this is a nonvoting position.

The **technical board** in both the AMRC and the AFRC is made up of representatives from Tier 1 member companies (which are entitled to a seat if they wish to take one) and one representative who puts forward the interests of all the Tier 2 member companies. The member representatives on the technical board tend to be senior technical staff. The technical board in each centre meets quarterly to determine research and development activities. This structure is designed to ensure that members are able to steer research in directions that interest them.

Tier 1 members are therefore in a particularly strong position to influence what activities are undertaken, and members that we spoke to were very satisfied in this regard, seeing this as crucial to the network's success. Tier 2 members have less influence, as reflected in their considerably lower membership fee. However, further channels can be constructed to ensure that Tier 2 members' views are fairly represented.

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15   www.swinburne.edu.au/engineering/ausamrc/
16   An 'exchange' role which is mirrored by a director from the AMRC sitting as an observer on the AusAMRC board.

> We have started other channels [to communicate with the Tier 2 members]. Even though there is one board member… that person has to communicate with an increasing number of Tier 2 members and try to create a separate forum. We've recognised that that's quite challenging, so we started a series of monthly research workshops that all the Tier 2 members are invited to. We see that as a key forum for getting them involved more in the AFRC activities. Also, within the core research programme, we try to align our Tier 2 members with particular interests... So their input is predominantly in the area [where] their interest lies.

Manager, AFRC

The AMRC and the AFRC differ slightly in how income from membership is spent. Tier 1 membership fees for the AMRC go partly towards the generic research programme and partly towards member-directed generic research. However, in the AFRC, 100 per cent of membership fees are directed into the generic research programme. This is based on a rationale that member companies can commission directly-funded research on a separate basis, so membership fees should go towards the collective research.

Because of their focus on research and development, intellectual property (IP) is an important consideration for the research centres. This is particularly the case because of the multiple sources of funding for the centre. As such, the design of the membership agreement, which sets out how these issues will be dealt with, was carefully considered at set-up stage.

> It took us about a year to get the membership agreement in place. Because there was a lot of discussion about the intellectual property arrangements, a lot of discussion about [how membership fees would be used and how research from various funding streams should be shared or not shared]. That took a lot of time, but we've ended up with what I believe is quite a robust membership document that members have… accepted in terms of intellectual property, etc.

Manager, AFRC

The AFRC also invested carefully, again at set-up stage, to make sure that ongoing arrangements for the management of information were robustly designed.

> It is very clearly detailed who owns what [in terms of intellectual property]. Where we do need to be careful… is where we have a project in the core programme which is address a particular issue, and we also have a directly funded programme from a specific company who is actually working in a similar area. Obviously we need to make sure that our management processes are such that we don't get information going from one programme to another when it shouldn't. That's a key challenge for any centre. We have invested a significant amount of time and money in putting together a database system which allows us to manage our project data and our intellectual property in such a way that ensures that only those people who have rights to access the information do so.

Manager, AFRC

Intellectual property agreements in the AFRC are affected by the tiers of membership, with Tier 1 members having free rights of access and use of intellectual property. Tier 2 members can access the intellectual property, but if they want to exploit it then they need to negotiate a license fee. Directly-funded or collaborative programmes outside the membership scheme are negotiated on an individual contract basis. In the AMRC, by comparison, all members have the same access to intellectual property.

The AFRC has also been running a road-mapping and strategy project since the centre was started up. Through workshops with members on specific subjects, members are able to identify their particular needs and interests. Members are routinely asked to identify their priorities.

Our interviewees told us that some member companies have more exposure to the centres than others, especially if they directly fund additional projects. However, it seems that the structure of governance is inclusive and collaborative. Membership represents a fairly large investment, especially for Tier 1 members, and our interviews suggested that members therefore seek out opportunities to provide their input and get a return on this. Furthermore, an annual members' day allows members to put forward their interests, providing a channel for feedback in addition to board membership.

The AMRC seeks regular feedback from its members on performance, and has a dedicated Quality Team. The research centre works to a quality management system which is the standard in the aerospace industry, the British Standards Institution's AS 9100 (Revision B). The centre also regularly asks for feedback from members:

> Every job that we do we expect feedback from our members. By acting on that feedback the AMRC continuously improves its performance.

> *Manager, AMRC*

8.6   Functions and activities of employer networks

Focus and type of activities

The key focus of the AxRC centres is research and development activity. This most often occurs in the centres themselves, and the physical buildings and facilities are perceived by the companies we spoke to as a key benefit of membership. The member companies we spoke to reported working with other firms in the supply chain, and indeed this was highly valued. So the centres appear to facilitate interaction between firms, not only between firms and the university as would be the case under a "hub and spoke" model. However, the majority of the research activities are carried out by employees of the AxRC, i.e. by university staff.

The centres aim to provide a bridge between highly theoretical (often academic) research and the operational testing that might commonly take place in industry. AxRC research therefore provides a way to translate theory into practice.

> Universities typically operate at Manufacturing Readiness levels one, two and three; and industry prefers operating at seven, eight and nine. The AMRC operates primarily at four, five, six and seven, so we are bridging that gap between traditional university research and what companies are looking for.
>
> *Manager, AMRC*

> Many of the ideas between level one and three never get to seven, eight and nine because there is nowhere you can productionalise them. Productionisation means full scale production kit, full scale fixtures, tooling, machine tool programmes, people who take real components and products to these places and turn those laboratory ideas into proven shop floor solutions, and then implement it at shop floor.
>
> *Manager, Member Company*

Research findings are disseminated through internally and externally published reports and presentations (the latter would tend to be to individual member companies). Knowledge transfer may also occur through demonstration projects, which show how newly-designed processes can work (although this would not tend to involve training per se).

There is also interaction with other research centres, including others in the AxRC network, the High Value Manufacturing Catapult and Boeing's GlobalNet.

> We have quite strong links with a number of institutes in Australia where we're working on incremental sheet forming, for example… partly through the GlobalNet activity.
>
> *Manager, AFRC*

Members were reported to link the research centres with knowledge transfer and innovation rather than formalised training. Knowledge exchange took place for members through contact with experts as part of project collaboration, but this occurred outside a deliberate training programme.

However, academic training is included as an activity within both the AMRC and the AFRC. The Engineering Doctoral Training Centre at Strathclyde University is partially funded through the AFRC; member (or other) companies may support EngD students through their doctorates. The intention is for this to build up to 32 doctoral students over the next four years. No training is carried out in the AFRC and these elements are provided by the University of Strathclyde while the AFRC concentrates on the research delivery. In the case of students who are part-funded by an industrial partner, the individual concerned may be involved not only in the company part-funding their work, but also with other companies that are either in the supply chain or potentially in the supply chain of the funding firm.

Although there are many areas of similarity, the centres demonstrate some differences in their activities. The activities which were not common to both centres are outlined below.

The AFRC

Monthly research workshops on specialised topics have recently been introduced, to which all members are invited.

A weekly newsletter is sent out, highlighting centre activities.

Placement students may come to the centre: these may be undergraduate or postgraduate students. Currently, the centre has six or seven students at undergraduate or postgraduate level.

Knowledge Transfer Partnerships (KTPs) may be arranged with either member or non-member companies. The AFRC provides the knowledge and infrastructure to support these.

> To give you an example, we've got a KTP with a small company that manufactures hot water cylinders. They were moving over from production with one material to another material that they didn't have much experience of. That material had to be rolled and then welded. So we provided the know-how and supervision to the KTP associates to allow them to do the job of work and introduce a new production line into the company that focused on this new material. The AFRC facility was used to do some material testing and other forms of tests on the weld and the whole process. So we used our know-how… and the physical capabilities in the centre to support the work.
>
> *Manager, AFRC*

The AFRC has been looking into the possibility of expanding the skills and training elements of the centre, to add to the knowledge transfer activities that currently exist. Discussions have been tentative so far, but include the possibility of setting up a training school and delivering Modern Apprenticeships in forging and forming. Other possibilities for further training activities include modular CPD programmes, in conjunction with the Department of Manufacturing and Engineering Management at Strathclyde University. The CPD programmes could be structured so that participants eventually achieved an MSc. Such activities would further the centre's objective of bridging the gap between academic and industrial research.

> Having training seminars that built upon our inputs would enhance the process of transferring that knowledge into industry… We've got to make sure that whatever we come up with, we have a mechanism to [transfer] it back into partner companies.

Manager, the AFRC

The AMRC

With the significant growth experienced a lack of skilled personnel was recognised as a problem:

> A lack of skilled people is the most significant barrier to growing the UK manufacturing sector. World class R&D, developing new tools, techniques and technologies, needs to be fed quickly into training regimes for UK companies to achieve competitive advantage

Manager, AMRC

The AMRC runs an apprentice scheme with Sheffield College, to train employees within the centre. Up to six apprentices start on the scheme per year: and altogether 22 apprentices have started on this basis.

The AMRC runs an apprentice scheme with Sheffield College, to train employees within the centre. Up to six apprentices start on the scheme per year: and altogether 22 apprentices have started on this basis.

The AMRC also has a customised HGV trailer, MANTRA, which can be used to showcase engineering and advanced manufacturing to school and college students or at exhibitions. MANTRA contains a variety of tools which allow for exploration by students or visitors.

The AMRC also has some significant planned activities to do with skills and training.

A new training centre is being established under the Advanced Manufacturing Institute (AMI) banner. The AMI Training Centre will open in September 2013 and will train 200 apprentices per year and provide part time training at BEng, MSc and EngD. The Training Centre was founded after regional companies and member firms expressed a need for more skilled employees, and the centre responded by putting in a bid for Regional Growth Fund financing. The bid was successful and the centre attracted £9.2 million from the Department for Business, Innovation and Skills. A further £11.3 million for the centre has come from other sources, including ERDF.

The AMRC Knowledge Transfer Centre was opened in March 2012. This will provide meeting and training space for regional businesses and other partners. It will also accommodate a Doctorate Training Centre.

Member participation

Members tend to actively participate in the activities of the research centres. Membership fees are substantial (see section 8.3 "Funding"), so members actively seek benefits from their investment. The Tier 1 members that we spoke to certainly invested considerable additional resources in network participation, beyond membership fees – for example by dedicating staff time to centre activities.

Members often work collaboratively with each other to identify the research topics which will be of most interest.

> We do joint workshops to define opportunities for improvement… All the members get together, or at least all the ones who have a real interest, and say… 'what kind of business issues have you got, and what kind of opportunities working collectively do we have to offer? And that's how these programmes are bred.

> *Manager, member company*

The network has encouraged members to work together and share ideas directly among themselves. Meetings may also be held on a more ad hoc basis either within the centre or at member companies. Most interaction between industrial partners would occur at meetings within the centres (the hub and spoke model) but some meetings at member companies might involve multiple industrial partners (a web model). An AMRC member described how member companies have undertaken visits to learn from each other.

There are some collaborative trips… organised between partner companies. A recent example of that would be the AMRC organised for Rolls-Royce and BAE Systems – two of the Tier 1 members – to open the doors to their internal apprentice schools. Two weeks ago, our HR manager went on a visit to learn how Rolls-Royce actually train and develop staff, as well as how BAE Systems does it. So there's a sharing of best practice amongst the community, and people are able to learn and see how other organisations… engage in developing and enhancing skills within their own organisations, and to share that knowledge and understanding throughout the supply chain we've engaged with in the AMRC.

Managing Director, Member company

Inevitably, some members are more involved than others in the research centres' activities. For instance, the AMRC has account managers for the 10 to 12 members who participate most intensively. In the case of the AFRC, partnerships between four of the Tier 1 industrial members and the research centre are facilitated by partnership co-ordinators employed by the industrial partners. Even where there is not a full-time co-ordinator, staff may work at the centres on secondment, to support core research activities. Member company staff may also work on AxRC-related projects within their firm.

Delivery and outlook

The infrastructure provided by both centres is an important resource for members, and some members (of the AMRC in particular) contribute to this through in-kind contributions of machinery. This infrastructure consists of the physical buildings and machines required to carry out research, as well as research staffing.

The centres add value because employers are unlikely to have the in-house research and development capabilities provided by the AxRC facilities. Even where firms have the equipment necessary to try out new approaches, testing new techniques would require firms to incur short-term losses by halting production. A member of the AFRC that we spoke to cited the fact that their in-house laboratories do not provide sufficient material property data. The laboratories at the AFRC provide this information from controlled experiments; this information can then be used in forging modelling software.

The centres work in a co-operative way with other organisations – using networks such as the High Value Manufacturing Catapult, GlobalNet and of course the AxRC network itself to collaborate.

> Part of the reason for setting up these [AxRC] centres is that they are specialised in their specific areas. So, for example, if [the AFRC] was doing a programme looking at dies and tooling, if there was part of that project which involved… machining, I would not do that here. I would actually collaborate with the AMRC who are specialists in machining, and they would carry out that part of the project… It's basically to avoid duplication.

Manager, AFRC

Although the centres have a strong focus on research which can potentially be applied in industry, making the final transition from the laboratory to the shop floor is not easy, and investment is still clearly required by the companies involved.

> One of the big challenges is to make sure that you get sufficient interaction at the working level to actually make sure that the things that you develop are exploited. You can't just have a direction from above to say 'do this'. In the same way, it doesn't work if you just have somebody on the ground floor saying 'well, this is a really good process: we really think we should be doing'. You have to have both of those happening. Unless the company involved actually puts resource and effort into exploiting that, then it won't actually get out into the factory… [You need senior management support to ensure that resources are allocated] but also you do need to have a dedicated coordination person, which [Tier 1 members have] in the majority of cases. But unless you have that and give those people access to resources within their own companies to actually do the things that [need to be done] to exploit the technology, then nothing will happen.

Manager, AFRC

8.7 Impact of employer networks on skills and growth

Network outcomes and impact

Impacts and outcomes are slightly easier to draw out in the case of the AMRC than the AFRC, given that the latter is considerably more newly-established.

However, the reputation and profile of both centres is excellent. The AxRC network now consists of seven research centres broadly based on the Sheffield AMRC model. These include centres in Singapore (PTRC) and in the USA (CCAM). Other research centres which are not within the AxRC network have also drawn inspiration from the AMRC: the Danish Advanced Manufacturing and Research Centre (DAMRC) states that it was influenced by the Sheffield AMRC[17]. The AMRC has won awards for innovation from Boeing, BAE Systems and Rolls-Royce.

The research centres' activities aim to benefit the region beyond their member firms. The AMRC has an Advanced Manufacturing Forum (AMF) for non-members. The AMF runs events about emerging technologies and supply chain issues. The charge for joining is £50 per year, for which AMF members are entitled to two places per event. Alternatively, non-members can attend events for £25 per place.

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[17]   www.damrc.com/index.html

The research director of the AMRC gave examples of decisions by companies to invest in the region that he believed would not have occurred without the AMRC's support. Indeed, the AMRC has found that "In the Yorkshire and Humber region alone, we have helped over 200 businesses, creating or safeguarding around 500 jobs and helping create over £50 million of additional sales".[18]

Members said that the benefits of membership made their involvement financially worthwhile. The centres' industrial focus was appreciated in this respect, and members we spoke to saw this commercial emphasis as the core of their success.

The centres allow businesses to respond from requests by customers and ensure that they are up to date with new technologies. Manufacturing techniques developed through collaboration with the AMRC, for example, are reported by the centre to have helped secure contracts.

Member firms who participated in this research gave specific examples of technological developments at the AMRC and the AFRC which resulted in improved efficiency, and enabled them to respond to requests for new products from customers.

Involvement with the centres was also reported to provide a reputational boost for member companies: it is a way for firms to make visible their commitment to innovation and quality.

Activities which were seen as particularly valuable included technical board meetings (for Tier 1 members) and the monthly research workshops held at the AFRC. More generally, networking activity was perceived to provide a considerable return.

> Involvement with the centres is perceived to assist with short-term and (even more) medium- and long-term technological strategy among member companies through drawing down information from their major customers in the supply chain.

Our interviewee from Scottish Enterprise also pointed to the fact that the AFRC promotes employment and training of researchers and can encourage investment in the region.

> The [rapid] rate at which research work is being attracted is putting real pressure on in terms of the need for expansion of the building, and it's also putting pressure on in the need for additional researchers… [Doctoral students in the centre] are also going to be doing valuable research work. One of the things that potential investors ask is, 'Have you got the skills that we're looking for?'. And we can point to people like the AFRC, now, and say, 'We have this'. It's a very positive sign to potential investors that we do take the skills agenda and the need for highly skilled people very seriously.

> *Funder of AFRC*

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[18]   www.amrc.co.uk/work-with-us/

The success of the AFRC's and the AMRC's HE-industry collaboration is also perceived by Scottish Enterprise to have influenced other networks. Scottish Enterprise has recently funded the International Technology and Renewable Zone (ITREZ), an HE-industry hub which focuses on research and development around renewable energy.

Monitoring and evaluation

The AFRC is currently evaluating its work formally, so that it can report back to Scottish Enterprise, which provided much of the capital for its physical infrastructure. However, this study is incomplete. There are some difficulties for the network in providing evidence of impacts, because of the commercial sensitivities of research and development. "We do gather data from our members in relation to the impact that we're making, but we're struggling to get firms to release a lot of that information to the public domain." (Bill Ion, Operations Director, the AFRC)

The AMRC asks for feedback from members on a regular basis, although this has not been collated into a publicly available evaluation document.

Funders also naturally require feedback about progress at the centres. Scottish Enterprise monitors what money is being spent on, development of membership, numbers of staff and how the research centre is interacting with others outside the membership.

> I think one of the things that indicates how much value is being placed on what is going on at the AFRC is the fact that two of the Tier 1 member companies are supporting a number of the studentships through that particular doctoral training centre. So they will be putting projects into the AFRC that these students will be working on, that [are likely to] then deliver benefit into the companies.

Funder of the AFRC

8.8   Conclusion

The successes of the AxRC research centres considered in this case study centre around the heavy involvement of industrial partners in the content and design of research studies. This arises from the governance structure of the networks, which ensures that fee-paying members are involved in the centres' strategic direction.

The AMRC was the first research centre in the AxRC network to be set up, and aimed to bridge the gap between industry and academic research. There seems to have been considerable success in achieving this aim, and all parties that we spoke to were happy with the way that research is pitched at a 'technological readiness level' which means that it can be quickly applied. Membership fees represent a considerable investment which ensures that members are actively engaged. Industrial members that we spoke to are very happy with their participation so far, and report transfer of knowledge across the supply chain and from academia. The numbers of members of both centres has exceeded expectations laid out in their business plans. Further outcomes for individual member firms are anticipated over the medium to long term.

The participation of members from across the supply chain was perceived by those we interviewed to be important.

> The main thing for the success of the AMRC is that it brings together all of the partners associated with a complete manufacturing strategy… It's because it has buy-in from everybody who is involved within the… supply chain. There really isn't another forum within the UK that provides that opportunity.

Manager, Member company

The participation of the universities also underpinned the research centres' staffing and infrastructural capacity.

Challenges such as competition between member firms have been carefully managed so far, in part through meticulously planned membership agreements which cover intellectual property. Setting up the research centres required a significant investment of time and money, and the involvement and coordination of the different partners (universities, member firms, and funders) ensured that the research centres could get off the ground.

The research centres' focus is currently very much on innovation rather than on training per se. However, both centres examined here run activities which involve considerable knowledge transfer and include the training of future engineers. A planned training centre at the AMRC means that there will be further activities in future, and will contribute to the centre's ability to translate research projects into practice.

9 Training 2000

9.1 The set-up and focus of employer networks

Main objectives of the network

Training 2000 is a membership-based Group Training Association (GTA) which historically had a focus on the engineering sector – an industry that still forms an important part of its activities. However, Training 2000 has diversified into other sectors since its establishment and it is the largest GTA in England. Diversification has been driven partly by members' interest in broader skills development. For example, engineering or manufacturing firms may need to improve their business administration skills. Funding has also been an incentive to broaden delivery.

GTA Social Care is a wholly-owned subsidiary of Training 2000, and focuses on training in the social care sector – the first GTA to do so. GTA Social Care has its own branding but is currently operating financially as part of Training 2000.

The largest source of funding for Training 2000 as a whole is the Skills Funding Agency (SFA). Other funders include the Young People's Learning Agency (YPLA) and the European Social Fund (ESF). Money also comes directly from employers, in the form of membership and course fees. Members and non-members alike may take advantage of most of its provision.

Key drivers / initiators

Training 2000 was established as a GTA (under another name) in 1967, following the 1964 Industrial Training Act, which formed the Industrial Training Boards. The Industrial Training Boards aimed to overcome barriers to training, especially barriers for SMEs, and aimed to ensure demand-driven training. Skills development is, therefore, the core focus for Training 2000. As a GTA, there is a strong emphasis on employer involvement in the design of its training.

Although it was formed to focus on the engineering sector, Training 2000 has since diversified and now covers business administration, construction, automotive and dental courses, among others. It has gone through a number of mergers and acquisitions to expand its coverage and capabilities. These mergers have been driven by the fact that diversification requires increased size in order to retain the ability to deliver specialised training.

GTA Social Care, as a wholly-owned division of Training 2000, was established partly in response to a favourable policy environment. Apprenticeship training is the key objective of the division, and recent policy developments have encouraged such provision, especially through the broader GTA and Apprenticeship Training Association (ATA) models. The white paper *New Opportunities: Fair Chances for the Future* has outlined plans to provide 35,000 more Apprenticeship places, and this provided part of the rationale behind the creation of GTA Social Care.

GTA Social Care is interesting because it operates in an industry in which public sector demands figure large. Even private providers in the industry are subject to regulation and the requirements of local and national government. The initial business plan for GTA Social Care was driven partly by national requirements (of the time) that at least 50 per cent of the care workforce within old people's and young adults' care homes should be trained to NVQ Level 2 or more. These requirements have now been loosened, and this seems to have affected demand for training in the sector.

Such regulations are clearly linked to employer demands, as employers need to respond to legislation and guidelines. However, in this situation where there are not always market-based signals for employers themselves to react to, the distinction between a 'supply-led' and 'demand-led' network becomes less meaningful. Nevertheless, GTA Social Care aims to engage employers and to work with them to deliver the relevant, quality training that they need. The strong link between employers' objectives and the training that the GTA provides is the key.

> Employers relate to what we're trying to do, which is not just to go out there and give the training, but ultimately to improve the quality of service to the end user through the delivery of exemplary training.

> *Manager, Training 2000*

GTA Social Care was able to draw on Training 2000's existing relationships and reputation in the North West, but has had a steeper learning curve in the geographical areas beyond Training 2000's traditional reach.

9.2 Key characteristics of employer networks

Background and characteristics

The network is a Group Training Association (GTA) and is a charitable company limited by guarantee. It was established in 1967 and it is based in the North West, where it has six sites. It has traditionally focussed on engineering training, but also provides business administration, construction, automotive and dental courses, among others. GTA Social Care, a department within Training 2000 that is sector branded, offers social care training and has a slightly broader geographical coverage, aiming long-term to engage employers across England. So far, GTA Social Care has been piloted in target areas of the North West, the South East and Greater London.

9.3 Funding

Funding sources

Funding on the engineering side appears to be reasonably sustainable and the economic downturn has not given significant cause for concern. Funding is not perceived to distort the design of training, which is developed in collaboration with employers. There is a serious concern that lack of access to capital funding is at best holding back the network of GTAs and at worst holding their contribution back. Most are still operating from the same premises at which they were established in the 1960's, maintaining suitable teaching and training equipment is a serious challenge with no support available for the purchase of extremely expensive machinery and resources. Keeping pace with technology in teaching and training is not currently a realistic objective for GTAs and a major frustration to the employers that are engaged.

For GTA Social Care, there are a number of funding-related challenges. The concept of a GTA is quite new to the sector, and there is not a strong widespread training culture (unlike in the engineering sector), which makes the social care market hard to penetrate. What is more, many providers of social care have suffered from local authority cuts. An employer that we spoke to confirmed that the pressure to find training courses at no cost is high.

Regulatory conditions have also been loosened in social care, which contributes to the difficult market for training providers. Previous requirements (that at least 50 per cent of the care workforce within old people's and young adult homes should be trained to NVQ Level 2 or more) have been removed, and providers are now able to set their own standards for training.

All this means it has been difficult to persuade employers to make the financial contributions required to make training sustainable.

> If an employer wants to train a 19+ employee through funded programmes the government's expectation is that the employer contributes 50 per cent of the training fees for that recipient. This is an expectation and not regulatory nor is it a reality. When we've asked employers to make a contribution, they can often present the counter argument that they can get the training from another provider who won't make the employer charge… There are a substantial number of workers in the care sector who are over 25. That's the nature of the care workforce. The majority of people in that workforce needing training are in that age bracket so the marketplace is substantial but not sustainable unless employers contribute

Manager, Training 2000

There is thus a potential mismatch between current training needs in the sector and what can be provided through the GTA (or indeed through other routes). GTA Social Care aims to overcome this obstacle by persuading employers that training for a quality workforce is worthwhile, and that quality will always come at a financial cost.

Running costs

Training 2000 has more than 250 employees in six locations in the North West. More than 150 employees are engaged in customer contact, including:

- Career Development Advisors/Engagement Advisors

- Career Development Managers

- Workforce Development Officers

- Business Development Co-ordinators

- Co-ordinators/Administrators

Training 2000 aims to deliver the highest possible standards of training to its customers with all resources directed to this aim. The business targets around a 2% surplus and all its finances and resources are deployed to deliver this. Significant commercial activity also supports the running cost of the business, without this the standard of our delivery and facilities would be drastically reduced.

There is no financial support for the running cost of the employer or GTA network. Training 2000 has been instrumental in the establishment of GTA England to act as a representative body for GTAs in the UK.

As a network with longevity, the model supports the fact that GTAs can deliver a sustainable, employer led framework.

9.4   Membership

There are currently 68 members of Training 2000.

There is disproportionately high representation of engineering companies among Training 2000's members, reflecting its history. However, there are now members from a spread of sectors in addition to engineering and manufacturing, including healthcare and professional services firms.

Membership costs £100 per year, excluding VAT. This is a nominal amount that does not have a significant directly perceived benefit. It is however a formalisation of the closely integrated relations with employers and is a mainstay to the structure of the business. Representation on Training 2000's non-executive board for example is directly drawn from these member companies. Membership has remained reasonably static over the years with an SME bias and some larger employers represented. Training 2000 is working towards wider sector membership and continues to focus upon its relationship management.

The economic downturn has not significantly affected membership or employer interaction with Training 2000, especially in the engineering sector. This is partly because the GTA has made a strategic decision to concentrate on resilient subsectors, such as civil aviation and its supply chain; nuclear power and maintenance. There has also been a broader increase in awareness in the sector that training new generations of engineers must be a priority, and this has helped to shore up demand for Training 2000's engineering training services.

> Going back to the 1960s when the GTAs were set up, engineering apprentices were recruited by the thousands. We then went through a lull, where in the late 1970s/1980s… engineering apprentices and apprenticeships in general went off the radar. I think we are now seeing a huge upturn as more companies are completing age profiles of staff and seeing huge gaps. Typically – and I've had this discussion with a number of the employers that we work with in engineering sector were their skilled workforce are in their late 40s and 50s.

Manager, Training 2000

However, sectors other than engineering have been affected by the downturn. GTA Social Care has struggled to get employers to pay for training. An employer we spoke to who uses GTA Social Care's training confirmed that cuts in the sector imposed constraints.

9.5   Network governance

Training 2000's governance structure reflects its employer focus. Strategic planning aims to reflect employers' needs; and indeed the board is composed of member company representatives. There are also other feedback mechanisms in place to ensure that members' views are taken into account. The membership model falls between a 'hub and spoke' and a 'web' model. Some employers will engage mainly with Training 2000 similarly to the way they would with other training providers. Other employers may be more involved in networking events such as the employer forums described below.

Training 2000 tries to take a long-term view of its strategy, publishing an eight year horizon plan. The more immediate business plan for 2011/12 contains four key themes which reflect the GTA's core values as well as the need to respond to harsh economic conditions.

- Increase apprenticeships and maximise funding

- Grow current commercial business

- Develop new commercial businesses

- Develop and grow sustainable 14-19 delivery models.

In general, business planning is a collaborative process involving feedback from staff within the GTA, based on their experiences of working with employers. Individual employers' needs are balanced with the need for the organisation to focus on areas which will not be loss-making.

> [Business planning] is an interactive process involving all staff. [The business plan] is not an aspirational executive document; it's a combination of all the staff's, members and customers views of where their sector's going. Feeding all this information together to include what the employers want us to develop, ensures our services are market and demand led. Having that direct on the ground feel for market demand and how they're going to evolve is a really important factor in our Business planning process.

Manager, Training 2000

The Training 2000 board is composed of representatives from member firms of the GTA. All GTA members can be considered for selection onto the board. Selection generally occurs through invitation; individuals from *member* firms may also put themselves forward. The existing board and the Training 2000 executive team will then consider the suitability of the candidate further. Because Training 2000 has diversified beyond its original engineering remit, efforts are made to ensure that different sectors are represented on the board. A majority of Training 2000 members are SMEs. Despite encouragement from the GTA, SMEs are under-represented on the board, due to smaller organisations' capacity constraints.

The ability of members to participate in board-level activities and the extent of Training 2000's operations therefore mean that additional measures, beyond board membership, are required to ensure that all companies are represented.

Staff employed as "Business Leaders" take on a specialist role to ensure that the GTA is engaging with all the stakeholders in the sector, including employers, the Sector Skills Council, the awarding body and other local networks.

In common with many other organisations, the Annual General Meeting provides a formal opportunity for members to be updated on the activities and performance of the GTA, and to provide feedback to influence the direction of the organisation.

Employer forums are a channel through which smaller companies can influence the GTA's methods and direction. Keeping these forums very practically focussed is seen as crucial to ensure that employers continue to engage with them.

> Lots of employer-based forums don't work and in my opinion the main reason for this is that there's an awful lot of politics and pontificating in events which lack direction. We aim to make our events outcome focused, for example, we will ask specific questions like, 'Following your recommendation we are going to buy five new machines and want to ensure that they meet you requirements, therefore which machines would you all recommend and which programming language should these machines use?' Then at the next meeting they will see the new machines in action. Employers need to see that the input they're giving you is implemented and will deliver benefit to their learners and business. And that's the secret to keeping them engaged.

Manager, Training 2000

Our interviewees within the GTA highlighted how day-to-day interactions between Training Officers and employers provide an additional feedback mechanism. Training Officers are constantly in employers' premises and so are able to see how well activities are engaging employers.

How employers interact with each other

Although activities arranged by Training 2000 may facilitate employers' relationships with other companies (for example through employer forums and annual meetings), neither of the employers we spoke to for this case study were intensively involved in networking activities.

9.6 Functions and activities of employer networks

Focus and type of activities

Apprenticeships form an important part of the GTA's activities. However, a variety of other courses are also on offer, from courses lasting less than one day to Level 4 Diplomas. Training is provided by the GTA itself, rather than by partner or sub contracted organisations. This focus on skills development at all levels reflects Training 2000's history and current status as a GTA. Many of its most popular courses are related to legislative drivers like health and safety or specific operating standards like electrical or gas safety.

Training 2000 prides itself on ensuring that programme content is tailored to employers' needs. This reflects the close relations between Training 2000 and its employers. Delivering bespoke solutions in a flexible, cost effective way that focuses on business benefit ensures they deliver what their customers want and ensures satisfaction and loyalty.

GTA Social Care aims to set itself apart from other social care training providers by working in partnership with employers. It also works closely with others in the sector, including the National Skills Academy for Social Care and Skills for Care.

Most of the training run by the GTA is available to both members and non-members. Benefits on offer exclusively to members include:

- a 30 days credit facility so that members do not have to pay upfront for training

- a training needs analysis and help with accessing funding

- priority access to events (such as members' business seminars); networking opportunities; and an annual gala dinner

- support with health and safety, comprising an initial health and safety visit and access to an ongoing helpline

- a dedicated account manager

- business advisory service

- special rates for conferencing facilities

- a training focused business magazine distributed three times per year.

Member participation

Relationship management was seen as extremely important by Training 2000, and personal contacts were believed to be the most effective way of communicating with members. Each company has an account manager, who looks after their needs, and regular contact is maintained through mechanisms such as events and the high quality magazine mentioned above. Training 2000 staff emphasised, though, that they feel it is important to keep communications relevant to employers' needs and to ensure that events have a purpose which will clearly benefit employers.

> We don't send members a monthly bulletin or anything because we'd just be sending similar information that they could get anyway, from looking at the website. We did originally think we might put on events a couple of times a year for people to attend, but feedback has shown that they don't really want to do that. They would if there was something very significant we could do for them at that time, but just to have a day where they come and have a bit of a chat… they couldn't see the benefit of doing that… If they can see that there's something really important that they want to come to, then they do come, and the numbers are usually quite high. Open days and things like that are really well-attended… They're getting something out of it.
>
> *Manager, Training 2000*

These personal contacts, especially in a relatively large organisation need to be carefully managed. Training 2000 therefore uses a Customer Relationship Management system to ensure that contact is not duplicated or contradictory.

> We struggled with relationship management as we grew and diversified. With different sectors or departments supporting the same organisation and not knowing what colleagues were up to was challenging our professional standards. In response to this we focused heavily on a significant system and data integration project. All staff now has access to the same company wide customer information and raising that awareness ensures everyone works towards the same objectives and keep our customer satisfaction high.
>
> *Manager, Training 2000*

Chubb Fire and Security chose Training 2000 to outsource its apprenticeships training, having previously had its own training centre. Training 2000's understanding of their business needs was cited as a key reason why Chubb selected Training 2000 over other providers. Training 2000's general responsiveness was highlighted, in addition to its capacity to provide non-apprenticeship training.

They've got a very good technology focus. The training is industrial from day one, and the skill set that is trained and delivered across the Training 2000 curriculum is exactly what we as a business are looking for. One of the key benefits from a business point of view is that they independently advise and work with us to develop bespoke solutions for other training that's not necessarily directly apprenticeship-related. We're developing Chubb specific electrical safety training, health and safety courses and have full control over the structure and deployment. The benefit is that we have a partner organisation that is prepared to sit down and listen and provide solutions as a partner around the table.

We have now integrated our national apprenticeship programme into Training 2000 first year training centre. The programme was very much a structural fit for the improvements we wanted to see at Level 2 with our apprentices and we wanted to increase the hand skills capability, mechanical reasoning, spatial awareness and so on. I think that's certainly been delivered with the [Performing Engineering Operations] units that we agreed. We've had full input and Training 2000 have integrated all the changes that we as a business wanted with the programme. Training 2000 has also volunteered other added-value activities, like Outward Bound courses and so on.

Employer member

Quality of provision and Training 2000's strong reputation were also important factors making the GTA attractive to Chubb. Training 2000 was seen to have outperformed other important players in the sector, in terms of quality. By specialising in areas which other providers have not focussed on, it was perceived to have successfully delivered training to a superior standard.

The issue we had with providers across the country was that their delivery model and quality was not where we wanted it to be. Whist we now incur significant cost to support travel and residential costs for learners, we do not have any of the consistency, quality assurance and integration issues that we encountered previously. The relationship delivers us tangible return on investment and maximum impact from new staff skills from day one in the business.

Employer member

Because of the fairly large-scale outsourcing of all its apprenticeship activities, Chubb's involvement is greater than would be expected of most members. Although member involvement in designing training was described as good, this appears to be due in part to Training 2000's outreach model: employers are unlikely to take the time to get involved except where they will benefit. Training 2000 staff emphasised that efforts are made to engage with SMEs, who may find it particularly challenging to find the time to participate – and Training 2000 tries to ensure that engagement activities do demonstrate clear benefits to businesses.

However, inevitably some members and other employers using the GTA's services may be less involved. Organisations with more resources will be able to spend more time on the relationship with the GTA and procure more training. The Chubb case provides an example of how a large firm can be quite intensively involved, with a senior staff member spending several hours per week on the relationship while the new apprenticeship arrangement is being set up. A second example provided by Training 2000 is that of Jaguar Land Rover. A number of Training 2000 staff have visited the company to work one-to-one with their technical staff, giving training on the manipulation of aluminium. This service is not limited to large companies, but the resources required to deliver such tailored training are of course considered by Training 2000.

> We would offer a tailored solution including a one-to-one service for any organisation large or small. Being a not-for-profit organisation means that we don't target huge profit from our activities. We do however remind customers that we are also a not-for-loss organisation. We don't deliver activities that lose lots of money and we are open with customers, 'We can deliver whatever they want and give them a clear understanding of what it will cost.' We are very open in the cost structure and have full visibility of costs of programmes and activities, so that people can clearly see we're not making huge margins on the activities that we undertake. Knowing that the money they spend is used to deliver the best possible service is one of the biggest attractions that people see in working with us.

Manager, Training 2000

Delivery and outlook

Over the last ten years all Training has been brought in house by Training 2000, after many years of sub-contracting delivery to Colleges of Further Education. As the focus on quality and value for money has increased they found the only way to ensure consistency in an efficient way was to deliver it themselves. Training 2000 has six sites in the North West, and training is provided largely at these locations, although staff may alternatively go out to individual members to provide an in company service. Certain specialist apprenticeships are residential, and this is seen to work well for employers and apprentices.

One of the key themes emphasised by Training 2000 staff was that its provision is highly respected because of the GTA's engagement with employers. Listening carefully to employers' specific needs ensures that training is demand-led and not simply a "numbers game".

One concern for the GTA is the fact that some other training providers and educational establishments which are effectively competitors have recently received a lot of regional investment which have resulted in excellent facilities. A threat to GTAs in general was seen to exist because such capital investment is lacking for them.

Lots of the facilities used by GTAs are the same buildings they started in from 1960-70, and they're still using the same equipment in some case. At that point the GTAs direct impact on industry skills and productivity was perceived to be a good investment by the government and that is supported by their existence and impact for such a long period of time. However, capital funding is now vital if we are to deliver world class skill levels to support the increasing innovation and technology in engineering and manufacturing which will form a mainstay for the economic recovery in the UK.

Manager, Training 2000

Resourcing is also a significant challenge for GTA Social Care's delivery of training. In this case, it is simply that employers are unwilling to pay for the costs of training or of related expenses such as CRB costs for apprentices (a legal requirement for jobs in the sector). GTA Social Care is starting to find ways in which it can encourage employers to meet such charges.

Network outcomes and impact

Training 2000's size and profile mean that they can be influential with policy makers and other decision makers.

We have quite a strong voice within the training field and feel we're here to stand the corner of industry training in the academic world, government and the political arena's. We represent the industry and especially SME's in those sorts of forums, because staff from these employer / member companies – tend not to have the time or desire to get involved in those types of activities. I think that aligns perfectly with our Group Training Association roots, because we exists to represent our members and their interests in all matters relating to training.

Manager, Training 2000

This ability to influence policy decisions applied not only to Training 2000's engineering operations but all the sectors in which they operate. For example Training 2000 participates in the Motor Industry's national advisory panel.

Training 2000 has used nationally-recognised frameworks to measure their performance. For example, Training 2000 has secured the Training Quality Standard (TQS). Although this is now being phased out, this was seen as a very useful mechanism to ensure that the training being delivered was meeting the needs of employers.

I think the framework that TQS set out around how you interact with customers is pretty robust within the training environment. It ensures you find out exactly what customers want, you deliver it flexibly to the appropriate quality standards and you make sure that the impact on the business is what they were hoping for in terms of return on investment.

Manager, Training 2000

Training 2000 has mechanisms (partly linked to the TQS accreditation) to establish employers' needs. One example is asking on booking forms what would make the programme a success for their business, so that provision can be tailored to the requirements of employers using it.

Training 2000 carried out a survey among employers who had paid for training or had an apprentice complete their training in 2009/10. The feedback was positive: average ratings among the responses received were high on dimensions including: how well Training 2000 understood employers' training needs; tailoring of provision; and how up-to-date training and delivery was for their industry. The vast majority of employers (96 per cent) reported that the training had had a positive impact on their business: 48 per cent said that productivity had improved; 67 per cent said performance had improved; and 8 per cent said sales volumes had increased as a result of the training.

Benefits for members

One employer interviewed for this case study (Chubb Fire and Security) will be seeking to ensure that hard outcomes such as success rates and qualifications gained are satisfactory. However, many of the benefits of training and of involvement with the GTA are hard to quantify, and in the short term benefits will be measured in qualitative terms, - for example by undertaking regular reviews with apprentices who are going through the Training 2000 programme. The employers we spoke to emphasised that they did not see Training 2000 as "just another training provider", but more as a strategic partner. In some respects the outcomes that employers are seeking are similar to those that they would expect from any training provider – good quality provision which is well-adapted to their needs. However, the level of influence and transparency through the GTA model is significantly increased and other benefits such as the credit facility offered to members and the advice and support offered to members add further value for member companies.

9.7   Conclusion

For all of Training 2000, including GTA Social Care, responsiveness to employer needs was seen as a key to its high satisfaction rating among employers. Training 2000 as a whole is highly respected in the North West. It has attained LSIS Beacon status and has previously attained quality standards such as 'Centre of Vocational Excellence' and 'Training Quality Standard' in numerous sector areas. This concentration of outstanding quality training across multiple sectors is quite unique in the training sector.

Responsiveness has been fostered through a governance structure which ensures that members oversee Training 2000's strategic direction (as the non-executive board is composed of member company representatives). Additional mechanisms such as employer forums and day-to-day engagement by Training 2000 staff ensure that all

employers are listened to – not only the larger organisations which are more likely to have resources to dedicate to board engagement. Good relationships with employers are fostered by ensuring that all communications and meetings have a purpose and outcome (e.g. they are an opportunity for employers to provide feedback on specific questions such as which machines or software should be used in training).

Thus governance arrangements and informal relationships are good practices which could inform set-up of future networks.

GTA Social Care has involved the establishment of a new brand in a sector which is unused to the GTA mechanism. It therefore offers some particularly useful lessons for other innovative networks. GTA Social Care has been able to draw on resources from Training 2000, including its reputation. Indeed, linking in with other partners in general was seen as an important factor contributing to successful set-up.

> I think it was the relationship with Skills for Care and the National Skills Academy that shaped the general ethos of GTA Social Care as it came into being… In the North West it helps to have Training 2000's profile because it's a really well-known provider. It's got a good solid reputation and people will go onto the Training 2000 website because it's one of the places that you go to look when you are leaving school or you're looking for a career option. Whereas in the South we haven't got that yet. It's certainly harder to create that from scratch.

Manager, Training 2000

As this quote illustrates, a key challenge for GTA Social Care has been establishing itself in a sector in which a GTA model is not the norm and is not easily understood by employers. This was acknowledged as a potential issue from the start, and some resources have therefore been dedicated to marketing (through a "careful and modest" marketing budget). It has linked in with employer-focussed events, especially those run by relevant partners such as Skills for Care; marketing has also included contributing to sector-specific publications, and direct marketing. GTA Social Care is relatively new and it has yet to be established whether or not these methods will be effective.

Persuading employers who are not used to paying for training to contribute financially has been another significant challenge for GTA Social Care. The GTA is still struggling to identify sustainable ways in which this can be achieved, but for the moment key approaches include being realistic about funding sources and also promoting the GTA's emphasis on quality.

This longer-term ambition to provide a service which employers really value underpins Training 2000's approach not only in GTA Social Care but in all its sectors of operation.

Intelligence › Investment › Impact