brought to you by 🏻 CORE

An Evaluation of Business Growth Through Skills Development and Knowledge Transfer

A report prepared for emda

Ekosgen Consulting (UK) Ltd

November 2008

This work, with the exception of logos, photographs and images and any other content marked with a separate copyright notice, is licensed under a <u>Creative Commons Attribution</u> 2.0 UK: England & Wales License

The use of logos in the work is licensed for use only on non-derivative copies. Under this licence you are free to copy this work and to make derivative works as long as you give the original author credit.

The copyright is owned by Nottingham Trent University.



This document forms part of the emda Knowledge Bank





An Evaluation of Business Growth through Skills Development & Knowledge Transfer

A Report to the East Midlands Development Agency

November 2008

EKOS Consulting (UK) Ltd St James House Sheffield. S1 2 EX



Report completed / submitted by [project manager]: Sundeep Aulakh

Proof check completed [project manager]: Sundeep Aulakh

Date: Friday, October 31, 2008

Report reviewed by [company director]: Karl Dalglesih

Date: Friday, October 31, 2008



TABLE OF CONTENTS

| 1 | EXECUTIVE SUMMARY | 1 |
|---|--|---|
| | An Outline of the Business Growth Programme | 1 |
| | THE AIMS OF THE EVALUATION AND THE RESEARCH METHODS | 1 |
| | FINANCIAL SPEND | 1 |
| | GOVERNANCE AND NETWORK BENEFITS | 1 |
| | THE TECHNOLOGY GRANT: OUTCOMES AND NET IMPACT | 1 |
| | THE INSTITUTIONAL GRANT | 1 |
| | SME and Institutional Relationships | 1 |
| | CURRICULUM DEVELOPMENT AND HIGH LEVEL SKILLS PROVISION | 1 |
| | CONCLUSIONS | 1 |
| 2 | INTRODUCTION | 1 |
| | BACKGROUND & HISTORY OF THE TECHNOLOGY BUSINESS GROWTH PROGRAMME | 1 |
| | THE AIMS OF THE EVALUATION | 1 |
| | THE RESEARCH METHODS | 1 |
| | THE REPORT STRUCTURE | 1 |
| 3 | THE STRATEGIC CONTEXT | 1 |
| | PRODUCTIVITY, INNOVATION AND ECONOMIC GROWTH | 1 |
| | HIGHER LEVELS SKILLS AND KNOWLEDGE TRANSFER ENGAGEMENT | 1 |
| | A RATIONALE FOR THE BUSINESS GROWTH PROGRAMME IN THE EAST MIDLANDS | 1 |
| | THE BUSINESS GROWTH PROGRAMME AND THE REGIONAL ECONOMIC STRATEGY | 1 |
| | SUMMARY | 1 |
| 4 | CONTRACTUAL PERFORMANCE | 1 |
| | Total Funding | 1 |
| | TECHNOLOGY GRANT EXPENDITURE | 1 |
| | INSTITUTIONAL GRANT EXPENDITURE | 1 |
| | SUMMARY | 1 |
| 5 | AN OVERVIEW OF THE DELIVERY MODEL & NETWORK BENEFITS | 1 |
| | A Profile of Institutional Survey Respondents | 1 |
| | THE HUB AND SPOKE MODEL | 1 |
| | NETWORK MEMBERSHIP | 1 |
| | NETWORK FUNDING | 1 |
| | NETWORK BENEFITS | 1 |
| | SUMMARY | 1 |
| 6 | DELIVERING THE TECHNOLOGY GRANT | 1 |

| | THE ELIGIBILITY CRITERIA | . 1 |
|---|--|--|
| | RAISING AWARENESS OF THE NETWORK & THE TECHNOLOGY GRANT | . 1 |
| | Managing Demand | . 1 |
| | THE PROCESS | . 1 |
| | Training | . 1 |
| | Benefits | . 1 |
| | SUMMARY | . 1 |
| 7 | THE INSTITUTIONAL GRANT PROCESS | . 1 |
| | Overview | . 1 |
| | THE PROCESS | . 1 |
| | THE OBJECTIVES | . 1 |
| | THE BENEFITS | . 1 |
| | Additionality | . 1 |
| | SUMMARY | . 1 |
| 8 | THE BUSINESS PERSPECTIVE 1: EXPECTATIONS & OUTCOMES | . 1 |
| | A Profile of Company Respondents | 1 |
| | AWARENESS | |
| | MOTIVATIONS AND EXPECTATIONS | |
| | SATISFACTION LEVELS WITH THE TECHNOLOGY GRANT PROCESS | |
| | SUMMARY | |
| 9 | THE BUSINESS PERSPECTIVE 2: BENEFITS AND OUTCOMES | . 1 |
| | PRODUCTION AND BUSINESS MANAGEMENT OUTCOMES | |
| | COMMERCIAL OUTCOMES | |
| | COMMERCIAL OUTCOMES | - 1 |
| | THE FINANCIAL VALUE OF COMMEDIAL OUTCOMES & THEIR SUSTAINABILITY | |
| | THE FINANCIAL VALUE OF COMMERCIAL OUTCOMES & THEIR SUSTAINABILITY | . 1 |
| | Additionality and Deadweight | . 1 . 1 |
| | Additionality and Deadweight | . 1 . 1 . 1 |
| | Additionality and Deadweight Displacement Substitution | . 1 . 1 . 1 |
| | Additionality and Deadweight Displacement Substitution Multipliers | . 1 . 1 . 1 . 1 |
| | Additionality and Deadweight Displacement Substitution Multipliers Summary | . 1 . 1 . 1 . 1 |
| 1 | ADDITIONALITY AND DEADWEIGHT DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY THE NET IMPACT OF THE TECHNOLOGY GRANT | . 1 . 1 . 1 . 1 |
| 1 | ADDITIONALITY AND DEADWEIGHT DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY THE NET IMPACT OF THE TECHNOLOGY GRANT GROSS SALES, PROFITS AND EMPLOYMENT | . 1 . 1 . 1 . 1 |
| 1 | ADDITIONALITY AND DEADWEIGHT DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY THE NET IMPACT OF THE TECHNOLOGY GRANT | . 1 . 1 . 1 . 1 |
| 1 | ADDITIONALITY AND DEADWEIGHT DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY DISPLACEMENT DEADWEIGHT LEAKAGE | . 1 . 1 . 1 . 1 . 1 |
| 1 | ADDITIONALITY AND DEADWEIGHT DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY DISPLACEMENT GROSS SALES, PROFITS AND EMPLOYMENT DEADWEIGHT LEAKAGE DISPLACEMENT | . 1 . 1 . 1 . 1 . 1 |
| 1 | ADDITIONALITY AND DEADWEIGHT DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY DISPLACEMENT DEADWEIGHT LEAKAGE | . 1 . 1 . 1 . 1 . 1 |
| 1 | ADDITIONALITY AND DEADWEIGHT DISPLACEMENT SUBSTITUTION MULTIPLIERS SUMMARY DISPLACEMENT GROSS SALES, PROFITS AND EMPLOYMENT DEADWEIGHT LEAKAGE DISPLACEMENT | . 1 . 1 . 1 . 1 . 1 . 1 |



| | CROWDING IN/CROWDING OUT | . 1 |
|----|---|---------------------------------|
| | WIDER EFFECTS ON SUSTAINABLE DEVELOPMENT | . 1 |
| | NET IMPACT | . 1 |
| | Summary | . 1 |
| 1 | SKILLS TRAINING: EMPLOYER AND EMPLOYEE BENEFITS | . 1 |
| | NATURE AND TYPE OF TRAINING | . 1 |
| | EMPLOYER PERSPECTIVE: BENEFITS AND OUTCOMES OF TRAINING | . 1 |
| | EMPLOYEE PERSPECTIVE: BENEFITS AND OUTCOMES | . 1 |
| | SUMMARY | . 1 |
| 1: | 2 SME AND HEI RELATIONSHIPS | . 1 |
| | SME Access to Institutional Capital Equipment | . 1 |
| | FORMAL AND INFORMAL SME-INSTITUTIONAL RELATIONSHIPS | . 1 |
| | SUMMARY | . 1 |
| | | |
| 1: | 3 CURRICULUM DEVELOPMENT AND HIGH LEVEL SKILLS PROVISION | . 1 |
| 1: | CURRICULUM DEVELOPMENT AND HIGH LEVEL SKILLS PROVISION | |
| 1 | | . 1 |
| 1 | THE NATURE OF SKILLS SHORTAGES | . 1 . 1 |
| | THE NATURE OF SKILLS SHORTAGES DEVELOPING HIGHER LEVEL SKILLS PROGRAMMES, & DEMAND LED PROVISION | . 1 . 1 . 1 |
| | THE NATURE OF SKILLS SHORTAGES DEVELOPING HIGHER LEVEL SKILLS PROGRAMMES, & DEMAND LED PROVISION | . 1 . 1 . 1 |
| | THE NATURE OF SKILLS SHORTAGES DEVELOPING HIGHER LEVEL SKILLS PROGRAMMES, & DEMAND LED PROVISION SUMMARY CONCLUSIONS | . 1 . 1 . 1 |
| | THE NATURE OF SKILLS SHORTAGES DEVELOPING HIGHER LEVEL SKILLS PROGRAMMES, & DEMAND LED PROVISION SUMMARY 4 CONCLUSIONS MANAGEMENT AND DELIVERY OF THE TECHNOLOGY GRANT | . 1 . 1 . 1 . 1 |
| | THE NATURE OF SKILLS SHORTAGES DEVELOPING HIGHER LEVEL SKILLS PROGRAMMES, & DEMAND LED PROVISION SUMMARY 4 CONCLUSIONS MANAGEMENT AND DELIVERY OF THE TECHNOLOGY GRANT MANAGEMENT AND DELIVERY OF THE INSTITUTIONAL GRANT | . 1 . 1 . 1 . 1 |
| 14 | THE NATURE OF SKILLS SHORTAGES DEVELOPING HIGHER LEVEL SKILLS PROGRAMMES, & DEMAND LED PROVISION SUMMARY 4 CONCLUSIONS MANAGEMENT AND DELIVERY OF THE TECHNOLOGY GRANT MANAGEMENT AND DELIVERY OF THE INSTITUTIONAL GRANT FACILITATION OF SME AND INSTITUTIONAL RELATIONSHIPS. | . 1 . 1 . 1 . 1 |
| 14 | THE NATURE OF SKILLS SHORTAGES DEVELOPING HIGHER LEVEL SKILLS PROGRAMMES, & DEMAND LED PROVISION SUMMARY 4 CONCLUSIONS MANAGEMENT AND DELIVERY OF THE TECHNOLOGY GRANT MANAGEMENT AND DELIVERY OF THE INSTITUTIONAL GRANT FACILITATION OF SME AND INSTITUTIONAL RELATIONSHIPS CURRICULUM DEVELOPMENT | . 1 . 1 . 1 . 1 |



1 Executive Summary

1.1 In September 2008, the East Midlands Development Agency (*emda*) commissioned EKOS to undertake a summative evaluation of the *Business Growth through Skills Development and Knowledge Transfer* Programme. This Programme straddles several three major policy agendas of national importance: encouraging business competiveness through innovation, improving workforce skills and encouraging the formation of relationships between business and higher and further education institutions.

An Outline of the Business Growth Programme

- 1.2 The Business Growth Programme originated from a national initiative in 2001/2 when the Government announced plans to fund *New Technology Institutes* across all nine regions administered by the Regional Development Agencies with the aim of boosting the regional supply of high-tech skills, and the transfer of technical knowledge to local businesses.
- 1.3 The national Programme ended in 2005. As it was operating successfully in the East Midlands, helping to address the region's key policy objectives, *emda* and its partners decided that it should continue for another three years. At this point, the programme entered its second phase and became known as *Business Growth through Skills Development and Knowledge Transfer* (Business Growth Programme hereafter). This evaluation focuses exclusively on the Programme's second phase.
- 1.4 The Business Growth Programme is targeted at Small and medium-sized enterprises (SMEs) and Higher and Further Education Institutions¹ operating in one of the four specified sectors and comprises the following work-streams:
 - (a) Delivery of a Technology Grant and providing Information Advice and Guidance to SMEs on technology and skills development and signposting them to relevant parties for other business support needs;
 - (b) Encouraging and facilitating the development of informal and formal relationships between SMEs and Higher and Further Education Institutions;
 - (c) Allocation of an Institutional Grant to enable Institutions to invest in high tech equipment and to support the development of Foundation degrees;
 - (d) Influencing curriculum development across the region to ensure that the supply of skills training and qualifications meet the needs of SMEs and key sector.
- 1.5 The Programme has been allocated £2.95m to undertake its core activities over the three-year period March 2006–March 2009. It is managed by the East Midlands New Technology Initiative Limited, with operational delivery undertaken by four specialist Networks that cover each sector.

The Aims of the Evaluation and the Research Methods

1.6 The purpose of the evaluation is to ascertain the way in which businesses have benefited from the Programme, assess its overall impact, and identify good practice or lessons that can be applied to other business support initiatives. More specifically, the evaluation is reviewing the effectiveness of NTI's core work streams and their sub-activities.



¹ Institutions from herein.

1.7 The study adopted a combination of methods to ascertain the views and experiences of stakeholders involved in managing and delivering the Programme, and the companies that have benefited from the Technology Grant. Specifically, the evaluation has undertaken two on-line surveys, one targeted at companies and the other targeted at the institutional members of Networks. It has also undertaken qualitative interviews with a sample of each Network's core and associate members, as well as with and eight businesses. The study has analysed relevant documents.

Financial Spend

- 1.8 The East Midlands NTI has been allocated £2.96m to deliver the Programme over the period March 2006 to March 2009. The vast majority of this (£2.6m / 88%) is for capital expenditure, with a small proportion reserved for revenue spend. To date, the Programme has spent £1.7m of capital expenditure and £240,000 of revenue spend. Profiled spend for 2008–2009 is £900,000 for capital expenditure and £120,000 for revenue.
- 1.9 Capital expenditure funds two main work-streams: delivery of the Technology Grant to SMEs and the allocation of the Institutional Grants to Network members. The level of funding for the two work-streams is not equal. Two-thirds of the capital spend is allocated to the Technology Grant, which equates to £1.735m, whilst the rest (approximately £860,000) is allocated to the Institutional Grant works-stream. To date, the Programme has supported 199 companies through the allocation of £1.5m of Technology Grant funding. The Institutional Grant has approved 46 grants across 20 institutions, comprising a combined value of just over £5.500.

Contractual Performance

- 1.10 The Programme has met virtually all its profiled outputs ahead of time, which are a combination of *emda's* core outputs and Key Performance Indicators. It has made significant progress with regards to the number of businesses using support services for skills and workforce development, and also the number requiring support with innovation.
- 1.11 The Programme has also contributed to the creation of 65 jobs, 118% higher than the target (which was 55). There is one target, however, where the Programme has been less successful. Specifically, it has made limited progress in facilitating employment for graduates. Over its duration, it was envisaged that the Programme would support 49 graduates to find employment; to date the actual number is 21. This is probably because graduate employment is not a key objective of the Programme.

Governance and Network Benefits

The Delivery Model

1.12 The *Business Growth* Programme is managed and delivered through a 'hub and spoke' model. An Executive Team, led by the Director of NTI Ltd, comprises the Central Hub and it is supported by a Board of Directors. Between them, they are responsible for strategic management and ensuring that the Programme's objectives are met. The four Networks undertake operational, day-to-day delivery of the Programme's work-streams. This model appears to have been effective; no major problems have occurred, there is a high level of satisfaction amongst businesses and the Programme's targets have been met.



Network Membership and Benefits

1.13 The survey targeted at Network members revealed that the Networks have managed to sustain membership, and that most members define themselves as being 'highly involved' with their network. Over the years, the level of involvement has increased, partly because members have experienced a range of benefits. Receiving a grant to contribute towards the cost of new equipment is the most clear and direct benefit. Alongside this, however, members identified other, more indirect benefits that they found just as valuable. Specifically, the value the *Networks* because they: (a) provide a forum for all the institutions to come together collectively; (b) they have reduced competition and rivalry between them; and (c) they have facilitated spin-off projects and relationships.

The Technology Grant: Motivations, Outcomes and Net Impact

1.14 The Technology Grant is targeted at regional SMEs operating in the four Network sectors. It offers them up to a maximum of £10,000 each to purchase equipment that either advances the use of technology within the workplace or contributes to significant growth and development of the enterprise. To access the Grant, SMEs are required to make a contribution of at least 50% of total costs. They are also obliged to enroll some or all of their employees on an accredited course at Level 3 or above. To date, 199 SMEs have received a Technology Grant. The average grant value has been £7,800.

Motivations and Outcomes

- 1.15 Primary research undertaken with businesses receiving the Technology Grant explored a range of issues from motivations and expectations of the support to benefits and outcomes. The key findings are:
 - The Grant has supported businesses with product and process innovation, and improvements in productivity. A range of commercial outcomes have also occurred. These include improved service to customers; increased sales; improved employee performance; and acquisition of new customers.
 - Although the financial value of sales and profits experienced by individual businesses has been relatively modest, their sustainability is high. Hence, most respondents expect to experience increases in sales and profits for five years or more.
 - With regards to additionality, the Technology Grant has been most successful in achieving time additionality. Businesses would have postponed the purchase of the equipment without the financial support available through the grant and, relatedly, the outcomes they experienced would have materialised later.

Workforce Development

- 1.16 The majority of businesses fulfilled their contractual obligations and released staff to participate in relevant training courses. Around half the sample released staff to acquire skills and knowledge relating to the new equipment they had purchased, whilst the other half used the opportunity to train staff to address specific skills gaps within their business (e.g. marketing, accounting).
- 1.17 Overall, it is disappointing that much of the training has either been non-accredited or below Level 3, thereby undermining one of the Programme's key aims. More positively, the training experience facilitated by the Grant has played a role in changing employers' views and approach to workforce development. Most businesses participating in this study noted



they have improved their training and learning practices and are more likely to engage in further training. In part, this is because they have noticed positive changes in employee performance and behaviour. In particular, it is reported that employees have increased their skills, improved performance and increased motivation.

Net Impact

1.18 The table below summarises the net impact of the Technology Grant. It is evident that it has made a significant contribution to sales, profits and jobs that would not have occurred otherwise.

| The Net Impact of the Technology Grant | | | | | | |
|--|------------|---------------|--|--|--|--|
| | Net Impact | | | | | |
| Sales | £8.5m | £5,412,740.00 | | | | |
| Profit | £2.3m | £1,324,849.00 | | | | |
| Jobs | 172 | 109 | | | | |

1.19 Businesses expect to experience sales and profits outcomes for up to five years. On this basis, it has been calculated that the Programme will have contributed to around £11m in sales and £2.7m in profits, indicating that its economic impacts are substantial and representing a reasonable rate on investment.

The Institutional Grant

1.20 Over the course of its duration, the Business Growth Programme will have made available around £900,000 across the Networks and their composite individual (institutional) members to purchase or upgrade high-technology equipment.

Process

- 1.21 To access the Institutional Grant, Networks must submit a Business Plan each year. This represents an agreement between the institutional members as to what equipment should be purchased and by which institution. Institutions that have been selected to benefit from the Grant must make a 50% contribution towards the cost of the equipment. They are also encouraged to make the equipment available to local companies for general use or training purposes.
- 1.22 There is consensus amongst both institutional and associate members that the process through which grants have been allocated to individual members has been "fair". There is further consensus that institutions tend to purchase equipment that supports the needs of their particular sector rather than their furthering their individual interest.

Benefits

- 1.23 The Institutional Grant has generated several key benefits, one of which has been reducing competition between members and facilitating greater exchange between them Others include:
 - Providing students with access to the latest technologies;
 - Encouraging collaborative activity between institutions either on a one-off basis (e.g. training members from other institutions) or enabling spin-off projects to take place;
 - Developing new courses, particularly Foundation Degrees;



- Product development and spin-off projects between an institution and an SME;
- Enabling SMEs to use and pilot equipment before deciding to purchase it themselves.
- 1.24 Finally, it should be noted that the Institutional Grant has acheived a high level of pure additionality, followed by scale additionality. At least half of the institutional members (participating in this study) would not have been able to purchase the equipment without the support of the Grant, whilst a smaller proportion would have purchased less advanced technology.

SME and Institutional Relationships

1.25 A key component of the Business Growth Programme is to encourage greater formal and informal relationships between SMEs and institutions with the overall aim of boosting research and technology development, and improving levels of commercialisation. However, no formal targets have been set relating to the formation of different forms of collaborative relationships between business and education.

SME Take-Up of Institutional Equipment

1.26 It has been expected that the Institutional Grant would comprise one of the key ways in which SME and institutional relationships would develop. Although the Networks have used multiple methods to raise awareness amongst SMEs of the available equipment, the evidence suggests that levels of take-up have been relatively modest. This is likely to be due to a lack of time on the part of SMEs and/or a perception that the equipment is not relevant to them. On this basis, there may be opportunities for Networks to articulate much more clearly the way in which the available equipment can support and benefit SMEs.

Other Types of Relationships

- 1.27 Networks have been encouraged to stimulate a range of different types of SME—institutional relationships. However, it is difficult to report upon the number and types of relationships that have occurred, as the Networks do not formally monitor them. Nonetheless, it is evident that the scale of interactions is lower than expected by the Programme and two reasons account for this.
- 1.28 First, SMEs feel they are too busy to engage with institutions. Second, Network Leads and their members have had limited resources to take forward this aspect of the Programme. It can be concluded that, although the Programme has 'played a role in facilitating student placements and working relationships between academia and SMEs', its full potential has perhaps not been maximised.

Curriculum Development and High Level Skills Provision

- 1.29 The fourth and final work-stream of the Business Growth Programme is centred on identifying gaps in higher-level skills provision and influencing institutions to address this through course and curriculum development.
- 1.30 The vast majority of Network members (core and associate) reported that their sector faces higher level skills shortages, namely at Level 4 and above. Around half of them also reported to facing skills shortages at Levels 2 and 3. However, they did not attribute this to the absence of appropriate courses; instead, most of them believe that aside from some minor gaps, current provision adequately addresses their sectoral needs. This suggests that



other factors (rather than skills and training provision) contribute to lower than average skills levels in the East Midlands.

- 1.31 Given that Network members have been satisfied with existing provision, curriculum development has comprised a moderate area of activity. When it has taken place, it has generally been a response to one of two stimuli: (i) the purchase of new equipment, which has precipitated new courses to develop, particularly foundation degrees (e.g. Non-destructive testing); (ii) the need to address employer needs e.g. changing format, length and delivery of courses to make it easier for them to release staff.
- 1.32 Overall, curriculum development has not comprised a main area of activity for Networks, partly because there is a perception that current provision sufficiently meets sectoral need and demand.

Conclusions

- 1.33 To summarise, the main conclusions are as follows:
 - Technology Grant: A key aim of the Technology Grant is to provide advice to SMEs about new technologies that support their growth and development. As most SMEs are familiar with and abreast of major changes, the role of the Adviser in this respect has not been as significant as expected. However, they have played a much more significant role with regards to identifying SME skills needs and brokering the appropriate provision.
 - A further aim of the Technology Grant is to boost innovation and there is evidence that, to some extent, this has occurred. Even where innovation has not occurred, the vast majority of businesses have reaped commercial benefits of some form or another.
 - Overall, it is evident that the Grant is one the Programme's major successes. It
 has secured a range of commercial benefits for businesses. Further, it has been
 effectively managed and efficiently delivered by the centre and each of the four
 Networks.
 - Institutional Grant: The equipment purchased by institutions has tended to be of a commercial nature, supporting business and sectoral needs, rather than furthering the research priorities of an individual academic or institution. The Grant has also generated several indirect benefits, particularly in encouraging collaborative working between institutions. However, the Grant/programme has been less successful in encouraging SMEs to access equipment.
 - **SME and Institutional Relationships**: Out of the various types of relationships that Networks have been encouraged to facilitate, student placements have been the most prominent. Although each Network can cite examples of other forms of collaborative activity, these appear to be the exception. Overall, from the various sources of evidence, it seems that progress in facilitating relationships that foster innovative activity and commercialisation has been fairly limited.
 - Curriculum Development: The East Midlands faces a higher-level skills challenge, although stakeholders participating in this study did not attribute it to a lack of appropriate training and learning provision. The Networks have played a modest role in shaping new curriculum, although overall, this has not been a major area of activity for them.

A broader learning point that arises from the study is resolving the tension between employers' demand for short term courses and raising skills through accredited learning of those already in employment.



Recommendations

1.34 This study proposes a series of recommendations regarding the future development of the Business Growth Programme. They are structured around two key themes: operational refinement and future sustainability. The former is directed at enhancements regarding the current Programme, whilst the latter is directed at sustaining the Networks beyond this.

Operational Refinement

- Increased Attention to Segmentation and Targeting to Maximise Programme Impact – The Technology Grant could be targeted specifically at high-growth, highvalue added SMEs. Arguably, they are likely to have a greater impact on increasing regional GVA than enterprises with average growth trajectories.
- Adopting Good Practice: Organisational Reviews The other networks may
 wish to follow the 'organisational review' undertaken by the HPE Networks. It
 combines the three main diagnostics that need to be undertaken: technological,
 skills and general business support.
- 3. **Engage with Train to Gain / Skills Brokers –** The system of cross-referral between the Networks and Business Link is operating fairly well and it could now be extended to include Train to Gain / Skills Brokers.
- 4. **Promote Greater Access to Institutional Equipment –** There is potential to increase the number of SMEs that access institutional equipment, especially amongst those that have not applied for a Technology Grant.
- 5. **Greater Encouragement of SME-Institutional Relationships –** *emda* may find it useful to set approximate benchmarks about the different types of SME and Institutional relationships that Networks should be seeking to facilitate. If set, appropriate mechanisms for monitoring their progress should be introduced.

Future Sustainability

- 1.35 The East Midlands NTI has secured two new contracts, enabling it remain operational at least until 2010. However, this does not guarantee the sustainability of the Networks, which has been one of the Programme's major indirect outcomes. There is a virtually a unanimous consensus that the Networks have fostered effective working relationships that have reduced competition between institutional members and led to spin-off projects with each other and with SMEs. On this basis, one of the key priorities for *emda* should be how it can secure the sustainability of the Networks, as they can be used to support RES objectives, as well as to take advantage of new funding opportunities.
- 1.36 In light of the above, EKOS recommends that *emda* should continue to provide revenue funding to NTI and the Networks to support their sustainability. This would enable the Networks to undertake follow-up activity relating to the Programme and support other regional developments. Specifically, the Networks have the potential to play a role in the following areas:
 - Awareness Raising: Promoting Innovation and Skills in Parallel;
 - Accessing Funding (for Sustainability);
 - Supporting iNets;
 - Supporting the LSC Employability Agenda;



- Developing relationships or extending membership to High Level Skills and/or Train to Gain Advisers;
- Cross-Network Working.
- 1.37 The main report provides detail on the issues outlined in the Executive Summary.



2 INTRODUCTION

2.1 In September 2008, the East Midlands Development Agency (*emda*) commissioned EKOS to undertake a summative evaluation of the *Business Growth through Skills Development and Knowledge Transfer* Programme. This Programme straddles several policy agendas of major national importance. It responds to the Department of Business Enterprise and Regulatory Reform's (BERR)² overriding objectives of increasing productivity and enhancing business competitiveness through improving skills and encouraging innovation.

Background & History of the Technology Business Growth Programme

- 2.2 The Business Growth Programme originated from a national initiative in 2001/2 when the Government³ announced plans to fund *New Technology Institutes* across all nine regions administered by the Regional Development Agencies with the aim of boosting the regional supply of information technology and other high-tech skills, and the transfer of technical knowledge to local businesses.
- 2.3 Over a three year period from 2002–2005, the Department for Education and Skills (DfES) made available a total of £25 million to support the development of the Institutes. The funding was administered through the Higher Education Funding Council for England (HEFCE) in conjunction with the Learning and Skills Council (LSC). Accordingly, in 2001, HEFCE invited bids from universities and further education colleges to form local consortiums that would become Technology Institutes responsible for achieving the following three objectives:
 - (a) Increasing the supply of people with high level skills in ICT (Information and Communication Technology) and other advanced technology;
 - (b) Supporting businesses regarding effective adoption of new technology and innovative business practices;
 - (c) Collaborating with local employers, regional and national organisations to identify skills gaps and to tailor NTI activity to local needs.
- 2.4 Eighteen Technology Institutes were established, including two in the East Midlands: Dagenham New Technology Institute and the East Midlands New Technology Initiative (NTI). This evaluation focuses upon the latter. Indeed, the East Midlands NTI comprised the largest of all consortia and it attracted the most funding.⁴ De Montfort University led the Consortium and five Networks were established, which corresponded to the region's priority sectors.
- 2.5 The five Networks⁵ assumed responsibility for day-to-day delivery of two capital grant funds, which were designed to achieve the first two objectives of the Programme. The first, the Technology Grant, was targeted at Small and medium-sized enterprises (SMEs) to enable them to purchase equipment that would support their growth and development. The second, the Institutional Grant, was available to individual universities and colleges that were members of one of the Networks to purchase equipment that would boost innovation and skills development.

⁵ Food and Drink, Clothing and Textiles, Creative Industries, Motorsports, and Health and Biosciences.



-

² Department of Business Enterprise and Regulatory Reform.

³ See 2001 DfEE/DTI White Paper on enterprise, skills and innovation, 'Opportunity for all in a world of change'.

⁴ In practice though, due to the number of Institutions involved, per capita funding was lower compared to other NTIs.

- 2.6 Emda commissioned a small review of the NTI in 2003 and decided to expand the number of Networks from five to seven. The two new Networks were Aerospace and Construction. To enable them to deliver the two grants and undertake other Network activities, the Agency made available an additional £1.45m.
- 2.7 The NTI Programme as managed by HEFCE and funded through the DfES came to an end in 2005. As it was operating successfully in the East Midlands, helping to address the region's key policy objectives, *emda* and its partners decided that the programme should continue for another three years; in effect, comprising phase two. Accordingly, *emda* organised a competitive tendering process to select a contractor most able to deliver the second phase effectively and efficiently. The bid submitted by the East Midlands New Technology Institute was successful and it was contracted to deliver the next phase. It was at this point that the NTI Programme became known as *Business Growth through Skills Development and Knowledge Transfer* (Business Growth Programme hereafter). It is this phase that is the focus of this evaluation.⁶

Phase 2: The Skills Development and Knowledge Transfer Programme

- 2.8 The second phase of the Programme covers the period March 2006 to March 2009. A couple of Networks that were operating under Phase 1 have been disbanded whilst others have merged together. The sectors that they now represent are: (i) Construction; (ii) Creative and Digital; (iii) Food and Drink, and (iv) High Performance Engineering. Two of these correspond to the region's priority sectors.⁷
- 2.9 The Programme is targeted at SMEs and Institutions operating in the aforementioned four sectors and it comprises several core work-streams, which are as follows:
 - (a) Delivery of a Technology Grant and providing Information Advice and Guidance to SMEs on technology and skills development and signposting them to relevant parties for other business support needs;
 - (b) Encouraging and facilitating the development of informal and formal relationships between SMEs and Higher and Further Education Institutions (Institutions from herein);
 - (c) Allocation of an Institutional Grant to enable Institutions to invest in high tech equipment and to support the development of Foundation degrees;
 - (d) Influencing curriculum development across the region to ensure that the supply of skills training and qualifications meet the needs of SMEs and key sector.
- 2.10 The Programme is managed and delivered by the East Midlands New Technology Initiative Limited, which is a consortium comprising 27 Higher and Further Education Institutions located in the region. In practice, this means that the 27 Institutions have formed four specialist Networks, covering each sector. All Networks are responsible for delivering all the work-streams. The Programme is administered and overseen by a small management team operating in De Montfort University.

⁷ The RES sectors are: Food and Drink; Sustainable Construction; Transport Equipment and Health Care.



-

⁶ An evaluation of Phase 1 was completed in 2005 and can be accessed directly from *emda*. There is also a national evaluation of NTIs, which is: Universitas (2006) *Evaluation of the New Technology Institutes Initiative: Report to HEFCE*. It can be accessed from HEFCE's website at: http://www.hefce.ac.uk/rdreports/2006/rd07 06/

2.11 The Programme was originally allocated £2.45m, which was increased in August 2007 by a further £0.5m. This was a response to the high level of demand from SMEs across all sectors for the Technology Grant.

The Aims of the Evaluation

2.12 The evaluation focuses upon the second phase of the Programme, that funded primarily by *emda*, covering the period March 2006–March 2009. Its purpose is to ascertain the way in which businesses have benefited from the Programme, assess its overall impact, and identify good practice or lessons that can be applied to other business support initiatives. More specifically, the evaluation is reviewing the effectiveness of NTI's core work programmes, which include sub-activities as indicated below:

| Table 2.1 Evaluation Themes and Issues | | | | | | | | |
|---|---|--|--|--|--|--|--|--|
| Work Programme | Activities | | | | | | | |
| | Provision of match funded grants to SMEs for the purchase of capital equipment to enable companies to innovate | | | | | | | |
| Management and Delivery of the Technology Grant | Provision of advice to SMEs on new technologies for businesses in the four sectors | | | | | | | |
| | Referrals of SMEs to appropriate and commercially relevant existing higher level skills courses | | | | | | | |
| Management and | Identification of appropriate enhancements to institutions' capital equipment | | | | | | | |
| Delivery of the Institutional Grant | Provision to SMEs of continued access to capital equipment that resides in educational establishments purchased through <i>emda</i> funding | | | | | | | |
| - " " | Facilitation of student placements and working relationships between academia and SMEs | | | | | | | |
| Facilitation of SME and Institutional Relationships | Driving increased collaboration between SMEs and the regional knowledge base for sector specific activity | | | | | | | |
| | Encouragement of peer learning between groups of SMEs and academic staff | | | | | | | |
| Curriculum Development | Work with key regional partners to assist the development and delivery of higher level skills programmes, via the NTI networks, in order to meet business needs | | | | | | | |
| | Identification of where gaps in higher level skills provision exist and promotion of more demand led provision by NTI member institutions. | | | | | | | |

The Research Methods

- 2.13 Over the last 18 months or so, greater emphasis is being placed upon all Regional Development Agencies to ensure that the evaluations they commission are in line with the Impact Evaluation Framework (IEF), which was produced by the Department of Trade and Industry in 2006.⁸ The research methods adopted for this evaluation are consistent with the IEF. This includes the following:
 - An on-line survey targeted at companies that have benefited from the Technology Grant under Phase 2. In essence, the aims of the survey were to explore companies' motivations for accessing support, the extent to which they have enabled employees to access skills training and any outcomes associated with this, and finally, identify the commercial outcomes that have or are expected to occur as a result of purchasing new equipment / technology.

⁸ DTI (2006) Evaluating the Impact of England's Regional Development Agencies: Developing a Methodology and Evaluation Framework. DTI Occasional Paper No 2.



_

- Business consultations with 8 companies have been undertaken to augment the survey data. This has enabled their motives for accessing the Grant and its impacts to be explored in greater detail. Overall, through the business consultations, the research has obtained a full picture of the beneficiary experience.
- Stakeholder consultations have also been undertaken. Across each Network, the Network leads have been interviewed, as have a small sample of each network's core and associate members.
- Institutional Survey A second survey was undertaken, which was targeted at the institutional members of Networks. The aim here was to ascertain their views about different aspects of the Programme and what benefits, if any, they have experienced as a member of a Network.
- Monitoring information has been analysed to ascertain how the Programme has performed in relation to its contractual targets and outputs.
- 2.14 In summary, the evaluation has comprised the triangulation of several research methods, producing valid and reliable research findings.

The Report Structure

- 2.15 The remainder of the Report is structured as follows:
 - **Section 3** sets the strategic and policy context of the Programme, and identifies the key challenges that it has been designed to address in the East Midlands.
 - **Section 4** reports upon the level of funding that has been allocated to the Programme across its two composite core streams and how much has been spent to date. It also assesses the extent to which the Programme has met its Tasking Framework targets.
 - **Section 5** presents an overview of the model through which the Programme has been delivered. It also identifies the benefits that members have experienced from their involvement with the Networks.
 - Sections 6 and 7 discuss the delivery of the two grants. Section 5 focuses on the
 Technology Grant and comments upon the extent to which SMEs are advised
 about new technologies in their sector. Section 6 outlines the process by which
 the institutional grant is allocated to members and the benefits that they have
 gained as a result.
 - Sections 8 and 9 present the findings from the online survey that was targeted at companies benefiting from the Technology Grant. Section 7 focuses upon motivations and expectations of the Grant, whilst Section 8 focuses on outcomes that have occurred, and level of additionality generated by the Grant.
 - Section 10 applies the survey findings to the Programme and presents an assessment of the net impact of the Technology Grant, taking into account the five major adjustment factors.
 - Section 11 returns to the business survey and examines the nature and level of skills training that has taken place and the types of benefits that companies have



experienced as a result. These results are augmented with employee interviews to present their experiences of the training they have received.

- Sections 12 and 13 report on the two other major work streams of the Programme. Using the results from both the institutional survey and interviews with Network members, Section 11 focuses on the extent to which the Programme has facilitated SME and institutional relationships and the form that this has taken. Section 12 examines the role that the Networks have played in developing education and training to meet high level skills needs as well as those of employers.
- **Section 14** presents the conclusions to the evaluation and **Section 15** proposes a series of recommendations.



3 The Strategic Context

3.1 The Business Growth Programme straddles two key policy agendas: business competitiveness and skills development. This Section briefly outlines the national policy objectives surrounding these areas. It also provides a rationale for introducing the Programme in East Midlands and the key regional issues it is designed to address. The Section ends by linking the Programme to the Regional Economic Strategy (RES).

Productivity, Innovation and Economic Growth

3.2 Raising productivity is one of the Government's central economic objectives as it strives to narrow the UK's gap with comparator countries. Boosting innovation amongst UK enterprises is a key mechanism through which the Government is seeking to achieve this. As the Cox Review⁹made clear, there are clear links between levels of innovation, business performance and economic productivity. A more recent Government publication reiterates the productivity objective and the role of innovation in placing businesses in a better position to deal with global competition. ¹⁰

Higher Levels Skills and Knowledge Transfer Engagement

- 3.3 Skills is another policy strand recognised as a major driver of productivity. The Leitch Review¹¹ emphasises the central importance of skills for productivity and employment opportunity. It stresses the need for the UK to quickly increase the skills base of its workforce, and presents an ambitious vision to be achieved by 2020. An implementation document detailing practical reforms was published July 2007.
- 3.4 It is well recognised that Higher and Further Education Institutions (HEIs hereafter) play a key role in economic development. They contribute to the competitiveness, prosperity and skill levels of a region. Over the years, various reports, policies and funding mechanisms have encouraged HEIs to improve their level of engagement with businesses and take forward different types of knowledge transfer.
- 3.5 The Business Growth Programme supports both of the aforementioned policy agendas.

A Rationale for the Business Growth Programme in the East Midlands

- 3.6 The Business Growth Programme addresses several issues associated with productivity in the East Midlands. There are two key skills challenges for the region, firstly, a high proportion of individuals have no qualifications and secondly, fewer individuals have higher level skills relative to the UK. The Business Growth Programme is primary designed to address the latter. It enables employees to gain higher level qualifications and skills, whilst also stimulating the demand for them (and graduate retention) through technological change.
- 3.7 Alongside skills, the Programme is seeking to boost innovation. Currently expenditure in research and development (R&D) does not always translate into commercial outcomes. In light of this, the Programme is seeking to facilitate cooperative relationships between HE/FE and SMEs and, in the process, boost the commercialisation of research and innovative activity.

¹¹ Leitch Review of Skills (2006) Prosperity for all in the global economy – world class skills.



-

⁹ Cox Review of Creativity in Business (2005): Building on the UK's Strengths.

¹⁰ DBERR (2007) Productivity in the UK7: Securing long term prosperity (Nov 2007) r

The Business Growth Programme and the Regional Economic Strategy

- 3.8 The East Midlands RES sets out 10 regional objectives and the Business Growth Programme directly contributes to three of these. These are as follows:
 - Strategic Priority 1, 'Employment, Learning and Skills', argues the case for a flexible
 and skilled workforce and high skilled jobs for these people. It argues that creating
 stronger linkages between education providers and employers is a way to address
 this, along with encouraging businesses to commit to training as part of work practice.
 - Strategic Priority 2, 'Enterprise and business support', sets out the aim to provide businesses in the region with demand-led support.
 - Under Strategic Priority 3, 'Innovation', the importance of a knowledge-based economy is presented in light of the increasing competition from global markets. The RES sets out aims to increase investment in technology and communication between commercial sectors and knowledge-bases.

Summary

3.9 The East Midlands faces two key challenges: raising high level skills and the commercialisation of research and development expenditure. Through its various workstreams, which are detailed in the following Sections, the Business Growth Programme seeks to contribute towards addressing both such challenges. In turn, it supports the Government's overriding objective of increasing productivity.



4 Contractual Performance

4.1 This Section provides a financial profile of the Programme, reporting upon the way in which its funding has been allocated to key work-streams. It also reports upon its contractual performance and the extent to which outputs are being achieved against profiled targets.

Total Funding

4.2 Initially, East Midlands NTI was allocated £2.45m to deliver the Programme over the period April 2006 to April 2009. The allocation was increased by £0.5m in August 2007 in response to demand from companies wishing to access the Technology Grant. The table below summaries the combined allocation by year and spend to date.

| Table 4.1 Total Funding | | | | | | | | |
|-------------------------|----------|-----------|-----------|-----------|-----------|-----------|--|--|
| | 2008 | 2008-2009 | | | | | | |
| | Profiled | Actual | Profiled | Actual | Profiled | Estimated | | |
| Capital | 775,000 | 775,174 | 925,000 | 925,094 | 900,000 | 900,000 | | |
| Revenue | 120,000 | 120,000 | 120,000 | 120,000 | 120,000 | 120,000 | | |
| Total | 895,000 | 895,174 | 1,045,000 | 1,045,094 | 1,020,000 | 1,020,000 | | |

4.3 The funding allocation is disaggregated between 'capital' and 'revenue' expenditure. The former includes two types of capital expenditure: that allocated to the Technology Grant budget, which is made available to SMEs and that allocated to the Institutional Grant budget, which is made available to FE and HE Institutions. The table below shows the split between the two types of capital funding.

| Table 4.2 Capital Funding | | | | | | | | |
|-------------------------------------|----------|---------|----------|---------|----------|----------|---------|------------|
| 2006-2007 2006-2007 2007-2008 Total | | | | | | | | |
| | Profiled | Actual | Profiled | Actual | Profiled | Estimate | Actual | % of CF |
| Technology | 475,000 | 476,187 | 625,000 | 659,461 | 600,000 | 591,223* | 1726871 | 66 |
| Institutional | 300,000 | 298,987 | 300,000 | 265,634 | 300,000 | 308,777 | 873398 | 34 |
| Total | 775,000 | 775,174 | 925,000 | 925,095 | 900,000 | 900,000 | 2600269 | 100 |

^{*} Actual recorded to date is 421,112

- 4.4 Two thirds of the capital funding has been allocated to the Technology Grant budget, which over the course of the programme amounts to around £1.73m. Each year there have been slight variances in the actual allocations against the profiled budget. The most significant variance occurred in 2007-08 where funding that was profiled for the Institutional Grant Budget was used to supplement the Technology Grant in order that it could meet the high level of demand from SMEs. It is anticipated that this will occur in 2008-09 as well with the institutional under spend being used to support the high level of demand for technology grants from SMEs.
- 4.5 The revenue expenditure is split between a central revenue budget and a network revenue budget. The former is allocated to support the administration, management and operational costs of East Midlands NTI Ltd, whilst the latter is shared between the four Networks for the same purpose. Each Network receives the same allocation. The table below summarises the split between the central and network revenue budgets.



| Table 4.3 Revenue Funding | | | | | | | | |
|---------------------------|----------|---------|----------|-----------|-----------|-----------|--|--|
| | 200 | 6-2007 | 200 | 2007-2008 | | 2008-2009 | | |
| | Profiled | Actual | Profiled | Actual | Estimated | Actual | | |
| Central | 40,000 | 40,000 | 40,000 | 40,292 | 40,000 | 40,000 | | |
| Networks | 80,000 | 80,000 | 80,000 | 79,708 | 80,000 | 80,000 | | |
| Total | 120,000 | 120,000 | 120,000 | 120,000 | 120,000 | 120,000 | | |

4.6 Funding from *emda* does not fully meet the operational costs associated with delivering the Programme. Revenue from the Agency is supplemented with income generated through network membership fees and a £50,000 grant from HEFCE. (This grant is awarded to NTI Ltd because it is regarded as a *Centre of Knowledge Excellence*).

Technology Grant Expenditure

4.7 This section presents a profile of the way in which the Technology Grant has been allocated between the four sectors and the counties.

The Total Number and Value of Grants

- 4.8 Since 2006, the Programme has approved 199 technology grants to individual firms, comprising a combined value of £1,556,760. This equates to an average grant size of £7,823.
- 4.9 The number of grants remained relatively consistent between 2006/07 and 2007/08 (74 and 77 respectively), although the average grant size increased by almost a third from £6,435 in 2006/07 to £8,654 in 2007/08. This suggests that the additional budget increase was used to provide higher grants as opposed to approving more applications. In part, this is likely to have occurred to support companies operating in the Construction and High Performance Engineering sectors. The technology/equipment they require is often very expensive.

Grants by Sector

4.10 The table below shows the distribution of the Technology Grant across the four sectors.

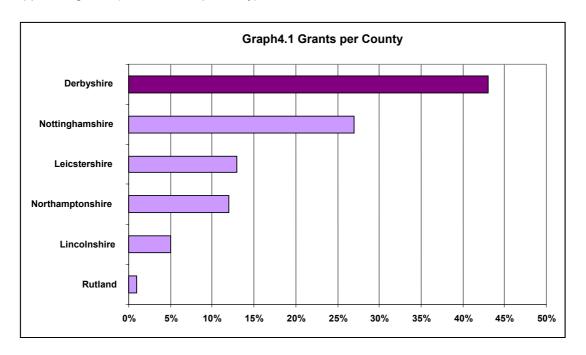
| Table 4.4 Total Value of Grants 2006/07-2008/09 | | | | | | | | |
|---|---------------|-----------|------------------|---------------------------|--|--|--|--|
| Sector | No. of Grants | Value (£) | % of Total Value | Average Grant Size (£) | | | | |
| High Performance Engineering | 68 | 613,444 | 39 | 9,021 | | | | |
| Construction | 52 | 385,748 | 25 | 7,418 | | | | |
| Creative Industries | 42 | 280,526 | 18 | 6,679 | | | | |
| Food and Drink | 35 | 269,167 | 17 | 7,699 | | | | |
| Other | 2 | 7,875 | 1 | 3,938 | | | | |
| Total | 199 | 1,556,760 | 100 | 7,823 | | | | |

- 4.11 Over the course of the Programme, the HPE sector has accounted for over a third of the total number of grants approved. This is almost double the number of those that have been approved for the Food and Drink sector.
- 4.12 The average grant size at £9,021 is highest within the HPE sector and lowest within the Creative Industries sector.



Grants by County

4.13 The graph below shows the geographic distribution of the Technology Grant. Derbyshire and Nottinghamshire have accounted for over two thirds of the total number of approved grants (86 and 54 respectively).



4.14 To date, Rutland has received one grant, which is to be expected given that it is a much smaller county compared to the others. The total value of grants for each county is shown in the table below:

| Table 4.5 Total Value of Grants 2006/07-2008/09 | | | | | | | | |
|--|-----|-----------|-----|-------|--|--|--|--|
| County No. of Grants Value (£) % of Total Value Average G Size (£) | | | | | | | | |
| Derbyshire | 86 | 719,321 | 46 | 8,364 | | | | |
| Nottinghamshire | 54 | 402,012 | 26 | 7,445 | | | | |
| Leicestershire | 25 | 180,943 | 12 | 7,238 | | | | |
| Northamptonshire | 23 | 177,273 | 11 | 7,708 | | | | |
| Lincolnshire | 10 | 67,301 | 4 | 6,730 | | | | |
| Rutland | 1 | 9,910 | 1 | 9,910 | | | | |
| Total | 199 | 1,556,760 | 100 | 7,823 | | | | |

4.15 To date, as well as having the highest number of approvals, Derbyshire accounts for the largest average grant size at £8,364. By comparison, Lincolnshire accounts for fewer approvals and the average grant size has been around 20% less at £6,730.



Institutional Grant Expenditure

4.16 This section presents a profile of the way in which the Institutional Grant has been allocated between the four sectors and counties.

The Total Number and Value of Grants

- 4.17 Between 2006 and 2008, 46 grants to 20 institutions were approved. Their combined value is £564,620. It is estimated that in 2008/09, a further £308,777 will be approved. In total then, it is estimated that the Programme will have made available £873,397 to the region's further education colleges and its universities (that are members of one of the four Networks).
- 4.18 The number of approvals increased by over 40% between 2006/07 to 2007/08 (from 19 to 27 approvals), which in turn resulted in a decrease in the average grant size from £15,735 to £9,838.

Grants by Network

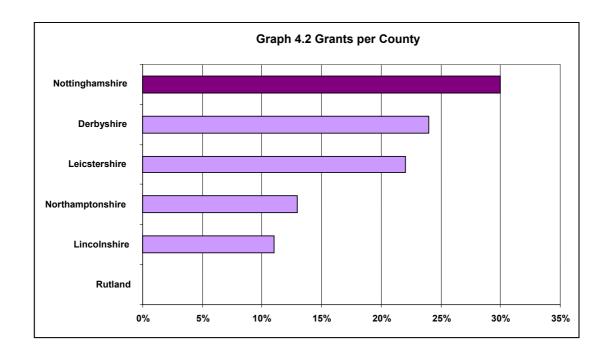
4.19 As shown in the table below, just over a third of the grants have been made to institutions that are members of the Creative Industries Network.

| Table 4.6 Total Value of Grants 2006/07-2008/09 | | | | | | | |
|---|------------------|-----------------|---------------------|------------------|------------------------------------|---------------------|--|
| Sector | 2006/07-2 | 2006/07-2007/08 | | | 2008/09 (Currently under approval) | | |
| | No. of Grants | Value (£) | % of Total Value | No. of Grants | Value (£) | % of Total Value | |
| Creative Industries | 15 | 190,811 | 34 | 9 | 79,500 | 26 | |
| Food and Drink | 10 | 142,716 | 25 | 6 | 74,500 | 24 | |
| HPE | 14 | 130,849 | 23 | 5 | 80,727 | 26 | |
| Construction | 7 | 100,245 | 18 | 5 | 47,050 | 24 | |
| Total | 46 | 564,620 | 100 | 25 | 308,777 | 100 | |

Grants by County

4.20 The geographical distribution of institutional grants follows a similar pattern to that of the Technology Grants. Nottinghamshire and Derbyshire accounted for over half of the total number of grants approved (14 and 11 respectively).





4.21 The table below shows the total value of institutional grants for each county:

| Table 4.7 Total Val | able 4.7 Total Value of Grants 2006/07-2007/08 | | | | | | |
|---------------------|--|-----------|------------------|---------------------------|--|--|--|
| County | No. of Grants | Value (£) | % of Total Value | Average Grant Size (£) | | | |
| Nottinghamshire | 14 | 217,702 | 39 | 15,550 | | | |
| Derbyshire | 11 | 136,131 | 24 | 12,376 | | | |
| Lincolnshire | 5 | 105,531 | 19 | 21,106 | | | |
| Leicestershire | 10 | 63,681 | 11 | 6368 | | | |
| Northamptonshire | 6 | 41,566 | 7 | 6,927 | | | |
| Rutland | 0 | 0 | 0 | 0 | | | |
| Total | 46 | 564,620 | 100 | 12,274 | | | |

- 4.22 The average grant size within each county remained relatively stable between 2006/07 and 2007/08. The exception is Lincolnshire, which experienced a decrease by 81% from £40,948 to £7,879. This is because the total value of the grants decreased whilst the number of applications increased slightly. Looking at the two years combined, there was a large variance between the higher overall average grant sizes.
- 4.23 Of note, the geographical distribution does not reflect the number of institutions receiving grants in that county.

Grants by Institution

4.24 Between 2006/07 and 2007/08, 20 institutions benefited from an Institutional grant. This comprised 14 FE colleges that received 26 grants and 6 Universities that received 20 grants. Whilst the number of approved grants was higher for colleges, the total value of the



grants was 13% higher for universities. The total value of grants allocated to FE colleges and Universities was £265,213 and £299,407 respectively.

- 4.25 As the numbers indicate, some institutions received more than one grant and there are two main reasons for this. First, an institution may have received a grant through a network in both the first and second year. For example, as a member of the HPE Network, Northampton College received two grants over two second years.
- 4.26 The second reason is that an institution may have received multiple grants by virtue of being a member of several networks. For example, the University of Lincoln accessed grants through both the Food and Drink and the Creative Industries Networks.
- 4.27 The tables below outline the number and value of grants received by individual institutions.

| Table 4.8 Total Value of Grants 2006/07-2008/09 | | | | |
|---|-----|---------|---------------------|--|
| College | No. | Value | % of Total Value | |
| West Notts. | 5 | 101,516 | 38 | |
| Chesterfield | 2 | 41,548 | 16 | |
| Derby | 3 | 38,303 | 14 | |
| Stephenson | 2 | 21,284 | 8 | |
| Northampton | 2 | 21,500 | 8 | |
| North Notts. | 1 | 12,396 | 5 | |
| Castle College | 1 | 7,250 | 3 | |
| Tresham Institute | 2 | 4,201 | 2 | |
| New College Nottingham | 2 | 4,592 | 2 | |
| Loughborough | 2 | 3,500 | 1 | |
| Leicester | 1 | 1,545 | 1 | |
| Moulton | 1 | 2,375 | 1 | |
| Booksby Melton | 1 | 2,993 | 1 | |
| Boston | 1 | 2,211 | 1 | |
| Total | 26 | 265,213 | 100 | |

| Table 4.9 Total Value of Grants 2006/07-2008/09 | | | |
|---|-----|---------|---------------------|
| University | No. | Value | % of Total Value |
| Lincoln | 3 | 95,097 | 32 |
| Nottingham Trent | 5 | 91,948 | 31 |
| Derby | 6 | 56,280 | 19 |
| DeMontfort | 4 | 34,359 | 11 |
| Northampton | 1 | 13,500 | 5 |
| Bishop Grosseteste | 1 | 8,223 | 3 |
| Total | 20 | 299,407 | 100 |

Performance against Outputs

- 4.28 East Midlands NTI Ltd. is expected to contribute towards *emda's* Tasking Framework outputs. These comprise a combination of *emda's* core outputs and Key Performance Indicators. The table below shows the progress that has been made to date.
- 4.29 The Programme has already exceeded all its targets with one exception. Specifically, it has under-performed with regards to securing the number of graduates into employment. This is probably because graduate employment is not one of the Programme's key aims. Rather, it is more of an indirect outcome, which means that the Networks and NTI have little control in its achievement.



| Table 4.10 Output Performance | | | | | | | |
|---|----------|-----------|----------|-----------|----------|----------------|--|
| | 2006 | 2006-2007 | | 2007-2008 | | 2008-2009 | |
| | Profiled | Actual | Profiled | Actual | Profiled | Actual to date | |
| T1- Jobs Created | 15 | 30 | 20 | 35 | 20 | 14 | |
| T4- Businesses assisted | 120 | 174 | 135 | 187 | 135 | 42 | |
| T6- People assisted- SME Capital | 150 | 248 | 180 | 174 | 200 | 11 | |
| T6- People assisted- Institutional Capital | | 346 | | 796 | | 1087 | |
| KPI 2 Graduates Employed | 15 | 9 | 17 | 12 | 17 | 4 | |
| KPI 12 Business Support* | 75 | 156 | 80 | 176 | 80 | 37 | |
| KPI 14 Business Support ** | 75 | 161 | 80 | 140 | 80 | 29 | |

^{*} Number of businesses using business support services, including those using brokers and intermediaries to access support for skills and workforce development.

Summary

- 4.30 The Programme has successfully supported businesses and institutions across the four key sectors. Between 2006 and 2008, two thirds of the NTI capital funding has been used to provide technology grants to SMEs. The remainder of the funding has been allocated to member institutions.
- 4.31 As indicated by the progress made in achieving *emda's* tasking framework targets, the Programme has secured major benefits and outcomes. These are explored more fully in subsequent Sections.



^{**} Number of businesses using business support services, including those using brokers and intermediaries to access innovation and support initiatives.

5 An Overview of the Delivery Model & Network Benefits

- 5.1 A key element of this evaluation has comprised ascertaining the views and experiences of all four Networks. This has taken place through two methods. A survey was administered to all institutional members and supplemented with face-to-face interviews with all the Network Leads. A sample of associate members (i.e. those representing partner organisations) was also interviewed, although the survey was not directed at them.
- 5.2 This Section along with Sections 6, 7, 12 and 13 present the findings from the survey and the qualitative interviews. Each Section focuses on a particular aspect of the Programme, ranging from overall management, network membership and benefits, and its composite work-programmes.
- 5.3 This Section provides an overview of the model through which the *Business Growth* Programme is delivered. It also identifies the key benefits that members have experienced as a result of their involvement with their respective Networks. It is useful, however, to begin by specifying the response rate to the institutional survey and providing a brief profile of respondents.

A Profile of Institutional Survey Respondents

5.4 The survey was administered to all the institutional members of the four Networks. Out of a total sample of 59, 28 members responded, giving a response rate of 47%. The table below summarises the response rate by sector.

| Table 5.1 The Sample Survey and Response Rate | | | | |
|---|------------------|-------------------|--------------------|-------------------------|
| Sector | Total Members | No of Respondents | % Response Rate | % of All Respondents |
| Construction | 16 | 9 | 56% | 32 |
| Creative Industries | 24 | 8 | 33% | 29 |
| HPE | 9 | 6 | 66% | 21 |
| Food and Drink | 10 | 5 | 50% | 18 |
| | 59 | 28 | | 100 |

5.5 The majority of respondents (78% / 21) have been members for more than three years. Respondents have been equally split between those operating at a university (48% / 13) and those operating at a further education college (48% / 13).

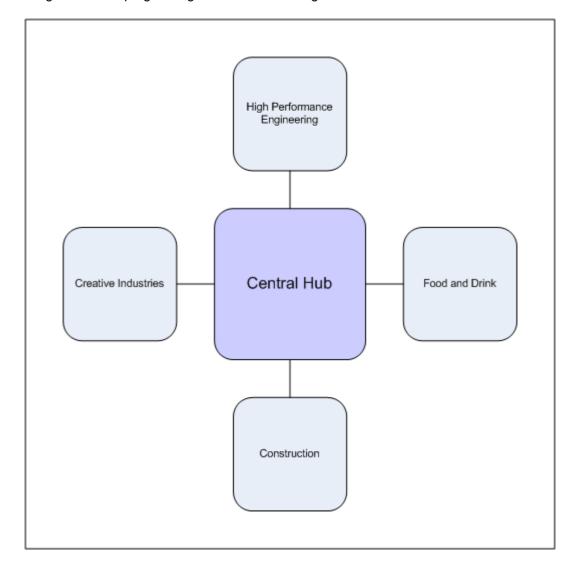
The Hub and Spoke Model

- 5.6 The *Business Growth* Programme is managed and delivered through a 'hub and spoke' model as illustrated in the diagram overleaf.
- 5.7 An Executive Team, led by the Director of NTI Ltd, comprises the Central Hub. The team has overall responsibility for ensuring that the Programme's objectives are met. This includes responsibility for strategy, management, and day-to-day coordination, including liaison between *emda* and the partners in the East Midlands NTI network. In essence, the team is accountable for the following:

Operations management and coordination: Ensuring that that each Network delivers all the Programme's activities and that the results are consolidated and documented in the form of 'deliverables'.



- **Communication and coordination**: Ensuring effective communication and exchange of information between the Hub and partners.
- **Performance Monitoring and impact analysis**: Collating monitoring data from the Networks to record progress being made against contracted outputs and outcomes, and other deliverables.
- 5.8 The Central Hub is supported by the NTI Board of Directors, which represents NTI's partners and stakeholders. It oversees operational and management issues and receives regular reports on contract management, implementation of composite elements of the Programme and progress against contractual targets.



5.9 As illustrated in the diagram above, the Central Hub sub-contracts delivery of the Programme to the four Networks – the spokes. Table 5.2 details their main areas of work and the associated activities that they are responsible for delivering.

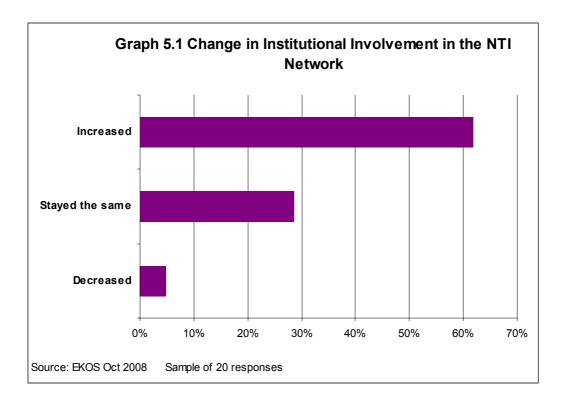


| Table 5.2 Network Activity | | | |
|--|--|--|--|
| SME Information, Advice & Guidance, | Providing business advice and support in relation to advanced technologies, workforce development and innovative business practices. | | |
| & Allocating Technology Grant | Signposting SMEs engaged to appropriate existing business support provision. | | |
| | Allocating Technology Grant to SMEs for the purchase of capital equipment to enable their companies to innovate (50% match funded). | | |
| Brokering SME and HE/FE Relationships | Providing SMEs with access to capital equipment that resides in educational establishments purchased with emda funds under a previous programme. | | |
| | Referring SMEs to appropriate existing higher level skills provision (e.g. foundation degrees to Masters level qualifications). | | |
| | Facilitating placements/working relationships between academia and SMEs. | | |
| Institutional Grant | ldentifying enhancements to institutions' capital equipment. | | |
| Allocation | Allocating Institutional Grant. | | |
| Curriculum Development | ldentifying where gaps in higher level skills provision exist and ensuring a more demand-led provision. | | |
| | Working with key regional partners, developing and delivering higher level skills programmes to meet identified gaps in provision and that meet business need (e.g. foundation degrees). | | |

Network Membership

- 5.10 The Networks are made up of core and associate members. Core members include the educational institutions (universities and further education colleges), and they are self-selecting. Some institutions are members of all Networks; others are members of a couple or only one. All institutional members are required to pay a membership fee for each Network that they are a member of as this provides an important source of revenue funding. Associate members include representatives from relevant Sector Skill Council, Life-Long Learning Partnerships, Business Link, *emda* and organisations working with SMEs in that sector.
- 5.11 The survey targeted at Network members asked them about their level of involvement with their particular Network and how this had changed. The results are very positive in that they demonstrate a high level of commitment to the Network. The key points to acknowledge are:
 - The Networks have managed to sustain membership the vast majority of respondents have been members for more than three years (78% / 22);
 - Members' level of involvement has predominantly increased over the years (64% / 14) or stayed the same (27% / 6); only one person reported that their involvement had decreased;
 - Most respondents define themselves as being 'highly involved' with their network see the graph overleaf.





5.12 Respondents' high levels of commitment to their respective Network are, in all likelihood, attributable to the benefits that they have derived from being members. The specific outputs and outcomes that have occurred as a result of their involvement are discussed below.

Network Funding

- 5.13 The East Midlands Development Agency contributes towards 50% of the Programme's revenue costs with the East Midlands NTI and the four Networks sourcing the remainder. Consequently, institutional members pay a 'membership fee', which is based on their turnover. This means smaller colleges and universities pay less than the larger ones. The fee allows members to participate in all of the network's activities. For example, without being a member, an institution is not able to submit an application to purchase equipment through the Institutional Grant fund.
- 5.14 Even when membership fees are combined with revenue funding from *emda*, the full costs of delivering the Business Growth Programme are not covered. Accordingly, all institutional members make in-kind contributions. Without this, it is highly probable that key Programme activities would not be implemented. Echoing the views of many institutional members, one Network Lead commented, "*NTI gets good value from us, especially since we draw in our knowledge, experience and links from other projects and consultancy work.*"
- 5.15 The Business Growth Programme has, in essence, been delivered by the public sector, which has been able to absorb and supplement delivery costs through good will and working for the greater good. Whilst *emda* has benefited from this, it cannot expect that other organisations will be able to subsidise such costs when delivering other Programmes.

Network Benefits

5.16 The three key outcomes that have occurred as a result of respondents' involvement with the NTI network have been:

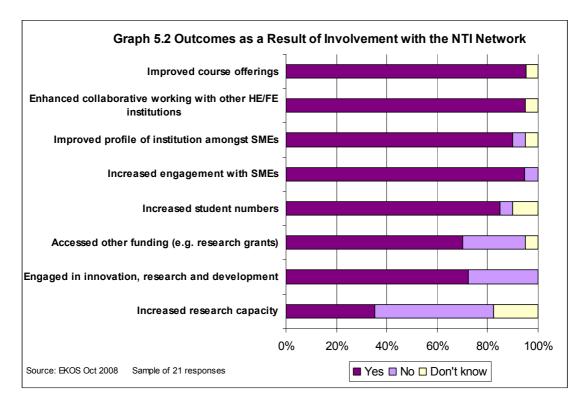


The purchase of new equipment through the institutional grant funding (100% / 21);

The provision of increased support/training to SMEs (91% / 19); and

The design of sector specific courses (91% / 19).

5.17 The above outcomes (and others) have, in turn, generated a further benefits for members, as illustrated in the graph below.



- 5.18 It is clear that 'engagement' has been one of the biggest benefits of the Networks. Members' engagement with each other, with SMEs and even with students (through improved course offerings) has increased. This is supported by findings from the stakeholder interviews. There is a consensus that the overriding benefit of the Networks is that they have:
 - (a) provided a forum for all the institutions to come together collectively;
 - (b) they have reduced competition and rivalry between institutions; and
 - (c) they have facilitated spin-off projects and relationships. The quotations in the Box overleaf illustrate these views.
- 5.19 One stakeholder described the Networks as "dynamic Hubs". Partners use the Hub/Network for specific needs, "jumping on and off when they need to". In other words, the Networks facilitate spin off projects between individual members.
- 5.20 All associate members value accessing network institutions simultaneously and the co-operation that exists between them. Individual institutions value the Networks because it raises awareness of what other providers are doing.



Network Benefits

"The programme is a way of bringing providers together. Its makes them act in a more coordinated way and with the providers talking to each other more, this makes for efficient provision; it reduces duplication" (Associate Member).

"NTI has brought together Universities and colleges. Without the Network, they would not have come together and XXX University has derived benefits from closer working relationships with other institutions The Network has broken down the competitive relationships between Universities and further colleges. ... It has also made it easier for regional agencies to talk to the sector in one go rather than having to communicate with all the colleges and universities individually. (Institutional Member).

"The Network gives added value to the sector. It's the only group in the region that gets all the HE and FE providers together.The Network is very good at managing all the providers ... nobody has done this before." (Associate Member).

The programme has led to greater partnership working between institutions where previously there has been great deal of competition and they wouldn't talk to one another. As well as partnerships between institutions, other engagement has occurred that would not otherwise have occurred. Broader membership, like EMDA, CABE etc attend Network meetings. The Network provides a forum for them to come together and speak to us and with each other informally.... One of the main things that have come out from the Networks is trust. It wasn't there before, but it is now." (Institutional Member).

"The Network provides a medium or forum for people to initialise projectsvarious bids are being put together and we wouldn't have got together without the Network. That's where it's been really, really useful" (Institutional Member).

Summary

- 5.21 The main points arising from the analysis are:
 - The Business Growth Programme has been delivered through a 'hub and spoke' model.
 - Institutional members have made in-kind contributions to support limited revenue programme, which has been essential to the effective delivery of the Programme.
 - Membership has been sustainable and the level of involvement amongst members has increased, mainly due to the benefits that they have experienced.
 - The overriding benefits of the Networks is that they have:
 - (a) provided a forum for all the institutions to come together collectively;
 - (b) reduced competition and rivalry between institutions;
 - (c) facilitated spin-off projects and relationships.



6 Delivering the Technology Grant

6.1 This Section provides an overview of the way in which the Technology Grant has been delivered by the Networks.

The Eligibility Criteria

- 6.2 The Technology Grant is targeted at regional SMEs operating in the four Network sectors. It offers them up to a maximum of £10,000 each to purchase equipment that either advances the use of technology within the workplace or contributes to significant growth and development of the enterprise.
- 6.3 There are two conditions attached with the Grant. First, SMEs are required to make a contribution of at least 50% of the total equipment costs. Second, it is obligatory for them to enroll some or all of their employees on an accredited course at Level 3 or above. This can be directly related to the new equipment/technology that they are purchasing or address other skills needs.

Raising Awareness of the Network & the Technology Grant

- 6.4 The initial challenge faced by all Networks was raising awareness amongst SMEs of the availability of the Technology Grant and the information and guidance that they provide. A combination of methods were used to raise such awareness. This included mail shots, development of the website, attending workshops, exhibitions, trade shows and other events where SMEs are likely to be present, as well as working with trade/sectoral organisations those that maintain a regular, ongoing relationship with SMEs. This latter approach seems to have been particularly effective.
- 6.5 For example, CINTIN became a member of, and formed relationships with all agencies, networks and partnerships that support regional SMEs in the creative industries sector, including the East Midlands Creative and Cultural Partnership and East-Midlands Media, the regional screen agency for film and media. CINTIN has worked through them and other agencies, using their communication channels to inform SMEs about the Grant and other services provided by the Network.
- 6.6 This is evident across the other Networks too. Indeed, all of them have found it beneficial to work with organisations that have strong links with businesses in their sector.
- 6.7 The HPE Network is unique in that it has promoted the Grant and the Network to large companies for two main reasons. First, they have been used as a portal to cascade information to SMEs in their supply chain. This is deemed to have been "really important" with the Network generating a high number of referrals from companies such as Rolls Royce, as well as direct enquires from SMEs. Second, although large companies are not eligible for the Grant, the Network targets them with information about skills training, provision and workforce development.
- Over time, 'word of mouth' has become an important way in which Networks receive enquiries about the Grant. This is where SMEs that have already benefited from the Grant and/or other services from the Network discuss their experience with other businesses. This is regarded as a particularly important development, highlighting a sea-change in attitude amongst SMEs. One Network Lead noted, "When I first started, it was hard to break down the barriers and overcome scepticism from SMEs, but because we've been around for years, they are more receptive...the Network has become embedded....[and is] trusted and valued."



- 6.9 'Word of mouth' can be regarded as the best form of advertising. It is an indicator of high levels of satisfaction amongst existing beneficiaries with both the process for accessing the Grant and the subsequent outcomes that occur.
- 6.10 Finally, over the last year, all Networks have experienced a higher level of referrals from Business Link due to the introduction of a cross-referral system. There is an agreement in place whereby Business Link refers companies to the relevant Networks; and they respond by referring any companies that have not previously engaged with Business Link.
- 6.11 The cross-referral system seems to be working well; particularly since a few Networks reported that in the early days of the Programme, the number of referrals from Business Link was "zero". There is, however, one drawback. It seems that business support advisers can sometimes refer companies that are inappropriate for the Grant, which leads to inefficient use of Network time.

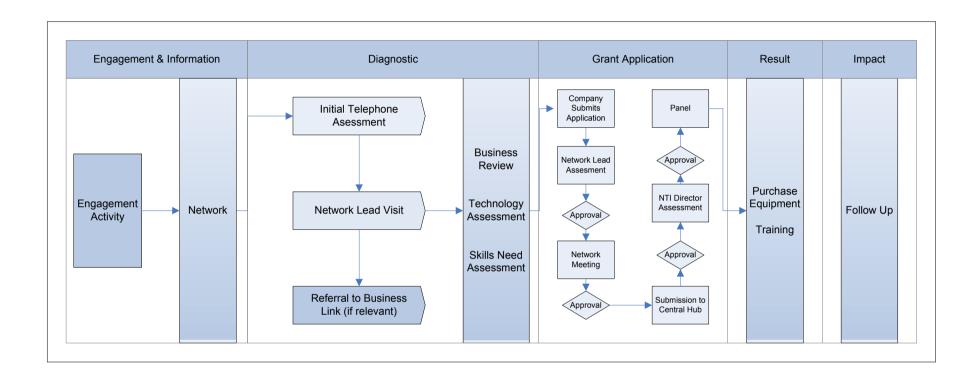
Managing Demand

- 6.12 Each Network now faces a different challenge from when it was first established. As the combination of the methods that have been used to raise awareness have proven to be successful, there is a higher level of demand for the Technology Grant than the funding available to meet it. Even with the extra £0.5m that was made available in August 2007, some of the Networks report that they may need to place a moratorium on new applications, as they will not have the funds to support them should they be successful. This is despite them introducing even stricter criteria for assessing applications compared to before. Most notably, only companies that can take-up training at Level 4 or above are being supported, whereas previously, those that accessed Level 3 were able to receive a grant.
- 6.13 At this point, it is important to acknowledge the change that has occurred over the years from when the Grant was first made available to the present day. Taking the construction sector as an example, it is characterised by micro and small enterprises, which are often highly sceptical of businesses support, resistant to change and particularly resistant to accessing skills training. In the East Midlands, the sector is also geographically disperse and often located in rural areas. Given this landscape, the Network like the others has been successful in raising awareness and now faces the challenge of managing higher volumes of applications compared to the funding available.
- 6.14 Although this is an indicator or the Grant's success, there is a need to manage expectations and ensure that SMEs do not become dissuaded from accessing business support.

The Process

6.15 **The diagram overleaf** illustrates the application and assessment process through which Technology Grants are allocated to SMEs. In essence, upon receiving an enquiry directly from an SME or a referral from an agency, the Network Adviser makes a visit to the company. The Adviser engages in detailed discussion with the company and undertakes two forms of assessment: (a) a technological assessment to identify the type of new equipment that would offer maximum benefit to the SME and (b) a 'training needs analysis' (TNA). This is a comprehensive assessment to identify the company's skills needs across the different grades and at what level (i.e. Level 3, above or below).







- 6.16 The HPE Network has developed a particularly sophisticated approach to assessing company needs. It has developed an 'organisational analysis' proforma that comprises a technological assessment, skills analysis and a review of other business support requirements.
- 6.17 There is a consensus amongst Network Advisers that in the majority of cases, SMEs have already decided the equipment they wish to purchase prior to the Adviser's visit. Accordingly, there are few opportunities for the Adviser to raise awareness amongst SMEs about new technology during the visits. As one Adviser noted "they've [i.e. SMEs] all done their homework. They've been to the shows, the exhibitions, they know what they want ... and at the end of the day, they know what's right for their business." Therefore, Advisers can be seen as verifying SMEs' existing technological knowledge. In addition, their role is to ensure that the equipment sought by companies aligns with the Network's objectives.
- 6.18 Advisers also support SMEs to complete the Grant application form. In particular, they help companies to formally articulate the way in which purchase of new equipment will support the development and growth of their enterprise.
- 6.19 As shown in Section 4, there are differences between the Networks regarding the average level of grant allocated per company, with HPE and Construction sector generally allocating higher grants than CINTIN and Food and Drink. In terms of company size, however, the Networks have tended to support the micro and very small enterprises. There is evidence that this is beginning to change across some Networks. For example, CINTIN has recently been targeting companies that employ 10 or more people.
- 6.20 Clearly, there are differences between companies in each sector regarding specific equipment that they purchase. The Construction Network, however, has noticed a trend that appears to support the sustainability and viability of companies operating within the sector. Many of the companies that have accessed the Grant are using it to buy equipment and attend training courses that enable them to work with large companies and become part of the supply chain. Large companies can often set criteria or require evidence that sub contractors are trained to a certain standard and the Grant facilitates this process. It enables them to tender for work.

Training

- 6.21 SMEs may have an idea about the equipment they wish to purchase, but they often have little detailed knowledge about training. Accordingly, this is an area where Advisers add particular value. The training needs analysis they undertake is a comprehensive assessment of all skills, competency and knowledge requirements. The Adviser reviews training needs associated with the new equipment as well as other business operations. As some suppliers offer training on equipment that is purchased from them, SMEs are able to take the opportunity to address other skills and training needs.
- 6.22 The Programme is primarily concerned with supporting high-level skills and qualifications, yet it is flexible to respond to SME's most urgent needs. All the Networks have experience of SMEs lacking basic or intermediate skills in areas that are essential to their long-term survival. For example, employees in a construction or engineering may be highly experienced in using complex machinery, yet lack basic IT or book-keeping skills. The Adviser's role is to make a judgement as to the type of training that is most urgent to the development of the company.
- 6.23 Some Networks report that facilitating training "has been the hardest element of the Grant". In the early phases of the Programme in particular, Networks found it difficult to enrol employees' on courses because SMEs found it extremely difficult to release staff due to



losses in productivity. This goes back to the point made earlier that many of the companies that have been supported are at the smaller end of the SME spectrum. For example, if a company employs four people and one is required to attend training, that can equate to a 25% reduction in productivity.

- 6.24 It is encouraging that the Institutions have responded and taken account of employer needs. Rather than offering year long or day-release courses, they have developed distance-learning modules, as well as 'bite-sized', shorter courses. The drawback is that, whilst employers' needs for skills are met, accredited qualifications are being over-looked. It is reported that this does not concern employers; as they are more interested in skills and competencies rather than qualifications.
- 6.25 Another challenge that has had to be overcome concerns the profile of employees put forward for training. Sectors such as Construction and HPE in particular are characterised by an older workforce, many of whom left school at 16 and have not entered a teaching environment since then. It has been challenging to make them feel comfortable and overcome their anxieties about attending college. As one respondent noted, the classroom environment is "alien" to them.
- 6.26 Once again, however, the Institutions responded by developing 'taster' courses, highlighting the benefits of this and demonstrating that the environment is not threatening.
- 6.27 The flexibility of the Programme does not mean that its objectives are compromised. When approving the Technology Grant for SMEs that need training at Level 3 or below, a condition is attached to it. Specifically, SMEs are required to follow basic training with that at Level 4 or above. Most companies are happy to agree. This indicates that the Programme's additionality is high. If SMEs are willing to access training twice in return for the Grant, then either the funding is highly important to them being able to purchase the equipment and/or they have been persuaded of the benefits training.
- 6.28 Skills development is a core element of the Programme and the evidence indicates that the number of SMEs accessing provision is high. In part, this is due to the approach adopted by Advisers. They act as 'honest brokers' matching courses most suited to SME needs rather than rather than promoting provision by their home institution.

Benefits

6.29 Section 9 of the Report identifies the benefits of the Technology Grant from the perspective of businesses. Here, it is useful to outline the stakeholder perspective, those individuals that have had considerable engagement with SMEs. As illustrated in the quotations below, the Grant is highly regarded and seen as making a significant contribution to the growth and development of those companies that have benefited.

"Tiny sums of investment that are injected at strategic times or points of development can make a massive contribution to company success." (Network Member).

"I think the level of investment, pound for pound, that is made through the Programme in is the best compared to any other programme targeted at the creative sector. It achieves quicker results Companies get the grant quickly; they do the training and then reap the results. NTI offers the best chance of entrepreneurial success." (Network Lead).

6.30 Different sectors emphasised different benefits of the Grant. For construction, the Grant's added value appears to be two-fold: supporting companies to innovate and supporting them to enter the emerging sustainable construction market. With regards to innovation, the



Network feels that "NTI has encouraged innovation in a sector that is resistant to change and faces barriers to innovation that have been well-documented. The sector needs initiatives like this to kick it shape; as it won't change on its own."

6.31 CINTIN believes that the Grant's added value lies in supporting companies to reach the market place quicker. In so doing, it is reported that it meets the issue raised in the CDI Green Paper that the sector needs to support companies to become operational quickly. The training element is regarded as another major benefit because the sector is characterised by fast-moving, technological advancements. There is a need for companies to be knowledgeable of and competent in using the latest technology and the Grant enables this to happen.

Summary

- 6.32 The main points arising from the analysis are:
 - The initial challenge faced by all Networks centred on raising awareness about the Grant and the work of the Network. A combination of methods have been used, with the most effective being working with and through organisations with direct links to SMEs. Further, the HPE Network has found it beneficial to target the Programme at large companies.
 - Networks now face a challenge of managing high level of demand and may need to place a moratorium on new applications.
 - The Technology Grant process seems to be operating well. The 'organisational analysis' undertaken by the HPE Network can be seen as good practice.
 - Given that SMEs tend to be already aware of the equipment they want to purchase, Advisers add value (a) by supporting companies to complete the application form; (b) undertaking training needs analysis and securing provision.
 - Facilitating training in the early days proved challenging, but the institutions have developed course formats that address employer needs.
 - The Grant is highly regarded by stakeholders and seen as making a significant contribution to the growth and development of those companies that have benefited.



7 The Institutional Grant Process

- 7.1 This Section outlines the process through which the Institutional Grant has been allocated to the Networks to enable their members to purchase new, hi-technology equipment. It also identifies the key objectives for purchasing such equipment and the benefits that have been experienced as a result.
- 7.2 Section 12 of the Report examines the extent to which the Networks have encouraged SMEs to access the equipment they have purchased via the Grant.

Overview

- 7.3 The Business Growth Programme has made available just over £300,000 across the Networks and their member institutions to purchase or upgrade high-technology equipment. It is left to the Networks to decide how the funding should be allocated between institutions.
- 7.4 As with the Technology Grant, institutions that apply for funding must make a 50% contribution towards the cost of the equipment. In addition, they are encouraged to make it available to local companies for general use or training purposes.

The Process

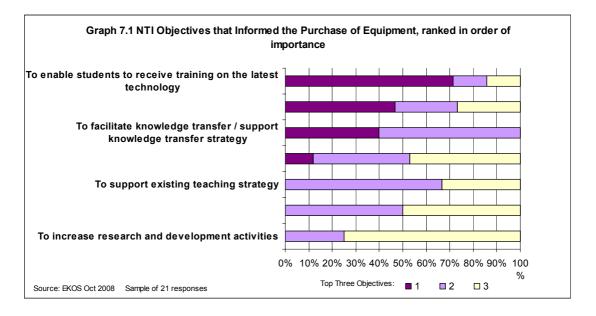
- 7.5 To access the Institutional Grant, Networks must submit a Business Plan each year. The Business Plan represents an agreement between the institutional members as to what equipment should be purchased and by which institution.
- 7.6 Before the Business Plan is produced, each Network goes through a consultation stage. Here, the HPE Network has developed good practice. It asks its members to complete a proforma, which sets out a list of SMEs' 'Skills Development Needs' that have emerged from the training needs analysis over the previous year. Institutions are required to:
 - (a) indicate whether they provide any courses that match those needs; and
 - (b) explain how any equipment they wish to purchase supports these skills areas and/or other Network activity.
- 7.7 The proforma covers other issues too, such as what types of activity are undertaken by the institution that supports SMEs and adds value to the Network. This enables a holistic/comprehensive assessment of each member's application for funding.
- 7.8 The other Networks undergo a similar process, although perhaps less formally. There are three key points to be made regarding the allocation of the Institutional Grant:
 - Over 95% of survey respondents (25) agree or strongly agree that the process through which grants are allocated to individual members is "fair".
 - As noted, each Network submits an annual Business Plan to the Board detailing
 the capital equipment that individual institutions wish to purchase. There is a
 consensus amongst both institutional and associate members that, in so doing,
 the Business Plans seek to meet sectoral needs. There is no evidence to
 suggest that institutions are purchasing equipment that furthers their own interest
 without addressing sectoral gaps or identifying the way in which purchased
 equipment can benefit particular sub sectors.



- Following on from the above point, there is a high level of co-operation and collaboration between members as to the distribution of the Grant. One Associate member remarked, "They [i.e. institutions] work and collaborate with each other more than anybody imagined...it's surprising really how fair they are with each other.
- 7.9 The Construction Network provides an example of such collaboration. One institution purchased equipment related to rainwater harvesting and another related to underground heating. The two institutions are working together to develop ideas for energy efficiency.

The Objectives

- 7.10 Virtually all the survey respondents (96% / 22) reported that (since 2006) their institution had received a grant to contribute towards the cost of purchasing or upgrading capital equipment. Half the sample (48% / 11) has purchased more than five items of equipment, whilst the other half has purchased far few items. Of this sample, the majority have bought one or two pieces of new equipment (30% / 7).
- 7.11 The survey asked respondents about the three top objectives underlying their decision to purchase new equipment. The results are presented in the graph below.

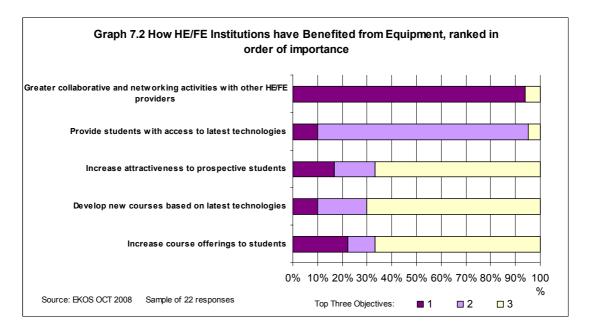


- 7.12 It is evident that the following three objectives have been dominant:
 - The desire to improve upon the existing skills training offer to SMEs;
 - · To meet industry or sector needs; and
 - To enable students to receive training on the latest technology.
- 7.13 In some ways, the results are quite surprising. There has been a far greater emphasis on responding to business needs and boosting relationships with them compared to meeting internal research and development priorities as one would have expected.

The Benefits

7.14 There is consensus amongst stakeholders (associate and core Network members) that the Business Growth Programme has enabled institutions to purchase "valuable" and "up-to-date" equipment. As shown in the graph below, this has generated a range of benefits.



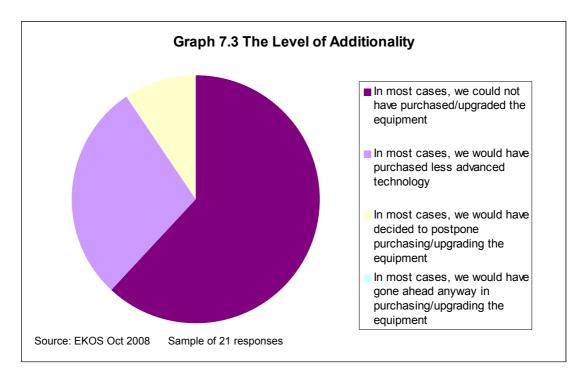


- 7.15 There have been two overriding benefits that institutions have derived from equipment purchased through the Institutional Grant. The first is providing students with access to the latest technologies. As the interviews revealed, this is particularly significant given that, up-to-now, funding pressures have meant institutions have been unable to modernise their existing equipment. Second, it is evident that institutions have been keen to share their equipment with each other. They have provided training to other members on how to use the equipment and have used the monthly/6-weekly meetings to facilitate this. Aside from training, members have engaged in joint activity involving the use of new equipment.
- 7.16 The other benefits that members' have derived from equipment purchased through the grant are:
 - The development of new courses, particularly Foundation Degrees;
 - Product development and spin-off projects either between institutions or between an institution and an SME;
 - Enabling SMEs to pilot equipment: for example, companies in the construction sector have been able to test hi-tech surveying equipment purchased by Stephenson College before making a decision as to whether they wished to purchase it themselves.
- 7.17 In summary, it is clear that the Institutional Grant has generated several key benefits, one of which has been reducing competition between members and facilitating greater exchange between them. Those that have some understanding of higher and further educational establishments will acknowledge that this represents a cultural change for them and a significant accomplishment.

Additionality

7.18 The Institutional Grant has presented institutions with a prime opportunity to modernise their equipment. As shown in the Chart below, there has been a high level of pure additionality, followed by scale additionality. This means that over half the sample would not have been able to purchase the equipment without the support of the Grant (57% / 13), whereas a quarter would have purchased less advanced technology (26% / 6).





Summary

- 7.19 The main points arising from the analysis are:
 - There is a consensus amongst institutional members that the process through which grants have been allocated to network members has been "fair".
 - The objectives for purchasing equipment show that members' have placed emphasis on meeting business needs, rather than their internal research and development priorities.
 - Further, there is no evidence to suggest that institutions are purchasing equipment that furthers their own (individual) interest at the expense of the sector.
 - There is consensus amongst stakeholders that the has enabled institutions to purchase "valuable" and "up-to-date" equipment.
 - The two overriding benefits of being able to purchase equipment have been supporting the learning of students and facilitating exchanges and co-operation between institutional members.
 - The level of pure and scale additionality associated with the Grant has been high.



8 The Business Perspective 1: Expectations & Outcomes

- 8.1 A key element of this evaluation comprises the administration of a survey targeted at companies that received the Technology Grant under Phase 2 of the Business Growth Programme, which has been supplemented with face-to-face interviews. This Section along with Sections 9 and 11 present the findings from both the survey and the qualitative interviews.
- 8.2 In essence, the aims of the survey and the interviews were four-fold. First, to explore the motivations for accessing the Technology Grant, second to explore the satisfaction with the process, third to ascertain the way in which the Grant contributed to the development of their business (if at all), and, finally, their views of the training that employees accessed. To recall, this was a condition of them accessing the Grant.
- 8.3 This Section reports on the first two objectives of the primary research. It begins by identifying the way in which respondents first became aware of the Technology Grant and then proceeds to explore their motivations and expectations of the Grant. It also reports on levels of satisfaction with the grant application process and the Adviser.

A Profile of Company Respondents

8.4 The survey was administered to 169 companies across the East Midlands region that benefited from the Technology Grant under the current funding cycle. In total, 88 companies responded to the survey equating to an overall response rate of 52%. The table below summarises the response rate by sector.

| Table 8.1 The Sample Survey and Response Rate | | | | | |
|---|------------------------|----------------------|--------------------|-------------------------|--|
| Sector | Total Beneficiaries | No of Respondents | % Response Rate | % of All Respondents | |
| HPE | 61 | 30 | 49% | 35% | |
| CDI | 39 | 22 | 56% | 26% | |
| Construction | 47 | 17 | 36% | 20% | |
| Food and Drink | 32 | 16 | 50% | 18% | |
| Total | 179 | 85 | NA | 100% | |

8.5 The number of responses from each sector are broadly in proportion to the number of grants allocated to SMEs operating within that sector. This is evident with respect to geography too, with the majority of respondents located in Derbyshire (36% / 30) and Nottinghamshire (34% / 20).

Company Size and Length of Trading

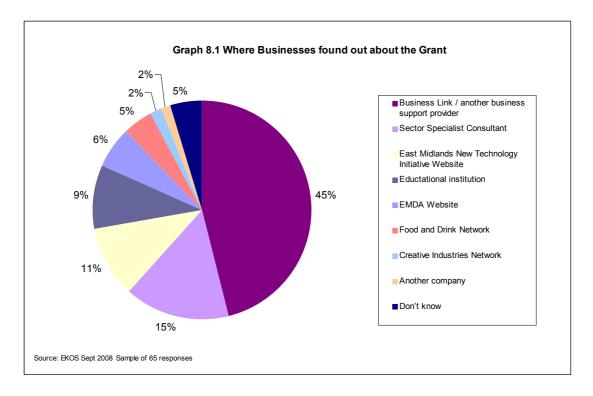
- 8.6 The Technology Grant is targeted at SMEs. Responses from the survey, along with interviews with stakeholders, however, reveal that the Grant has predominately supported micro enterprises to date that is, companies employing five and less people. Hence, virtually half the companies responding to the survey are micro enterprises (48% / 40), although nearly a third (32% / 27) fall into the 'small' category.
- 8.7 Section 5 noted that Network Advisers believe that the Grant has been important in supporting the development of many companies, including micro enterprises. If the Programme were to continue in future, however, it would be appropriate to consider targeting companies at the larger end of the SME spectrum. There is (arguably) greater potential to maximise increased sales, profits and, ultimately, GVA from larger firms.



8.8 The Technology Grant is available to all SMEs that have been operating for over a year. The majority of respondents to this survey have been trading for over ten years (38% / 33), although just a fifth (21% / 18) are relatively young and have been operating for less than three years.

Awareness

- 8.9 It is important to find out about how companies became aware of the Technology Grant as this provides insights into the effectiveness of different promotional activities and / or the efficacy of the referral system between business support providers.
- 8.10 As shown in the chart below, most of the respondents found out about the Grant from Business Link and other business support providers (39% / 31). This corroborates comments from Network Advisers, which all reported that the number of referrals from Business Link had increased over the last 12–18 months. 'Other providers' is likely to include organisations that work directly with companies within that sector as the Networks operated through them to raise awareness of the Grant.



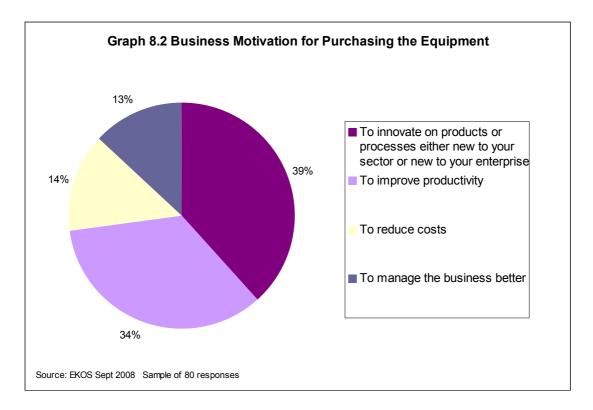
Motivations and Expectations

8.11 It is well documented¹² that British companies need to engage in more innovative activity (and, overall, raise their productivity to compete effectively on the global market). It is encouraging, therefore, that the Technology Grant has supported both these processes. As shown in the chart below, respondents to this survey reported that product and process innovation (70% / 59), along with improved productivity (64%/ 54) were the main reasons for accessing the Grant.

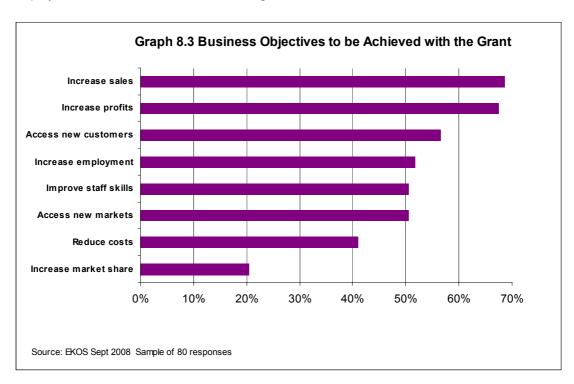
¹² See for instance, Lord Sainsbury of Turville (2007) *The Race to the Top: A Review of Government's Science and Innovation Policies*. (HM–Treasury); and DIUS (2008) *Innovation Nation White Paper*.



-



- 8.12 Alongside asking businesses about their motivations' for accessing the Grant, the survey also asked them about key objectives they expected the Grant to help them achieve. Responses to this question can provide insights about the type of business growth and development aspirations that companies have.
- 8.13 The results show that businesses sought to achieve several objectives with the Grant, the most popular being increased sales (69% / 58), followed by increased profits (68% / 57). It is interesting that virtually the same number expected the Grant to increase the number of employees as increase the skills of existing staff.



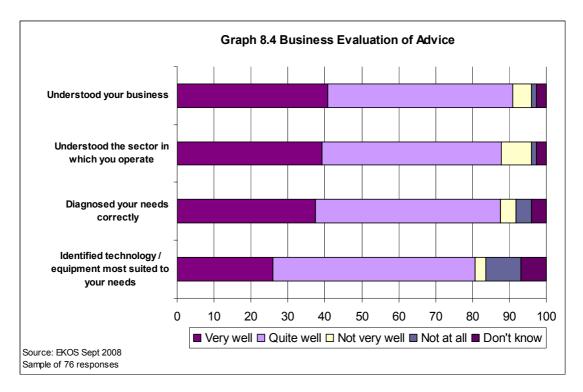


Satisfaction Levels with the Technology Grant Process

- 8.14 The success of many business support programmes depends, in part, upon the knowledge and expertise of advisers, the confidence placed in them by companies and, also, the ease of applying/accessing support the customer journey. Poor experience can deter companies from accessing support in future, which would be unfortunate as they may miss opportunities for growth and development.
- 8.15 In light of the above, the survey asked respondents a number of questions about their satisfaction with the Technology Grant Process, the Adviser, as well as with analysis of their training needs. In general, companies expressed a high level of satisfaction, although there are a small number of respondents whose experience seems to have been negative and they were more likely to express consistently their dissatisfaction.

The Grant Process

- 8.16 As shown in the graph below, the vast majority of respondents expressed satisfaction with the Adviser regarding different aspects of the support and advice they provided. Respondents were most likely to express satisfaction with Advisers' understanding of their business (91% / 70), followed by their understanding of the sector in which they operate (88% / 66) and diagnosis of their technological needs (87% / 64).
- 8.17 The overall level of satisfaction expressed by respondents' declines slightly with regards to Advisers' identifying technology and equipment suited to company needs (81% / 60). This does not appear to have been a significant problem, but probably reflects the point raised by some Network Advisers that companies already have ideas about the equipment they want to purchase before the Adviser undertakes an analysis of the company.
- 8.18 This is also supported by consultations with several of the companies. For example, one construction company was already aware that it needed to invest in ICT before it applied for the Technology Grant. Consequently, it particularly valued the Adviser's role in identifying and brokering relevant training opportunities (rather than identifying its technology needs).

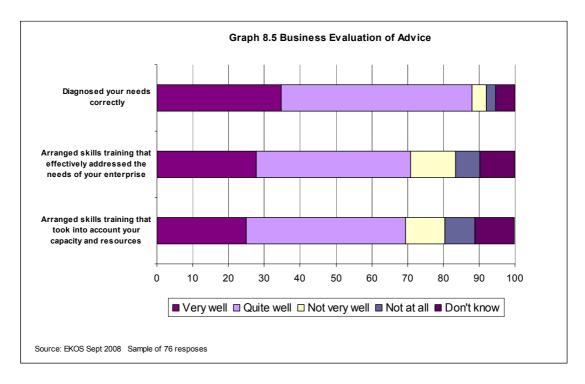




8.19 The survey results and the interviews indicate that there may have been a misconception in-built into the Programme, namely that SMEs require advice from Advisers about the latest technological developments within their sector. Although the Programme has imparted such knowledge, it is also evident that some SMEs are already aware of major developments (through attendance at trade shows, journals and so forth). Therefore, the lower level of satisfaction expressed with Advisers in this respect should not be seen as a weakness of the Programme or the ability of the Advisers; instead it should be seen as the strength of the region's SME base and their tenacity in keeping abreast of sectoral trends and issues.

Training Needs Analysis

- 8.20 A condition that is placed on companies receiving a Technology Grant is that they must engage in workforce development, particularly at the higher-skills level. To ensure that this occurs, Advisers are required to undertake training needs analysis of companies submitting a Technology Grant application.
- 8.21 Again, as with the technology needs analysis, most respondents felt that the Adviser had diagnosed their training needs accurately (89% / 67). The level of satisfaction, however, declines somewhat with regards to the brokerage of training, particularly in terms of Advisers taking into account company capacity and resources (70% / 51). In all likelihood, this is not a comment or reflection on the ability of Advisers, all of whom seem to be fully aware of different types of provision and where it can be accessed. Instead, this is probably a reflection of the perennial barrier faced by many SMEs, which is releasing staff to access off-the-job training.





Summary

- 8.22 The main points arising from the analysis are:
 - Respondents reported that the main reasons for accessing the Technology Grant were to support product and process innovation, and improve productivity. They anticipated that this would lead to increased sales and profits.
 - The vast majority of respondents expressed satisfaction with the Adviser regarding different aspects of the support and advice they provided.
 - The overall level of satisfaction expressed by respondents' declines slightly with regards to Advisers' identifying technology and equipment suited to company needs. This should not be seen as a weakness of the Programme or the ability of the Advisers; instead for reasons explained above, it should be seen as the strength of the region's SME base and their tenacity in keeping abreast of sectoral trends and issues.
 - Most respondents felt that the Adviser diagnosed their training needs accurately.
 However, the results indicate that they can face difficulties in releasing staff to attend training courses.

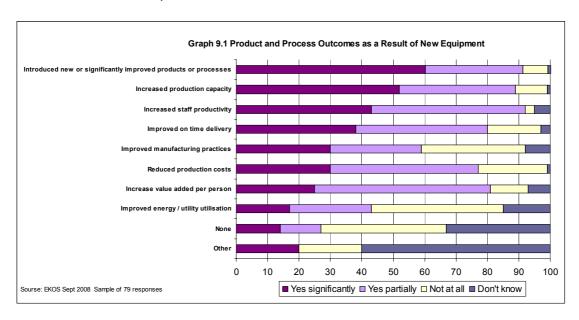


9 The Business Perspective 2: Benefits and Outcomes

9.1 The previous Section identified respondents' motivations for accessing the Technology Grant and their expectations of the way in which it would support their growth aspirations. This Section turns to the benefits and outcomes that have occurred as a result of the technology they purchased through the Grant.

Production and Business Management Outcomes

- 9.2 The survey asked respondents to identify the different types of production and process outcomes they experienced as result of the Technology Grant, as well as any business management outcomes. Unsurprisingly, respondents' were more likely to report that they had experienced improvements related to the former as opposed to management practices.
- 9.3 To recall, innovation and raising productivity were the primary motivations for accessing the Grant and it is particularly encouraging that these have been met. Hence, respondents reported that the Grant either significantly or partially:
 - Led to the introduction of new or improved products and processes (91% / 68);
 - Increased staff productivity (92% / 67); and
 - Increased production capacity (90% / 66).
- 9.4 These and other production-related outcomes are illustrated in the chart below.



- 9.5 It can be seen that the Grant has not been used to improve energy utilisation or manufacturing practices. Nor has it played an extensive role in securing business management outcomes. This is to be expected, as respondents' did not access new technology to achieve such outcomes. Nonetheless, the Grant has enabled businesses to improve management practices and the extent to which this has occurred is a little surprising.
- 9.6 Technology purchased through the Grant has enabled businesses to improve communication with their customers and suppliers (59% / 42), as well as enabled the introduction of new or improved management tools (58% / 43). This is borne out by several of



the business consultations. For example one company operating in the HPE sector commented that software purchased with the Grant had "streamlined and improved the product development process."

9.7 Alongside the production and management outcomes mentioned above, the consultations identified additional outcomes that have occurred. Several companies reported that the Grant had improved their credibility; in effect, it provided potential clients and lending agencies with assurance and confidence about the company, its product and standing in the market place. The Box below illustrates this point.

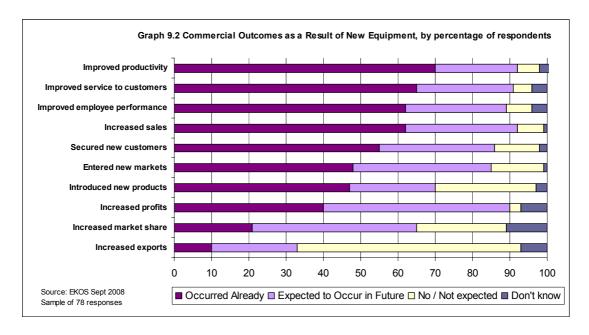
The Technology Grant and Raising Credibility

"The Grant provided a track record of public funding, which helped us with future grant applications". (Company in the HPE sector: 4 employees).

"The Grant reduced the effects of the 'small company syndrome' by making me look bigger than I am" (Company in the Creative Industries sector: 1 employee).

Commercial Outcomes

9.8 It is generally acknowledged that there is often a time lag between an intervention and for outcomes to materialise. On this basis, to ensure that the survey fully captured the benefits associated with the Technology Grant, respondents were asked to identify those outcomes that had already occurred and those that they expected to occur in future. The results are summarised in the chart below. It is evident, however, that respondents to this survey have already experienced outcomes and only a small proportion are yet waiting to reap the benefits.



- 9.9 The top five outcomes that have already occurred are listed below. These have been experienced by over 50% of the sample:
 - Improved productivity (70% / 52);
 - Improved service to customers (65% / 49);
 - Increased sales (62% / 47)



- Improved employee performance (63% / 45); and
- Secured new customers (55% / 41).
- 9.10 Amongst excepted outcomes, the main ones likely to occur in future are increased profits (50% /34), and increased market share (44% / 29).
- 9.11 The data is more revealing when the results for individual expected outcomes are added to those that have already occurred. As shown in the Table below, the data shows that three quarters of respondents have already, or expect to, experience increases in sales, improve productivity and employee performance, as well as their services to customers. Moreover, just under three quarter expect to, or have already, entered new markets and increased profits.

| Table 9.1 Commercial Outcomes: Occurred and Expected | | | | |
|--|-----------------------|----------------------------------|--|--|
| | | ve occurred or are I to occur | | |
| | Number of respondents | % of Total Respondents | | |
| Increased sales | 70 | 81 | | |
| Improved productivity | 68 | 79 | | |
| Improved service to customers | 68 | 79 | | |
| Improved employee performance | 64 | 74 | | |
| Secured new customers | 64 | 74 | | |
| Entered new markets | 62 | 72 | | |
| Increased profits | 61 | 71 | | |

9.12 These results are encouraging and indicate the positive contribution that the Programme is making to the regional economy.

The Financial Value of Commercial Outcomes & their Sustainability

9.13 For most respondents, the financial value of sales and profits that they have experienced due to the Technology Grant is relatively modest. Hence, the majority of them experienced sales of up to £25,000 (56% / 42) and profits of up to £10,000. See the Table below.

| | | % of Respo | ondents | Survey Agg | regate |
|--------------------------|-----------------------|------------|---------|--------------|--------------|
| Range Given in Survey | Mid Point of Range | Sales | Profits | Sales | Profits |
| Less than £10,000 | £5,000.0 | 29.3 | 58 | £146,666.7 | £577,741.9 |
| £10-25,000 | £17,500.0 | 26.7 | 21 | £466,666.7 | £730,201.6 |
| £25-50,000 | £37,500.0 | 16.0 | 3.2 | £600,000.0 | £240,725.8 |
| £50-100,000 | £75,000.0 | 10.7 | 4.8 | £800,000.0 | £722,177.4 |
| £100,000 - £500,000 | £300,000.0 | 5.3 | 0 | £1,600,000.0 | £0.0 |
| £500,000 & over | £500,000.0 | 1.3 | 0 | £666,666.7 | £0.0 |
| Not expected* | | 10.7 | 13 | | |
| Total | | 100.0 | 100 | £4,280,000.0 | £2,270,846.8 |

^{*} Based on number of respondents that did not answer the question

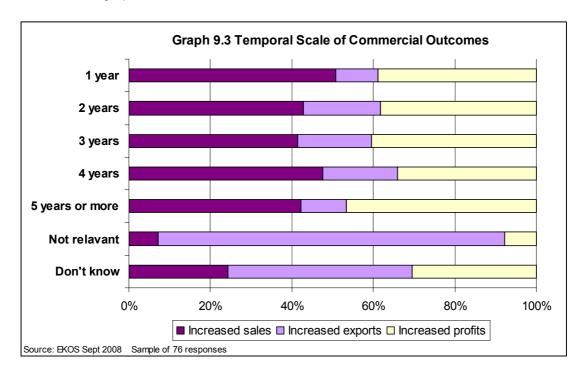
9.14 Following on from the above, when comparisons are made between the financial value of sales and that for profits, it is evident that respondents are more likely to have



^{**}The total excludes those respondents that answered 'Don't Know' to this question.

experienced higher levels of sales than profits. This is a common experience and resonates with other business support programmes.

9.15 As shown in the Table above, it can be estimated that the combined value of sales and profits achieved by respondents in one year equates to around £4.28m and £2.27m respectively. However, it is encouraging that respondents expect them to occur for several years. In short, the sustainability of profits and sales attributable to the Technology Grant is high. Hence, most respondents (23 in number) expect to experience an increase profits for five years or more and a similar number expect to experience sales increases for the same time. See the graph below.

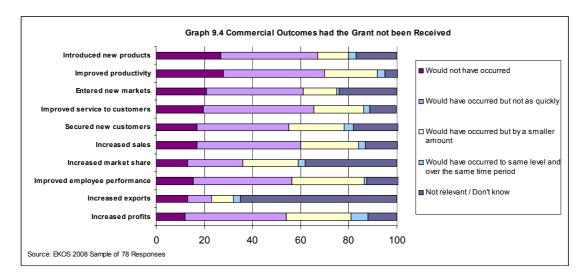


Additionality and Deadweight

- 9.16 Additionality and Deadweight (see below) are different sides of the same coin. Additionality refers to the added value of a project or programme, generating an effect that would not otherwise have occurred without the intervention. Deadweight, by contrast, refers to an outcome that would have occurred regardless of any intervention. Both measures are part of a core set of indicators identified in the IEF that RDAs must consider when evaluating the performance of any programmes they fund.
- 9.17 There are several ways that the survey provides evidence of the additionality achieved by the Technology Grant. The first relates to the financial support, with a minority reporting that they would have purchased the equipment without the Grant (4% / 3). This highlights high levels of additionality, particularly time additionality with over half the sample reporting that would have postponed purchase of equipment without the Grant (57% / 46). Pure additionality is also relatively high with over a third of the sample reporting that they could not have purchased new technology if it had not been for the financial support received through the Programme (37% / 30).
- 9.18 The second way in which the survey provides evidence of additionality relates to the extent to which outcomes would or would not have occurred without the Technology Grant. The results are summarised in the graph below. Key points emerging from the survey results are:

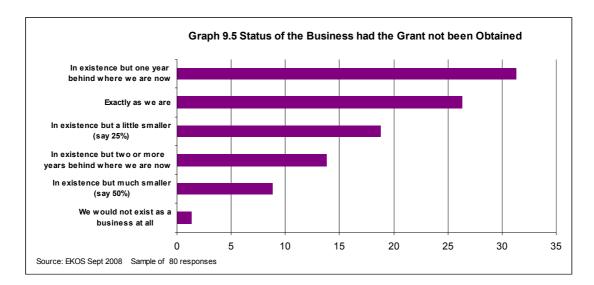


- Overall, the Grant has enabled time additionality. Across all outcomes, respondents report that the Grant enabled them to achieve these quicker compared to if they had not received funding.
- Representing pure additionality, over a quarter of the sample reported that
 without the Grant, they would not have been able to introduce new products at all
 and/or increase productivity. Pure additionality has been achieved for other
 outcomes too, although this is evident amongst a lower number of respondents.
- Alongside productivity and innovation outcomes, time additionality is highest for securing improved service to customers (47% / 37) and increased sales (44% / 34). Moreover, 42% of the sample reported that it would have taken them longer to increase profits without the Grant (31).
- Over a quarter of the sample reported that without the Grant, employee performance would have occurred by a smaller amount (29% / 22).
- The level of deadweight is very low across all the outcomes, although perhaps surprisingly it is highest with respect to increased profits. Five respondents reported that they would have experienced the same increase in profits and over the same period even if they had not accessed the Grant.



9.19 Following on from the above, the survey asked respondents about the growth position of their companies had they not accessed their grants. In essence, to what extent did the Technology Grant enable company growth over and above that would have occurred anyway? The results are illustrated in the graph below.





- 9.20 The results corroborate earlier findings with time additionality emerging as the dominant type of additionality that has occurred. Nearly a third of respondents (31% / 25) stated that without the Grant, their business would be a year behind where they are now. Over a quarter of respondents, however, reported that even if they had not accessed the Grant, their business would be in the same position as it is now (37% / 22). This seems to be a little high, given all the other additionality/deadweight responses and could be interpreted as an anomaly.
- 9.21 The final indicator of additionality is whether companies would have pursued alternative actions if they had not received the Grant. Just under a third report they would have pursued an alternative course of action (31% / 25), with the majority stating that they would either not been able to do so (26% / 21) or they do not know (44% / 35).
- 9.22 The interviews corroborate survey findings regarding the Programme's high level of additionality. For example, a company operating in the Food and Drink sector reported that without the Grant, the company would have gone out of business because of declining customer levels. In essence, the equipment purchased through the Grant "...has made the business more competitive, and we now attract people from a much wider area".

Displacement

- 9.23 Displacement relates to the benefits, which have accrued to the businesses supported by the programme at the expense of non-supported businesses. For example, a business receiving a Technology Grant may have increased its sales at the expense of a non-supported company.
- 9.24 It is encouraging that levels of total and partial displacement are low. Hence, less than five respondents indicated that their sales had been at the expense of other companies in the region and just over a quarter reported that no other company would have been affected by their success (26% / 21).

Substitution

9.25 Substitution refers to businesses changing their behaviour to take advantage of available (public) support. Examples include a firm deciding to invest less of its own resources in training or research and development in order to take advantage of public funding in these areas.



9.26 The survey asked whether accessing the Technology Grant prevented companies' from investing elsewhere in the business. The level of substitution appears to be low, with the majority indicating that they had not substituted other activity to enable investment in purchasing new technology (84% / 66).

Multipliers

- 9.27 Multipliers relate to knock-on benefits of the Grant, particularly those retained in the region. There are two types of multipliers: income multipliers arising from expenditure incurred in the economy from new employees recruited by a company; supplier multipliers: arising from additional spend on suppliers, who in turn increase their expenditure within the region.
- 9.28 Nearly half of all respondents reported that they increased the number of employees they employ as a direct result of the Technology Grant (46% / 36). The majority of them increased staff numbers by one (53% / 19) and just under a third were able to recruit two new members (31% / 11).
- 9.29 Most of the companies interviewed by this study have recruited more staff to keep pace with increased sales and workloads. One company expected to increase its number of employees specifically for them to take on duties performed by existing staff. The intention is that this will allow them to concentrate on high-value design work for which they received training from the Business Growth Programme.
- 9.30 Turning to suppliers, around a third of the sample reported that the Technology Grant had made no difference to the number of suppliers they work with or the level of orders that they place. However, a higher proportion (38% / 30) reported that they have either increased orders to suppliers based in the East Midlands or increased the number that they work with.

Summary

- 9.31 The main points arising from the analysis are:
 - Given that respondents reported that innovation and raising productivity were the primary motivations for accessing the Grant, it is particularly encouraging that these have been met.
 - Over 50% of the sample has already experienced commercial outcomes, with the top three comprising: Improved productivity; Improved service to customers; and Increased sales.
 - For most respondents, the financial value of sales and profits that they have experienced as result of the Technology Grant is relatively modest.
 - However, it is encouraging that their sustainability is high. Hence, most respondents expect to experience increases in sales and profits for five years or more.
 - There are several ways that the survey provides evidence of the additionality achieved by the Technology Grant. Overall, it seems that it has been most successful in achieving time additionality. Hence, most respondents would have postponed the purchase of the equipment without the financial support available through the grant. In addition, the outcomes they experienced would have materialised at a later date.



- Levels of total and partial displacement are low with less than five respondents indicating that their sales had been at the expense of other companies in the region.
- The level of substitution appears to be low, with the majority indicating that they
 had not substituted other activity to enable investment in purchasing new
 technology.
- Nearly half of all respondents reported that they increased the number of employees they employ as a direct result of the Technology Grant, although in the majority of this cases, this was only by one.
- Around a third of the sample has either increased orders to suppliers based in the East Midlands or increased the number that they work with.



10 The Net Impact of the Technology Grant

10.1 This Section provides an assessment of the net impact of the Technology Grant, taking into account the five major adjustment factors.

Gross Sales, Profits and Employment

- 10.2 As discussed in the previous Section, a high proportion of survey respondents reported that, as a direct result of the Technology Grant, they had experienced an increase in sales. This ranged from less than £10k to over £500,000 (one instance). To recall, the combined value of these sales was estimated to be £4.28m.
- 10.3 Following on from the above, responses from the survey have been used to estimate the total value of sales and profits at the Programme level, that is, across the 199 companies that have received a Grant since 2006. As shown in the table below, the Programme has contributed to £8.5m in additional (gross) sales and £2.3m in additional (gross) profits.

| Table 10.1 | Table 10.1 Gross Sales and Profits | | | | | |
|------------------------------------|------------------------------------|--------------------------------------|--------------------|------------------|--------------------------------------|----------------------|
| | Sales | | | Profits | | |
| Mid Point of Sales / Profits | % of Rspndts | No of Programme Beneficiaries* | Aggregate Sales | % of Respndts | No of Programme Beneficiaries* | Aggregate Profits |
| £5,000 | 29.3 | 58 | £291,866.7 | 58.1 | 115.5 | £577,741.9 |
| £17,500 | 26.7 | 53 | £928,666.7 | 21.0 | 41.7 | £730,201.6 |
| £37,500 | 16.0 | 32 | £1,194,000.0 | 3.2 | 6.4 | £240,725.8 |
| £75,000 | 10.7 | 21 | £1,592,000.0 | 4.8 | 9.6 | £722,177.4 |
| £300,000 | 5.3 | 11 | £3,184,000.0 | 0.0 | 0.0 | £0.0 |
| £500,000 | 1.3 | 3 | £1,326,666.7 | 0.0 | 0.0 | £0.0 |
| Not expected | 10.7 | 21 | _ | 12.9 | 25.7 | |
| Total | 100.0 | 199 | £8,517,200 | 100 | 199 | £2,270,846 |

^{*} These are calculated in proportion to percentage of respondents experiencing sales at the given ranges. E.g. as 29% of survey respondents reported achieving sales of £5,000, then this proportion is applied to total beneficiaries (i.e. 29% of 199).

10.4 The table below identifies the estimated number of jobs created by the Programme to date.

| Table 10.2 Gros | ss Employment | | | | |
|--|----------------------|---------------------|------------------------|---------------------|--|
| No of New Employees | No of Respondents | % of Respondents | No of Beneficiaries | Gross Employment | |
| None | 39 | 52 | 103 | 0 | |
| 1 | 19 | 25 | 50 | 50 | |
| 2 | 11 | 15 | 29 | 58 | |
| 3 | 2 | 3 | 5 | 16 | |
| 4 | 2 | 3 | 5 | 21 | |
| 5 | 2 | 3 | 5 | 27 | |
| Total | 75* | 100 | 199 | 172 | |
| * Excludes those that did not answer the question. | | | | | |



10.5 To summarise, it is estimated that the Programme has enabled £8,517,200 in gross sales, £2,270,847 in gross profits and created 172 gross new jobs. On this basis, it can be estimated that the Programme has generated Gross Value Added of £6,555,023.¹³

Deadweight

10.6 Deadweight is the adjustment that takes into account the benefits that businesses would have achieved regardless of the support secured through the Programme. From the survey results, the table below summarises the level of deadweight associated with sales and profits.

| Table 10.3 Without the Technology Grant, the proportion of businesses that would have achieved | | | | |
|--|---|-------|---------|--|
| | | Sales | Profits | |
| Pure deadweight | All of the sales / profits | 2.7% | 7.2% | |
| Partial deadweight | Some of the sales / profits but not as quickly | 47% | 44.9% | |
| - artial dodarro.g.ii | Some of the sales / profits but by a smaller amount | 25% | 29.0% | |
| No deadweight | None of the sales / profits | 18% | 13% | |

- 10.7 The calculation for Deadweight is based on the following:14:
 - **Gross Attributable Benefits**
 - minus pure deadweight;
 - minus 50% deadweight for those stating some of the benefits would have occurred not as quickly; and
 - minus 50% deadweight for those stating some of the benefits would have occurred by a smaller amount.
- 10.8 The table below applies the calculation in relation gross sales and profits.

| Table 10.4 Sales and Profit Deadweight | | | | | |
|--|------------|--------------------|--------------------------|--------------------|--------------------------|
| | | S | ales | Profits | |
| Types of deadweight | Adjustment | Survey Response | Deadweight £'000s | Survey Response | Deadweight £'000s |
| (Minus) pure deadweight | 100% | 2.7% | £229,964.40 | 7.2% | £163,500.97 |
| (Minus) partial deadweight (time) | 50% | 47% | £2,001,542.0 | 44.9% | £509,805.1 |
| (Minus) partial deadweight (scale) | 50% | 25% | £1,064,650 | 29.0% | £329,273 |
| Total Deadweight | | | £3,296,156.40 (38.7%) | | £1,002,578.85 (44.2%) |

The Table shows that deadweight is higher for profits than sales, which again, is a common experience. The calculations highlight that the Programme has secured £5.22m in sales and £1.27m in profits that would not have occurred otherwise.



¹³ GVA has been calculated by multiplying the number of gross new jobs and average sector wage, and then gross profits to this. EKOS has used figures from the ONS to obtain the average wage. The Annual Survey of Hours and earnings on 2008 identified this to be £24,908.0 ¹⁴ Note, these are based on the evaluators' experience, rather than specific formulas or benchmarks.

Leakage

10.10 Leakage relates to the benefits that accrue to those businesses that are outside a programme's target group. In this case, any benefits experienced by companies not operating in one of the four priority sectors and/or which are not located in the East Midlands. As the monitoring data shows, virtually all the businesses that received a Technology Grant met its eligibility criteria. Accordingly, leakage is likely to be relatively low and, on this basis, this adjustment factor is estimated as 1.5%.

Displacement

- 10.11 Displacement refers to the extent to which benefits gained by companies as a result of a given intervention have occurred at the expense of others that have not received support.
- 10.12 The survey asked respondents to estimate the extent to which additional sales they experienced as a result of the Technology Grant affected other East Midland companies or those in the UK. As noted in Section 9, their responses indicated that levels of total and partial displacement are low. However, it is important to acknowledge that small businesses tend to under-estimate this, mainly because their levels of market intelligence about competitors tends to be low.
- 10.13 Based on the survey results, the level of displacement has been calculated at 9.6%. The table below shows the method by which this calculation has been arrived at.

| Table 10.5 Displacement calculation | | | | | |
|---|--------------------------|-------------------------|----------------------------|--|--|
| Displacement | Level of Displacement | % of Survey respondents | Displacement Adjustment | | |
| Other EM companies significantly affected | 80% | 2.2% | 1.8% | | |
| Other EM companies somewhat affected | 50% | 6.7% | 3.4% | | |
| Other EM companies marginally affected | 25% | 17.8% | 4.5% | | |
| No EM companies affected | 0% | 24.4% | 0 | | |
| Other UK companies affected | 0% | 24.4% | 0 | | |
| No UK companies affected | 0% | 24.4% | 0 | | |
| Total | | 100.0% | 9.6% | | |

Substitution

10.14 Around 10% of survey respondents (who answered the question) reported that by accessing the Technology Grant, this had prevented them from making an investment elsewhere in their business. The results present a good proxy for estimating the level of substitution at the Programme level. This is slightly higher compared to some other programmes, although it seems unlikely that other investment would have achieved the same level of sales as that achieved by the Technology Grant.

Multipliers

- 10.15 Multipliers relate to the spin-off benefits generated by a programme. The most common are, first, income multipliers, which relate to extra spend in the economy that has occurred through new employment. Second, supplier multipliers refers to extra spend made by suppliers because companies have increased orders to them or are working with more suppliers than before.
- 10.16 Multipliers are not easy to generate through primary research and it is common practice to use established benchmarks. This study has made use of benchmarks produced by English Partnerships. It has issued a range of 'ready reckoners' that evaluators can make



use of depending on the type and nature of the intervention they are assessing. This study has applied a multiplier of 1.3, which is the most conservative across the range. This is because in all likelihood, impacts on local supply linkages or that arising from additional income will have been fairly limited.¹⁵

Unintended Effects

10.17 It is likely that the Technology Grant will have generated some unintended consequences. As these are likely to be low, no economic value has been attributed to them. In the main, un intended effects tend to be more common with large scale land and property investments rather than a business support programme such as this.

Crowding in/Crowding Out

10.18 The crowding in/out phenomena refers to the effects of public expenditure causing other variables in the economy to adjust. This is rare and tends to occur where the level of public expenditure is significantly high in relation to the total investment of a given intervention. Whilst the Business Growth Programme comprises significant investment, this has taken place over several years and is complemented by the private sector's own investment, which will have been at least to the level made by *emda*. As above, no economic value has been attributed to this adjustment factor.

Wider Effects on Sustainable Development

10.19 The wider effects on sustainable development are not easy to quantify, although the Technology Grant may have had an impact on embedding sustainable development principles within the region. Anecdotal evidence from the Construction and HPE Networks suggests that firms have used grants to develop sustainable development products. As above, however, no economic value has been attributed to this adjustment factor.

Net Impact

10.20 The table below applies the composite adjustment factors to gross sales and profits.

| able 10.6 Gross to Net Sales and Profits | | | |
|--|---------------|---------------|------------|
| | £m Sales | £m Profits | No of Jobs |
| Gross | £8,517,200.00 | £2,270,847.00 | 172 |
| Deadweight for sales and jobs* @ 39% and 44% for profits | £3,321,708.00 | £999,172.68 | 67.1 |
| Sub Total | £5,195,492.00 | £1,271,674.32 | 104.9 |
| Leakage @ 1.5% | £77,932.38 | £19,075.11 | 1.6 |
| Sub Total | £5,117,559.62 | £1,252,599.21 | 103.3 |
| Displacement @ 9.6% | £491,285.72 | £120,249.52 | 9.9 |
| Sub Total | £4,626,273.90 | £1,132,349.68 | 93.4 |
| Substitution @ 10% | £462,627.39 | £113,234.97 | 9.3 |
| Sub Total | £4,163,646.51 | £1,019,114.71 | 84.1 |
| Multipliers @ 1.3 | £1,249,093.95 | £305,734.41 | 25.2 |
| Net Impact | £5,412,740.46 | £1,324,849.13 | 109 |

^{*} The survey did not generate data to enable employment specific calculations to be generated. Hence, those that have been calculated for sales have been applied to calculate gross to net jobs.

¹⁵ English Partnerships (2004) *The Additionality Guide* – Table 4.8: Multiplier Effects (page 24).



_

- 10.21 It can be seen that the Technology Grant has enabled £5.4m of net sales and £1.3m of net profits. The investment in the Programme to date has comprised £1.5m. On this basis, the net increase in sales and profits represents a return on investment of 1:3.61 and 1:0.9 respectively. The cost per (gross) job (based on Programme investment) seems to be around £9,000, which is quite low. With regards to net sales, it seems that one job has been created for an increase in sales of £49,500.
- 10.22 It should be recalled that the net impacts refer to those that have occurred to date. The survey findings indicate that most respondents expect to experience continued sales and profits (from the Grant) for up to five years. Accordingly, when this is taken into account, the figures increase substantially. Hence, over the next five years, anticipated sales are estimated to be £11,054,481 and profits to be £2,690,462.
- 10.23 The net impact adjustments are within anticipated ranges. EKOS work for Yorkshire Forward on Output Additionality identified benchmark deadweight for sector-specific projects at 45%, with displacement at 35%, reflecting that sector-specific projects generate higher than average net impacts because they are targeted and specific. It is encouraging, therefore, that the Technology Grant is generating similar ratios.

Summary

10.24 The main point arising from the analysis is that, in return for an investment to date of £1.5m, the Technology Grant has enabled £5.4m of net sales, £1.3m of net profits and created 109 (net) new jobs.



11 Skills Training: Employer and Employee Benefits

- 11.1 Skills development is an important part of the Business Growth Programme and successful technology grant applicants are obliged to enrol one or more of their employees on a relevant skills training programme within six months of the grant being approved. This should typically occur at the NVQ Level 3 and above to support higher skills development. It is also the intention that training should be provided by one of the institutional network members.
- 11.2 Whereas Section 9 focused on commercial outcomes that have occurred as a result of the Technology Grant, attention here turns to the benefits experienced by both employers and employees as a result of training they accessed. It begins by providing an overview of the nature and type of training that has been undertaken.

Nature and Type of Training

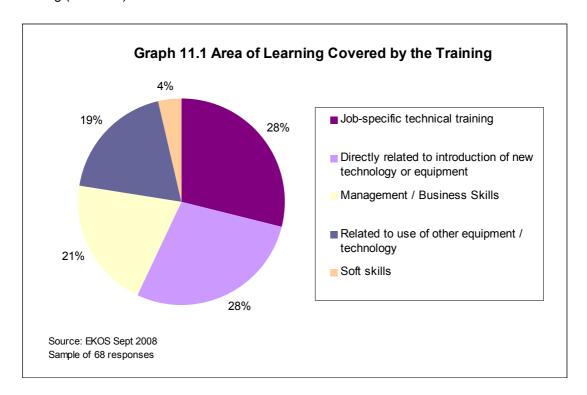
11.3 The vast majority of respondents (85% / 65) reported that training accessed through the Business Growth Programme was made available to some employees rather than all of them. This is perhaps not surprising given the difficulties SMEs face in releasing staff for training purposes.

| Table 11.1 The Nature and Format of Training | | | | |
|--|----------------------------------|--|--|--|
| Aspect of the Training | Response percent / sample number | | | |
| Targeted at all employees | 15% /65 | | | |
| Targeted at some employees | 85% /65 | | | |
| Not related to new equipment | 45% / 64 | | | |
| Directly related to new equipment | 55% /64 | | | |
| On the job | 31% /64 | | | |
| Off the job | 69% /64 | | | |
| Provided in house | 10% /62 | | | |
| Delivered by an external provider | 90% /62 | | | |
| Non-Accredited | 43% /51 | | | |
| Accredited | 57% /51 | | | |

- 11.4 There seems to be more or less an even split between those companies that accessed training directly related to new equipment (55% / 64) and those that used the Programme to address other skills needs (45% / 64). There is a slight bias towards the former.
- 11.5 The vast majority of training takes place at colleges and universities, although just under a third (31% / 20) of the sample report that training took place on company premises. Two reasons underlie this apparently high proportion. First, if the training is related to equipment, it may only be possible for it to be delivered at company premises. Second, institutional members of both the Construction and HPE Networks, in particular, have responded to employer needs and begun delivery on-site.
- 11.6 A relatively significant number of respondents (37% / 22) reported that the training received was non-accredited. This group is likely to include companies that accessed training directly related to the purchase of new equipment for which there is no formal qualification or other validation. It is also likely to include those companies for whom the acquisition of key skills and competencies is more important to their development than formal qualifications. The Programme's flexibility in being able to respond to individual company needs in this way is to be commended.



11.7 Turning to the content of training, corroborating the findings mentioned above, much of the training has been related to either the introduction of new equipment or other technology (67% / 51). A quarter of the sample has also accessed management related training (29% / 22).



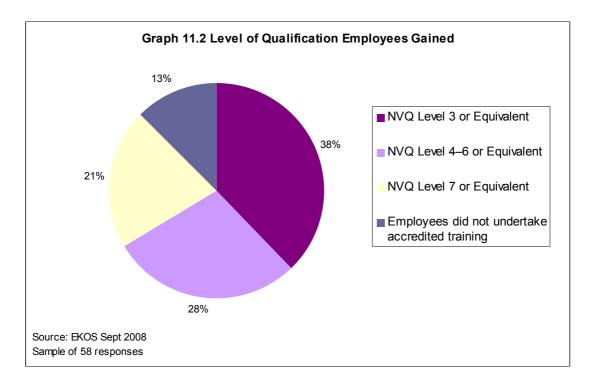
11.8 The Business Growth Programme has been designed to support higher level skills training. As shown in the chart below, it is a little disappointing, therefore, that the majority of respondents reported that training accessed through the Technology Grant was either not accredited or was below Level 3 (39% / 28). That said, around a third of the sample reported that employees had accessed higher level skills training, that is, training between levels 3–6.

Employer Perspective: Benefits and Outcomes of Training

Qualifications

11.9 It was noted above that a small proportion of employees accessed accredited training. Of this sample, virtually all of them completed courses with a qualification. As shown in the graph below, this has predominately been at Level 3.

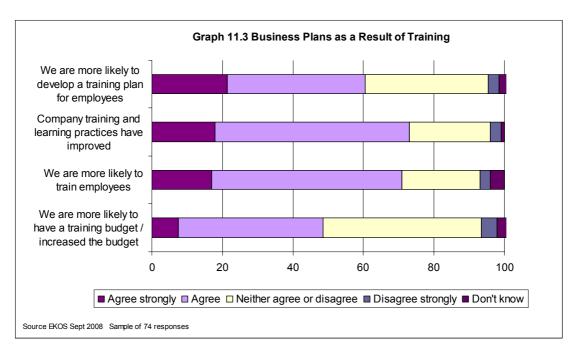




11.10 Employees of a significant proportion of the sample (31 SMEs) have gained non-accredited qualifications. These include national certificates, City and Guild qualifications and manufacturer specific accreditation.

Organisational Changes

11.11 It is well-documented that many employers can be reluctant to access training, mainly because of the barriers they can face in so doing. However, it is evident that, because of the benefits they have experienced (such as improved employee performance and increased productivity), the Programme has played a role in changing employers' views and approach to workforce development.

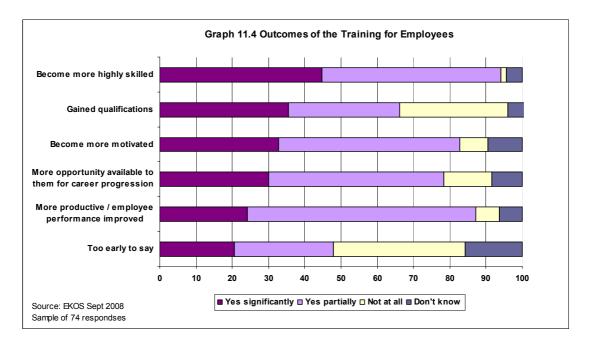




- 11.12 As shown in the graph above, as a direct result of the Programme, employers:
 - Have improved training and learning practices (71% / 50);
 - Are more likely to train employees (71% / 50);
 - Are more likely to develop a training plan for employees (61% / 44).
- 11.13 Another benefit of the training is that it has precipitated companies to access further training. One company operating in the Construction sector, for example, reported "we are starting to work with Train to Gain to address our skills needs, which is something that we would not have considered before the Grant".
- 11.14 It seems attitudinal changes have not directly translated into a financial commitment, with half the sample not clear as to whether they are more likely to have a training budget. On a positive note, (48% / 33) respondents anticipate designating a training budget or increasing the one they already have.

Changes Observable amongst Employees

11.15 In general, the majority of respondents have noticed positive changes in employee performance and behaviour. The graph below shows that the three most dominant ways in which training has benefited employees are: (i) increased their skills; (ii) improved their performance; and (iii) increased their motivation.



Commercial Outcomes

- 11.16 A more motivated workforce with higher skills appears to be leading to other commercial outcomes for the vast majority of respondents. As a direct result of the training, respondents reported that their business had benefited in the following ways:
 - Increased productivity amongst the workforce (87% / 61);
 - Increase in competitiveness (79% / 54);
 - Increase in profitability (73% / 48);
 - Increase in turnover (70% / 46); and
 - Increase in sales (68% / 47).



- 11.17 The least experienced benefits were reduction in staff turnover and decline in sickness and absence.
- 11.18 Although most respondents have experienced both commercial and employee benefits from the Business Growth Programme, they were less inclined to attribute any growth in their business to the training they had received through it. Nevertheless, 41% / 31 of respondents attributed approximately 25% of their business growth to the training received by employees. A modest proportion (23% / 17) attributed as much as 50 to 75% of their growth to the training.
- 11.19 Clearly, the survey findings indicate that NTI skills training has positively impacted upon both companies and employees. Employees are more motivated and have higher skill levels, whilst companies have seen an increase in sales and productivity.

Employee Perspective: Benefits and Outcomes

- 11.20 The survey findings were supported by consultations with employees from a few case study companies. In general, employees have seen significant benefits from NTI related skills training. The key findings are as follows:
 - Enabling company competitiveness: A few companies have raised their credibility in the market, as they can use qualifications gained from the Programme to substantiate their expertise and track record. One consultee commented that the company is now able to "work on the same level as the big boys".
 - Further Training: The Programme has motivated employees to undertake further training. Some employees mentioned they are expecting to undertake NVQ Level 4 training.
 - *Progression*: In some instances, employees have changed their job role within the organisation because of the training accessed through the Programme.
- 11.21 In general, the employees that were interviewed as part of this study expressed a high level of satisfaction with the training they had received.

Summary

- 11.22 The main points arising from the analysis are:
 - There seems to be more or less an even split between those companies that accessed training directly related to new equipment and those that used the Programme to address other skills needs.
 - A significant proportion of training has been delivered at company premises, probably because (a) it is directly related to purchase of new equipment; and (b) institutional members have responded to employer needs and begun to deliver training on-site.
 - A significant number of respondents reported that employees accessed nonaccredited training. This should not necessarily be regarded as a problem, but as an indicator of the Programme's flexibility and responsiveness.
 - The Programme has played a role in changing employers' views and approach
 to workforce development. Most respondents have improved training and
 learning practices and are more likely to engage in further training.



- Employers have noticed positive changes in employee performance and behaviour as a result of the training they have participated in. In particular, employees have increased their skills, improved performance and increased motivation.
- A more motivated workforce with higher skills appears to be leading to other commercial outcomes for the vast majority of respondents. Respondents reported that their business had increased productivity, competitiveness, profitability, turnover and sales.



12 SME and HEI Relationships

- 12.1 The East Midlands is experiencing an 'innovation deficit' whereby the commercialisation of research and development is not commensurate with the level of expenditure that is taking place. In part, this is attributed to low levels of co-operation between businesses and the knowledge base within the region. In light of this, a key component of the Programme is to encourage greater formal and informal relationships between SMEs and institutions with the overall aim of boosting research and technology development, and improving levels of commercialisation.
- 12.2 The Networks are encouraged to facilitate the formation of following types of different relationships:
 - Facilitate SMEs accessing capital equipment
 - Facilitate 24 placements between HE and SMEs
 - Facilitate KTPs
 - Facilitate formal linkages between SMEs and HE/FE
 - Facilitate collaborative actions between HE and SMEs
- 12.3 They are not expected to have developed a specific number of such relationships (in other words, no targets have been set). However, the number of desired placements that the Networks should achieve between them has been identified.
- 12.4 This Section presents the results from the survey targeted at network members, supplemented with findings from stakeholder interviews regarding SME and HE/FE relationships. Specifically, the Section outlines the way in which SMEs are encouraged to make use of equipment purchased by Network members through the Institutional Grant and the benefits that have occurred. The latter part of the Section explores other forms of collaborative relationships. These tend to be fewer and far between, although there are examples of the types of actions that can have significant benefits to the regional economy.

SME Access to Institutional Capital Equipment

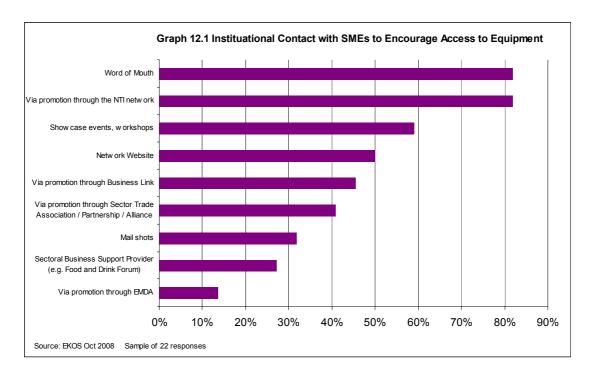
Promoting SME Access to High Technology Equipment

12.5 Graph 11.1 shows that the Networks use multiple methods to raise awareness amongst SMEs of specific pieces of equipment held by individual institutions, which they can access. Leaving aside 'word of mouth', the most popular approaches appear to be the use of Network websites, intermediaries, and attending sectoral workshops or events.

¹⁷ A Flourishing Region: Regional Economic Strategy for the East Midlands 2006–2020; (page 75).



¹⁶ http://www.emda.org.uk/innovation/deault

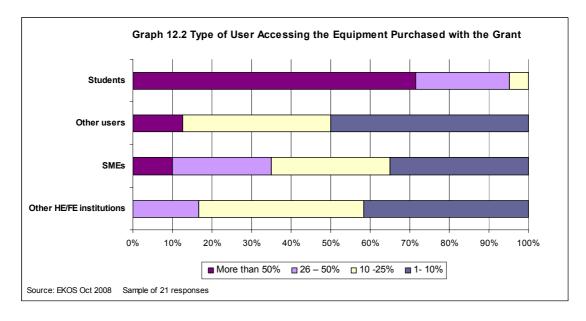


12.6 Although Networks use a variety of approaches to promote access to institutional equipment, the interview findings reveal that the two most effective are 'word of mouth' and prior engagement with the Network. Specifically, SMEs who access equipment tend to be those that have accessed the Technology Grant or have become aware of a particular piece of equipment from another business colleague.

The Scale of Equipment Usage

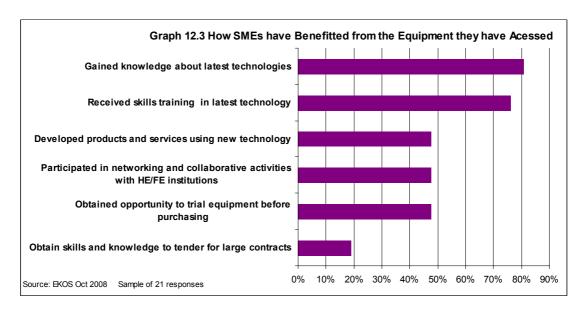
- 12.7 As indicated above, the Networks have worked hard at highlighting the availability of institutional equipment for SMEs to use. Their level of take-up, however, has been relatively modest. The majority of survey respondents reported that only a small number of companies had made use of equipment purchased by their particular institution (57% / 13).
- 12.8 To gauge the scale of take-up in more concrete terms, survey asked respondents to estimate the number of SMEs that have made use of individual items of equipment purchased by their institution (in their sector). Reinforcing earlier survey results, the numbers are surprisingly modest. Overall, individual items have attracted the interest of up to 20 companies. However, there have been four isolated cases where the equipment has generated a much higher level of interest amongst SMEs. Here, the numbers accessing them have ranged from 50–74 (two pieces of equipment) and 75–100 (a further two).
- 12.9 Lack of time is probably the main reason why SMEs have not accessed equipment as much as anticipated or desired by the Programme. Moreover, 'relevance' is likely to be an issue, with SMEs unwilling to carve out time to access equipment unless they feel that it will be of direct relevance or benefit. It is evident that Networks promote the availability of equipment. However, there may be opportunities to articulate much more clearly the way in which the available equipment can support and benefit SMEs in effect, identifying what SMEs can gain from accessing it.
- 12.10 In light of the above, it is perhaps not surprising that the number of students that have accessed new equipment is far higher than SMEs. In fact, they account for more than 50% of all users, with SMEs accounting for 25% and other institutions accounting for less than 10%. This is illustrated in the graph overleaf.





Benefits of Accessing Equipment

12.11 Even though the overall numbers of SMEs who have accessed new equipment has been modest, those that have made use of these opportunities have experienced a range of benefits as shown in the graph below.

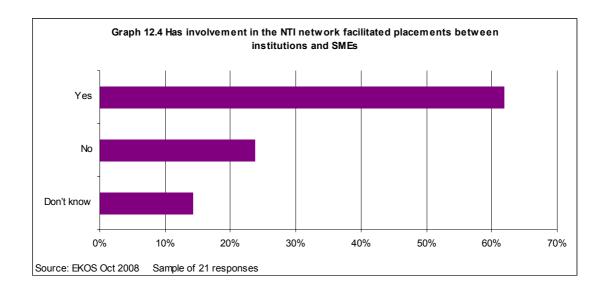


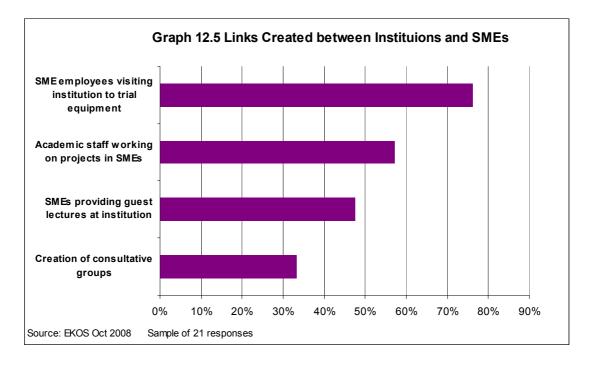
12.12 In the main, SMEs have gained knowledge about the latest technology in their sector and received training about how to use this. In addition to this, a significant proportion of respondents reported that this activity has stimulated collaborative activities between businesses and institutions, and supported the development of new products and services. This is clearly in line with the Programme's aims.

Formal and Informal SME-Institutional Relationships

12.13 As indicated in Table 11.1, the Networks have been encouraged to stimulate a range of SME-institutional relationships. With the exception of accessing institutional equipment, their overall level of success has been moderate. The sub section explores the different forms of relationships in more detail.







SME Placements

12.14 SMEs hosting placement students appears to have been one the most common forms of interactions that has taken place between institutions and companies. Just over half the survey sample reported that the Network had facilitated various forms and types of placements (57% / 13). This has been confirmed by stakeholder interviews. Respondents reported that some courses are designed to include a placement period and the institutions find it easier to place students amongst companies that have already engaged with the Network. For example, one company operating in the CDI sector was unsuccessful in obtaining a Technology Grant, but it subsequently offered placements to several photography students. In other instances, SMEs require support with a particular project and, through the Network, offer a group of students the opportunity to gain practical experience of solving a particular problem.

12.15 The length of the placement period varies. They can last between two weeks to six months or even a year. Almost half of the survey respondents (42% / 9) indicated that up to



ten placements have occurred at SMEs as a result of their involvement in the NTI network. One respondent indicated that, in their experience, more than 20 had occurred, showing that the level of this form of engagement varies across the programme.

Collaborative Working

12.16 With the exception of the Food and Drink sector, the Programme has not facilitated Knowledge Transfer Partnerships. However, the survey indicates that peer learning between SMEs and academic staff has been taking place. Over half of the survey respondents (57% / 12) reported that academic staff have been / are working on projects in SMEs, whilst a further 48% (10) reported that SMEs have given guest lectures at their institution.

12.17 There are also anecdotal examples of collaborative activity across all Networks. This includes spin-off projects that support business competitiveness and product innovation, particularly within the HPE sector. For example, the Network has been working intensively with one company that is developing non-petroleum fuel. It is reported that the support offered by the University should enable the company to reach the market quicker than if it had not received the support.

The Level of Interaction

12.18 Whilst the majority of survey respondents (85% / 18) felt that their institution had improved its profile amongst SMEs and that the overall level of engagement between the two parties had increased, it is difficult to capture the scale of interactions. This is because Networks do not formally monitor progress made in facilitating the development of different types of relationships. Further, the interactions occur in an ad-hoc manner, and opportunities vary between individual companies and institutions. This means that Network Leads are not aware of all the relationships that are being formed.

12.19 Nonetheless, it is evident that the scale of interactions is lower than expected by the Programme and two reasons account for this. The first is that SMEs are too busy and unless they can expect a benefit in the short or medium term, they will not enter into formal or informal relationships for the sake of it. The second reason relates to the lack of revenue funding. In essence, Network Leads and their members do not have the resources to promote or develop this aspect of the Programme. Their main area of activity has comprised administering and managing the two grants and even this has required in-kind contributions. Without sufficient revenue funding them, it is not surprising that the level of interaction between business and academia is limited than expected.

12.20 It can be concluded that, although the Programme has 'played a role in facilitating student placements and working relationships between academia and SMEs', its full potential has perhaps not been maximised. The same conclusion can be made for peer learning and increased collaboration between SMEs and Institutions for sector specific activity. Should emda wish to continue this in future, then attention needs to be given to the types of relationships that it wishes to promote, how they should be encouraged and the funding required to do so.

Summary

- 12.21 The main points arising from the analysis are:
 - SMEs that have accessed equipment tend to be those with prior engagement with the Network and/or have become aware of it from another business. Unlike the Technology Grant, the combination of awareness raising methods has not led to a surge of companies bombarding institutions to access their equipment.



- The main users of new equipment purchased through the Institutional Grant have been students.
- Even though the overall numbers of SMEs who have accessed new equipment has been modest, those that have made use of these opportunities have experienced a range of benefits.
- Networks have had moderate to low levels of success in stimulating collaborative relationship transcending the use of capital equipment, and student placements. Overall, it is concluded that, although the Programme has 'played a role in facilitating student placements and working relationships between academia and SMEs', its full potential has perhaps not been maximised.

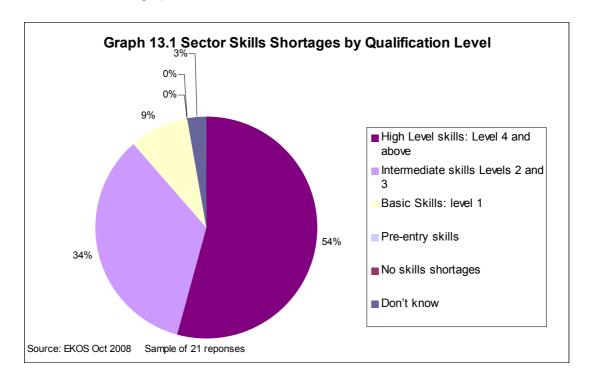


13 Curriculum Development and High Level Skills Provision

- 13.1 This Section turns to examine the fourth and final work-stream of the *Business Growth* Programme, which is centred on higher level skills provision. The work-stream has three specific aims, which are:
 - Identifying gaps in higher level skills provision;
 - Developing and delivery higher level skills programmes;
 - Ensuring more demand-led provision.
- 13.2 This Section identifies, in broad terms, the types of skills shortages faced by the sectors. It then discusses the extent to which Networks have identified gaps in provision and the development of appropriate curriculum to address this.

The Nature of Skills Shortages

13.3 As noted in the RES, the East Midlands has lower than average skills levels. It significantly lags behind the national average in higher level qualifications, and has one of the lowest proportions of its workforce educated to degree level. The survey findings reiterate this as shown in the graph below.



- 13.4 Nearly 90% (20) of respondents reported that their sector faces higher level skills shortages, namely at Level 4 and above. For example, the Food and Drink sector is experiencing a shortage of food technologists and scientists, which means that this work is being undertaken outside the region, and the UK. This presents lost opportunities in the form of employment, business development and wealth creation and, accordingly, reinforces the importance of *emda's* strategy of stimulating the demand and supply of higher level skills.
- 13.5 It is important to acknowledge that alongside high level skill shortages, around half the sample (57% / 13) reported that their sector also faces intermediate skills shortages at Levels



- 2 and 3. Again, this reinforces a further aim of the RES, which is centred on encouraging workforce development and raising the skills levels of those already in employment.
- 13.6 The majority of respondents (68% / 15) believe that, over the short to medium term, aside from some minor gaps, current provision adequately addresses their sectoral needs. Overall, this indicates that, respondents do not attribute higher-level skills shortages to the lack of current provision; rather other factors are more important. This is further borne out by interview findings, with several stakeholders stating that, in their opinion, there is sufficient provision to meet sectoral needs. As one respondent remarked "I don't think there are any gaps…"

Developing Higher Level Skills Programmes, & Demand Led Provision

- 13.7 Developing higher level skills programmes and ensuring demand led provision are two different, yet interrelated aims. The former is primarily concerned with providing appropriate graduate and post-graduate courses that support the development of the regional and UK economy. The latter is principally geared at employers and those already in employment. The aim is to ensure that the content and format of courses is tailored to their needs, specifically addressing gaps in knowledge and skills that are undermining business development and performance.
- 13.8 Originally, it was intended that each Network would form a Curriculum Development Group to identify areas of skills development and then produce the curriculum needed either to develop high level skills programmes or to meet the needs of employers.
- 13.9 In practice, however, no such Group has been formed (in any of the sectors). Instead, both the interviews and survey findings reveal that most of this work has been undertaken directly by the Networks. Hence, over two-thirds of respondents (66% / 14) reported that the NTI Network has taken the lead in developing curricula to meet the skills of sector. They have been supported mainly by the Lifelong Learning Partnership and to a lesser extent by the Sector Skill Councils (SSC). Their contribution has been comparatively modest for three main reasons.
- 13.10 First, SSC representatives cover extremely large geographical areas; a couple of the representatives interviewed by the study were responsible for the whole of the Midlands, not just the East. This clearly limits the time they can devote to specific initiatives. Second, detailed planning relating to curriculum development and provision tended to be undertaken by the LLNs, not the SSC representatives. In the main, they view their role and contribution as strategic rather than operational. Relatedly, SSC representatives tended to highlight national developments to support regional issues e.g. the forthcoming National Skills Academy for Construction.
- 13.11 Around half the survey respondents reported that curriculum development has been a major area of activity for the Networks (52% / 12), whilst 40% (9) reported that this has been a 'moderate' area of activity. Interviews with Network leads and other stakeholders reinforce the latter position. They indicated that curriculum development has been a moderate area of activity for two main reasons. First, the Networks have devoted most of their time to promoting and administering the Technology Grant. Second, it is not regarded as an urgent area of activity as current provision sufficiently meets sectoral needs.

The Type of Curriculum Developed

13.12 Turning to the way in which the Networks have influenced curriculum development, virtually all the respondents reported that they had successfully enhanced existing courses (84% / 21) and also developed new courses (80% / 20) to meet the needs of their particular



sector. These have primarily been short courses (83% / 19), addressing the short term requirements of employers and, often, tend not to lead to formal qualifications. However, as corroborated by the interview findings, the Networks have also either developed new modules for existing foundation degrees (70% / 16) or developed new foundation degrees (61% / 14). For example, the HPE Network has developed foundation degrees relating to non-destructive testing and motor sports, both of which have been oversubscribed since their inception.

13.13 The interview findings also indicate that a significant proportion of new courses or modules have been developed as a result of equipment purchased by an institution through the Institutional Grant. For example, Stephenson College has developed several courses relating to its purchase of new surveying equipment.

The Challenges Associated with Curriculum Development

- 13.14 Respondents reported upon several challenges that they have experienced in developing curriculum to support higher level skills or meet employer needs. It is useful to summarise these here in order that *emda* can take this learning to inform the development of other skills programmes or strategies:
 - Access to funding: Respondents reported that developing new qualifications and courses is expensive. For example, the 12 individual modules for the non-destructive testing foundation degree each cost between £15,000 and £20,000 to develop. In addition to this, the validation process cost £30,000. They are typical sums. Up to now, the Programme's aim of meeting sectoral needs through curriculum development has, in part, been met through in kind contributions from the institutions. Going forward, there is a risk that institutions will not develop courses in line with sectoral needs, especially if the is no Network to encourage them to do so.
 - **Time:** Developing new courses is a fairly time-consuming process. As one respondent commented, it can often take up to two years from the point of conceptualising a course to recruiting students. This is likely to be more relevant to high level skills courses rather than the shorter, non-accredited ones.
 - Keeping up with new technology demands: Many of the courses that have been
 developed to date relate to new equipment and technology. Given the rate at which
 technology develops, it can be challenging for providers to keep up with new
 developments and to either incorporate them into existing courses or to develop new
 courses.

Summary

- 13.15 The main points arising from the analysis are:
 - The survey and interview reinforce the analysis in the RES about skills shortages. Put simply, each sector is facing shortages at both the higher and intermediate levels.
 - In the main, respondents do not attribute skills shortages to the absence of appropriate training and educational provision in the region.
 - The Networks have taken the lead in identifying areas of skills development and producing curriculum. There has been a propensity to develop short, bite-sized courses to meet the needs of employers, although a significant number of institutions have been involved in developing foundation degrees in some form or another.



 Overall, curriculum development has not comprised a main area of activity for Networks, partly because there is a perception that current provision sufficiently meets sectoral need and demand.



14 Conclusions

14.1 This Section presents a series of conclusions regarding the overall performance of the Business Growth Programme in its second phase. They are structured around the Programme's four core work-streams to provide an overall assessment of the extent to which these activities have been delivered and their impact.

Management and Delivery of the Technology Grant

- 14.2 The Technology Grant is one the Programme's major successes. It has been effectively managed and efficiently delivered by the centre and each of the four Networks. This is an achievement in itself as not all programmes are delivered without operational difficulties.
- 14.3 The Programme has secured a high level of demand, which is another indicator of its success. This is particularly significant given that when it was first established, there was no awareness of it or the Networks amongst SMEs. The key learning point emerging here relates to their successful engagement, especially those that have had no previous engagement with any business support agency or programme. Often, SMEs are sceptical about the benefits of receiving business support and/or do not know where to access this from. (Indeed, overcoming such challenges was one reason why the Government introduced the Manufacturing Advice Service in 2000). The rural nature of a significant proportion of the East Midlands tends to further isolate SMEs.
- 14.4 Against the above context, the Networks should be commended for the way in which they managed to penetrate the SME business base. Further, their approaches to engagement should be applied to other contexts and programmes. Working through and with SME (sectoral) intermediaries and larger companies has been particularly effective.
- 14.5 A key aim of the Programme is for each of the four Networks to provide advice to SMEs about new technologies that can support their growth and development aspirations. There is an underlying assumption that SMEs lack knowledge about the latest technological developments and that they require institutional support with this. In practice, it seems that most SMEs are familiar with and abreast of major changes. The role of the Adviser (and the Programme) in this respect has not been as significant as may have been expected.
- 14.6 A further aim of the Programme is to refer SMEs to appropriate skills training. It is evident that in this respect the Adviser (and the Programme) has been of considerable importance. The skills assessment and the brokerage of training has been valued by SMEs.
- 14.7 The underlying intention of the Technology Grant is to boost innovation and there is evidence that, to some extent, this has occurred. Even where innovation has not occurred, the vast majority of businesses have reaped commercial benefits of some form or another.
- 14.8 It has been estimated that (to date) the Programme has contributed to £8.5m of gross sales and £2.27m of profits. When the key adjustment factors are taken into account this equates to £4.2m of sales and £1.03m of profits per annum. However, most respondents expected to experience these outcomes for several years. On this basis, it has been calculated that the Programme will have contributed to around £11m in sales and £2.7m in profits. By taking this into account, the Programme's economic impacts are substantial and represent a reasonable rate on investment.



Management and Delivery of the Institutional Grant

- 14.9 As with the Technology Grant, this work-stream has been effectively and efficiently delivered. Each Network has introduced a consultative mechanism for identifying appropriate enhancements to institutions' capital equipment. Accordingly, it is notable that the vast majority of members (participating in this study) believe that the allocation of resources between individual establishments has been fair.
- 14.10 It is also important to highlight that the equipment purchased by institutions has tended to be of a commercial nature, supporting business and sectoral needs, rather than furthering the research priorities of an individual academic or institution.
- 14.11 Clearly, those institutions that have purchased equipment through the Grant have benefited. However, indirect benefits have occurred too. In particular, the Grant has encouraged collaborative working between institutions, such as working on joint projects or offering training to one another.
- 14.12 The Grant has been made available to Network members on condition that they encourage SMEs to make use of it. This has perhaps not occurred to the level anticipated by the Programme. Take up for individual items has been fairly modest, in most cases this has comprised up to 20 companies. Only in isolated instances have the numbers increased substantially. However, when SMEs have accessed equipment, they have benefited in a variety of ways, most notably with regards to skills and knowledge development.
- 14.13 The lack of time is likely to be the main reason why many SMEs have not taken the opportunity to access institutional equipment. Unless they believe that there is a commercial benefit for them doing so, such opportunities are likely to be viewed as 'luxury'. It may also be the case that the equipment purchased is not deemed to be relevant to SMEs.

Facilitation of SME and Institutional Relationships

- 14.14 A key component of the Programme is to encourage greater formal and informal relationships between SMEs and institutions with the overall aim of boosting innovative activity and its commercialisation. Out of the various types of relationships that Networks have been encouraged to facilitate, student placements have been the most prominent. Although each Network can cite examples of other forms of collaborative activity, these appear to be the exception.
- 14.15 Overall, from the various sources of evidence, it seems that progress in facilitating relationships that foster innovative activity and commercialisation has been fairly limited.

Curriculum Development

- 14.16 The East Midlands faces a higher level skills challenge and there is an underlying assumption within the Programme that, in part, this is attributed to a lack of appropriate provision. Therefore, one of the aims of the Programme is to ensure that gaps are identified and that new courses are designed and delivered to address this. In practice, there is a consensus amongst stakeholders that, in the main, skills shortages are not attributable to a lack of provision. Accordingly, the need to develop new courses has been limited. This does not mean that activity in this area has been non-existent. Networks have played a key role, with partners, in developing new courses or modules in response to two developments.
- 14.17 First, it has been common for institutions purchasing equipment to enhance their existing courses or to develop new ones that incorporate their usage. Second, through their interaction with employers, the institutions have developed short, 'bite-sized' modules that



meet their needs more effectively than longer courses. Where appropriate, they have also changed delivery formats e.g. made courses available through long distance learning.

- 14.18 It is probably fair to say that developing the curriculum has not been a major area of activity for the Networks, but this does not mean that they have been under-performing in this area.
- 14.19 The key learning point that arises here is resolving the tension between employers' demand for short tem courses and raising skills through accredited learning of those already in employment.



15 Recommendations

15.1 This section proposes a series of recommendations regarding the future development of the Business Growth Programme. They are structured around two key themes: operational refinement and future sustainability. The former is directed at enhancements regarding the current Programme, whilst the latter is directed at sustaining the Networks beyond this.

Operational Refinement

- 15.2 The evaluation has shown that, overall, the Programme has been delivered effectively to date. The following recommendations are suggested to enhance the outcomes and impacts of the Programme even further.
 - 1. Increased Attention to Segmentation and Targeting to Maximise Programme Impact The Creative Industries Network has, from time to time, targeted specific sub-sectors to benefit from the Programme. Recently it been considering targeting companies at the larger-end of the SME spectrum. Given the high demand for the Programme, this could be extended across all Networks. Specifically, they could work with Business Link to target high-growth, high-value added companies. Arguably, they are likely to have a greater impact on increasing regional GVA than enterprises with average growth trajectories.
 - 2. Adopting Good Practice: Organisational Reviews The 'organisational review' undertaken by the HPE Network can be seen as good practice, which others may wish to follow. Its advantage is that it combines the three main diagnostics that need to be undertaken: technological, skills and general business support.
 - 3. **Engage with Train to Gain / Skills Brokers –** The study has shown that the system of cross-referral between the Networks and Business Link is operating fairly well. This could now be extended to include Train to Gain / Skills Brokers to ensure that the skills dimension received specialist support where appropriate. This should not pose a problem as Business Link East Midlands also brokers Train to Gain and other skills provision.
 - 4. **Promoting Greater Access to Institutional Equipment –** There is potential to increase the number of SMEs that access institutional equipment, especially amongst those that have not applied for a Technology Grant. The Networks should consider how this can be achieved.
 - 5. Greater Encouragement of SME-Institutional Relationships The study has show that the Programme has not developed as many collaborative relationships between SMEs and Institutions as desired. There is potential for the Networks to devote greater time to this work-stream than hitherto. The Development Agency may wish to consider setting approximate benchmarks about the different types of relationships that Networks should be seeking to develop, and put in place mechanisms for monitoring their progress. The scale and depth of engagement would become much more evident.

Future Sustainability

15.3 The East Midlands NTI has secured two new contracts, enabling it remain operational at least until 2010. However, this does not guarantee the sustainability of the Networks, which has been one of the Programme's major indirect outcomes. There is a virtually a unanimous consensus that the Networks have fostered and developed important, trusting working relationships that have reduced competition between institutional members and led to spin-off projects with each other and with SMEs. On this basis, one of the key priorities for



emda should be how it can secure the sustainability of the Networks, as they can be used to support RES objectives, as well as to take advantage of new funding opportunities. Indeed, given their wealth of experience and expertise, it would be inefficient and unproductive not to make use of them in other contexts.

- 15.4 In light of the above, EKOS recommends that *emda* should continue to provide revenue funding to NTI and the Networks to support them towards full sustainability in the medium term. This would enable the Networks to undertake follow-up activity relating to the Programme and support other regional developments. Specifically, the Networks have the potential to play a role in the following areas:
 - Awareness Raising: Promoting Innovation and Skills in Parallel One of the underlying issues that the Government's Manufacturing Advisory Service is seeking to address is the importance of raising productivity to keep pace with global completion. Similar parallels can be drawn here, particularly within the current economic climate. Networks should continue to play a key role in raising awareness of the importance of innovation and skills development around the region. With regards to the latter they could act as an important channel to communicate Train to Gain and other skills development packages, especially given that employers are likely to be predisposed of reducing investment in skills at a time when they should be increasing it.
 - Accessing Funding (for Sustainability): NTI has submitted an application to
 access the Further Education Sustainability and Innovation Fund and, if
 successful, the Networks would play a key role in its delivery. If the Networks
 were sustained through emda revenue funding, this would place them and the NTI
 at the forefront or at least at a competitive advantage in accessing other funding
 opportunities too. The aspiration should be towards achieving sustainability over
 the medium term.
 - Supporting iNets Following the recommendations of the region's Innovation Strategy, four iNets (innovation networks) are currently being established to support innovation and improve the competitiveness of businesses in the region.¹⁸ There is significant potential for the NTI Networks to support the work of the iNets reahrdign the impletmation of the strategy and synergy to be realised.
 - Supporting the LSC Employability Agenda The study has shown that institutional members can be responsive and flexible to employer needs; in some cases, course content and the format in which they have been delivered have been specifically designed to make it easy for them to take up learning opportunities and ensure they are relevant. On this basis, they can play a more defined role in supporting the LSC's workforce agenda by ensuring that provision within their institutions is aligned with and responsive to employer demands, as well as ensuring that they focus on the region's priority skills issues.
 - Developing relationships or extending membership to High Level Skills and/or Train to Gain Advisers: The agenda of the Regional Skills Partnership can be further supported if membership of the Networks is extended to include the new High-Level Skills Advisers that are being recruited for each iNet and/or Train to Gain Advisers. This would provide the Networks with 'on-the-ground' insights into skills needs, gaps, which they in turn could use to influence provision and curriculum.

¹⁸ They are consortium-led organisations led by universities or trade associations and will be responsible for developing and delivering sector-based initiatives to maximise commercial innovation.



• Cross-Network Working – There are one or two isolated examples of links between the Networks. There is potential to identify opportunities for cross-Networking working, which the Networks could explore.

