

Good Practices on Regional Research and Innovation Strategies for Smart Specialisation

Interface - The Knowledge Connection for Business

Scotland

December 2012





Table of Contents

1	Basic Data of the Practice	3
2	Introduction: Regional Smart Specialisation Background	
3	Description of the Practice	
4	·	
5	Lessons Learnt	. 15

1 Basic Data of the Practice

1.1 Title of the practice

Website:

Interface - The knowledge connection for business

Interface provides a central point of access for industry to Scotland's research base through its unique matchmaking service. Its aim is to maximise business potential by stimulating innovation and matching a company with the relevant expertise at universities, which can help develop solutions to solve business challenges.

Precise theme/issue/policy tackled by the practice ☐ Clusters ■ Innovation friendly business environments for SMEs ☐ Research infrastructures, centeres of competence and science parks ☑ Universities ☐ Digital Agenda for Europe ☐ Key enabling technologies ☐ Cultural and creative industries ☐ Internationalisation ☐ Financial engineering instruments ☐ Innovative public procurement ☐ Green growth ☐ Social innovation In particular: ■ Open innovation ☐ User driven innovation Process of regional change initiated: ☐ Transition ☐ Modernisation ☑ Diversification ☐ Radical foundation of a new domain Geographical range of the practice NUTS 1 - UKM 1.4 Contact details Dr Siobhán Jordan, Director, INTERFACE - The knowledge connection for business 1-7 Roxburgh Street, Edinburgh, EH8 9TA, UK E: siobhan@interface-online.org.uk; Tel: +44 131 651 4790 **Sources of information**

www.interface-online.org.uk

Knowledge exchange supplement http://bit.ly/O1f79J

2 Introduction: Regional Smart Specialisation Background

The overarching direction for Scotland's future prosperity is articulated in the Government Economic Strategy (GES), which was 'refreshed' in September 2011, to take account of current global trends and Scotland's relative performance. The core objectives of Smart Specialisation' in Europe 2020 of 'smart, sustainable and inclusive growth' fit well with the GES. The GES highlights innovation as a key economic driver, affecting the growth of productivity, companies and sectors. It also recognises that innovation is broader than the traditional focus on technology and R&D, requiring "input from numerous sources customers, competitors, academia and other business.

The delivery of Scottish Innovation policy is articulated in the business plans of Scottish Enterprise, Highlands and Islands Enterprise and the Scottish Funding Council. Scottish Enterprise's Innovation approach is predominantly through our key sectors and working directly with growth potential businesses. The goal is to expand the community of innovative companies and quicken the commercialisation process leading to faster market-ready products and services. Scottish Enterprise has various support mechanisms for the delivery of innovation support direct to Scottish businesses. There are also a number of key sector projects which prioritise innovation through sectorally targeted and delivered activity and there are a number of other funded organisations and trade bodies that support the innovation system.

A key strand of Scotland's economic development objectives has always been focussed on the development of key industry strengths. The main growth sectors in Scotland are Creative Industries; Energy; Financial Services; Food & Drink; Life Sciences; Technologies & Engineering and Tourism. These sectors account for 46% of total Scottish GVA in 2010, with energy (including North Sea oil & gas revenues) accounting for almost 20%. In employment terms, the growth sectors account for 30% of jobs, with tourism the largest sector. Life sciences and digital media account for a small proportion of the economy on both measures. These sectors all have industry lead strategies outlining their aims and objectives, along with the innovation aspirations they plan to achieve during the period of the strategy. All the sectors have Industry Leadership Groups which contain industry, academia and public sector experts who determine the vision, strategic direction, and ambitions for the sector.

The rationale for applying a sector specialisation approach to economic development is well proven especially in current turbulent economic conditions. These specialisms are expected to outperform the average and to provide a disproportionate impact on the economy.

Scotland is supportive and engaged in the European Commission's Regional Innovation and Smart Specialisation agenda (RIS3) but has not registered on the "Smart Specialisation Platform". Instead, Scotland is one of a few regions, that have been asked by the Commission to work' directly with it to develop their Smart Specialisation Strategy.

3 Description of the Practice

3.1 Executive summary

For any University, developing collaborations with small and medium sized enterprises (SMEs) offers many challenges with respect to identifying companies, engaging and influencing them to consider a mutually beneficial collaboration and catalysing the connections to ensure sustained relationships. Interface-The knowledge connection for business, has developed and successfully applied intelligent brokerage mechanisms to facilitate university-industry relationships in the UK.

Interface hosted by the University of Edinburgh comprises 24 partner Universities and Research Institutes within Scotland. The partners have come together by mutual consent to provide a central point of access for companies to tap into their world leading expertise across a wide breadth of disciplines from science, engineering and technology to arts and humanities. Interface core aims and objectives are to:

- provide a central point of access to the knowledge, expertise, services and facilities available from Scottish Universities and Research Institutes for industry and commercial organizations;
- provide detailed expressions of interest on the capability and capacity in response to enquiries
- stimulate demand by companies across all sectors and sizes (in particular SMEs) for expertise and commercial opportunities;
- filter and direct enquires to individual research groups and monitor progress of enquiries until a conclusion is reached including support and guidance on funding options

The Interface strategy aims to stimulate demand for knowledge exchange between industry and universities and research institutions through creating sustained partnerships, proactive marketing, stakeholder engagement and infrastructure management including research into long term sustainability options.

Interface has introduced over 1227 businesses to academic partners and 600 collaborative projects have been facilitated since 2005. In the past 12 months 306 Scottish SMEs were supported with 401 expertise specifications issued to academic partners an increase of 21.5% compared to the previous 12 months. Outputs include a wide range of collaborative projects with a majority being through feasibility studies, student assignments/placements and Innovation Voucher supported consultancy. Interface has gone from strength to strength over the last year broadening its reach across all industry sectors from food and drink to tourism and all regions both rural and urban.

With a 92% satisfaction rating from client businesses, the key unique selling points include the business led approach in delivering a free, impartial and bespoke brokerage service. Moreover the team are experienced practitioners who establish trust and are determined to identify and facilitate the most appropriate solution for the business. The companies supported by the Interface team are already demonstrating significant business benefits form their academic partnerships including new products, sales and international links. As a result a new breed of companies are emerging that look to academic institutions as a partner of choice when considering innovating within their businesses. Many case studies can be found on http://www.interface-online.org.uk/

3.2 Key features of the practice

- Free, impartial and bespoke brokerage service: to companies regarding the specialist expertise; including research and technology, consultancy, industrial placements and access to equipment and facilities. The team matches business need to academic expertise and provide support to facilitate productive R&D collaborations for mutual benefit.
- **Unique model:** that offers businesses the impartiality of understanding available academic capability and capacity and speed of response without having to individually contact many different research groups that may appear relevant to their business requirements.
- Face to face brokerage: through regional offices and acting impartially to help engage, catalyse and connect with businesses
- Proactive translation service: to the private sector to address the issue that they "don't know what
 they don't know" by promoting suggestions of relevant expertise from across the academic
 institutions
- **Expertise:** across both sector and regional capabilities within the operations team to ensure widespread engagement with the business community
- **Identifying** challenges the businesses are facing and help them understand how academia may be able to help them solve their technical or business challenge.
- Underpinning operational activity with proactive marketing activity in the form of a
 comprehensive website, case study materials from a wide range of sectors, organizing events, the
 use of social media, webinars and webcasting to offer new means of engagement. New innovative
 ways of delivering content has resulted in 17% of all enquiries originating from events and 22%
 directly via website or by phone.
- **Networks:** Being seen and staying in contact with 17% of enquiries from repeat business through focus newsletters/e-campaigns; attending, presenting and exhibiting at events
- Active engagement with a network of intermediary organisations (Enterprise agencies, Chambers
 of commerce and trade bodies) in all of Scotland's regions and key sectors to generate leads
 through referrals which now account for 37% of the Interface leads.

3.3 Detailed content of the practice

The central role of innovation in creating future prosperity and quality of life is widely acknowledged and accepted. Innovation is at the heart of economic development policy at UK and Scottish levels. Policy and practice is increasingly focused on a broader model that also takes account of the different kinds of drivers of innovation, and an understanding that innovation must be **demand-led**. The knowledge within Scottish academia has an obvious and important role to play supporting innovation. However, while evidence shows that the majority of Scottish firms are 'innovation active', the most important sources of information for innovation are market-based (customers, suppliers and competitors). Public sector and university sources are found to be the least often used, suggesting a need for ongoing effort to build demand for knowledge exchange with universities.

Scotland's expenditure on R&D in Higher Education (HE) compares favourably with most competitor economies. However, business expenditure on R&D is less than half the UK rate, which in turn is well below the OECD average. This is crucial as OECD studies have confirmed that business R&D is the optimum driver of economic growth. Therefore increasing rates of business R&D is an important strategic issue. In parallel, Scotland must improve the exchange of expertise and knowledge between universities and research institutes on the one hand and businesses on the other.

The key Scottish Government strategies and frameworks make clear the need for intervention via the Interface programme to allow practical application of the excellent R&D in the academic sector to drive economic impact in the business base. However, whilst there is clear strategic fit, market failure must be identified to justify public intervention. The feedback from both Interface's annual surveys of beneficiary companies and stakeholders, and in the evaluation of the programme (EKOS 2010), confirms the service continues to address systemic market failures in the innovation process.

The market failure issues affecting HE/business interaction are well documented, and typically take the form of information failures (each party has only limited information on the capabilities and requirements of the other, thus inhibiting productive collaboration) and "externalities" (where the ideas generated by one firm's R&D can be shared by other firms, creating a disincentive to invest). Regular beneficiary surveys and the formal evaluation provide evidence that Interface is directly addressing these market failures. This market failure of lack of information may be considered as follows:

- many business, particularly SMEs, may not be aware of either what expertise exists within the
 academic base, or where to access this expertise (which is the appropriate organisation to
 approach);
- lack of understanding by businesses of the expertise within the HE base, and of the needs of business on the part of academics has constrained interaction;
- the costs (both financial and time) to individual companies of obtaining commercial or market information to support their innovation needs may be seen to generate insufficient benefits (returns);
- businesses may be unable to access information on up-to-date business best practice, new technical or operating practices or may not be aware of how to access this information. This in turn may restrict their ability to compete by keeping up with trends and new opportunities;

Stakeholder and beneficiary surveys have confirmed that that lack of awareness of the benefits of collaborating with HE was a major issue for SMEs, and one that Interface was helping to address and that the input of Interface at an early stage helped companies to articulate their requirements in a way that would have meaning to the academic community, thus enhancing the chances of a finding a suitable collaborative partner and achieving a positive outcome. The annual beneficiary survey also identified that for many users of the service, Interface had saved them time and money in helping to find a suitable partner.

Interface provides a free, impartial and bespoke brokerage service to companies regarding the specialist expertise; including research and technology, consultancy, industrial placements and access to equipment and facilities. The team match business need to academic expertise and provide support to facilitate productive R&D collaborations for mutual benefit. The face-to-face nature of the Interface model means that local presence helps to stimulate business demand. The programme has evolved from its launch in 2006 with a team of three and a single office in Edinburgh to the current operations with 17 staff dispersed throughout Scotland. Recognising the geographical spread of businesses throughout the region staff are based in Edinburgh, Glasgow, Inverness, Dundee and Aberdeen in order to directly engage with local businesses.

Interface is a unique model that offers businesses the impartiality of understanding available academic capability and capacity and speed of response without having to individually contact many different research groups that may appear relevant to their business requirements. This impartial mode of operation and neutrality is seen by the private sector and academic partners as key to exploring the benefits of knowledge exchange.

Interface takes as its starting point the needs of its business clients, and seeks the expertise most appropriate to meeting those requirements, regardless of where that is located across Scotland. This is in contrast to other programmes that are linked to one or a few academic institutions / specific sectors. This neutrality allows Interface to act as an honest broker, a feature that is consistently identified as a strength by stakeholders and HEIs alike. It is also a 'one-stop-shop' offering a single point of entry for businesses seeking academic expertise. Pre-start, SME or larger client companies are able to obtain 1:1 advice on their particular business requirement. Initial screening determines if their requirement is suitable to explore as an academic collaboration. If deemed not suitable (e.g. at too early a stage or otherwise) the company is referred to other support mechanisms e.g. Business Gateway.

Expertise enquiries fall into two categories:

- Problem solving where the company does not have the in-house capability and is seeking to collaborate/ subcontract a university partner to undertake this
- Horizon scanning companies who are seeking to move into a new area of business/ develop a
 new product or process and wish to know what the current developments in technology or
 otherwise by collaborating with an academic group

In outline terms, the **intelligent brokerage service** is delivered as follows:

- in response to direct or referred enquiries from companies of all sizes and sectors, the team will work
 closely with its 24 HEI partners to identify relevant expertise from the Scottish research base to meet
 the organisation's needs;
- from the initial approach the team work with the company to clarify needs and helping to articulate the
 enquiry. During these reviews the team will gain a good understanding of the SMEs needs which will
 aid in highlighting areas where wider collaborative engagement with the science base may be
 beneficial.
- from the information supplied and following the decision of the company, Interface initiates a search to
 potential HEIs and gathers suitable responses. Interface then facilitates introductions to potential
 collaborators from across the entire Scottish research base;
- the programme is impartial and it is up to each individual company to select the most appropriate collaborative partner for their project;
- the project executives will also provide advice on potential funding options as appropriate to the nature and scale of the proposed collaboration.

It is important to note that the Interface team will invest a significant amount of time and effort at the early stages of the process, in particular in helping companies to frame and articulate their enquiry. The feedback from the HEIs is this has greatly improved the quality of the enquiries coming through the system, enhancing the chances of successful outcomes.

The desirable outcome from an Interface enquiry is a collaboration/ partnership between a Scottish Higher education institution and the company. Collaborative projects once commenced are led by the Institution, but are closely monitored by the Interface team. Effective delivery of the Interface service depends on the close cooperation of the partners through the nominated points of contact based in the university organisation. Their responsibilities are set out in an operating plan, signed by each institution. Progress with each enquiry and project is undertaken on a regular basis through emails and phone calls with the lead business champion.

Outcomes from the programme of activity will include knowledge exchange, business and product development, process or service improvement, or analysis and testing. These outcomes will be developed through leverage of existing support mechanisms such as Innovation Vouchers, Knowledge Transfer Partnerships or Scottish Enterprise Innovation Support. In many instances these short scoping studies will provide the SME with reassurance that their initial idea is worthwhile to develop further and put it in a stronger position to self fund or seek further funding form a 3rd Party. Furthermore the outcomes will in many cases result in a sustained relationship between the SME and the academic base leading to longer collaborative projects in the future.

Marketing and promotion of the role of Interface is critical to ensuring that relevant companies and other organizations that support businesses are aware of the service and the benefits of collaborating with academic groups. The marketing strategy includes the following key activities:

- 3rd Party events are attended by the Interface team either in a networking capacity or exhibiting/presenting. Given the rural nature some of these events will be delivered online via blended webinars to target specific sectors.
- Intermediary meetings Regular meetings will be held with a variety of stakeholders who will provide referrals including Scottish Enterprise and Highland and Islands Enterprise account managers, industry sector and innovation specialist teams, Chamber of Commerce, Trade Associations etc. to raise awareness of the service and outcomes
- Interface **website** is the primary source of information available to internal and external customers and features a considerable number of case studies, funding options, news and details of ways of collaborating with academic partners.
- Case studies Around 30 new case studies are developed each year to encourage companies by peer example to engage with the academic sector to grow their business
- **Press/PR** the programme has regular contributions and case study promotions through local and national press, trade association journals and e-bulletins etc.
- **e-marketing activities** including regular e-newsletter to over 3000 recipients, e-marketing campaigns to specialized industrial sectors e.g. tourism, creative industries etc.
- Social Media is regarded as strategic marketing tool by Interface. The primary objective of these
 activities is to raise awareness of the Interface service and create new opportunities through
 further engagement with current stakeholders, clients and potential clients.

The delivery of the Interface service fits very closely with the industry sectoral focus of regional innovation in Scotland with the majority of businesses representing the key industries including food and drink, Creative Industries (including digital), Energy (including renewables), Financial and Business Services, Life Sciences and Tourism. We give particular priority to creating demand for, and supporting research and development and innovation in Scottish businesses, particularly those operating in the priority sectors. The

existing project team has developed a wide network of contacts across Scotland both in urban and rural areas as these bodies (including the enterprise agencies, trade sectors, and local fora (e.g. food and drink groups) recognize the key benefits of enhanced links between their member companies and the research base.

In line with the strategic importance of the food and drink sector to Scotland and the recognition that innovation can drive the delivery of new products and processes 6 of the staff are dedicated to supporting this sector through Interface –food and drink. The current Scotland Food and Drink Strategy identifies the need for greater commitment by the industry to investment in research and development and innovation if it is to continue to grow and compete on UK and international terms. Whilst Scotland's food and drink industry has well developed business to business support networks for innovation, historically the sector has not turned to Scottish universities for problem solving, technological expertise or other areas of knowledge. The team are directly engaged with the relevant trade associations and levy bodies, encouraging the uptake of multi-disciplinary, collaborative projects that address key challenges sub sectors including meat, dairy, fish and processing.

Over 2011-12, with proactive activity across all 11 sub-sectors of the Creative Industries sector, a higher percentage of enquiries have been received including fashion, arts and crafts; advertising, publishing and media; film, TV, radio and music. Improvements in accessing previously difficult to reach companies and building close links with organizations such as Creative Scotland and Cultural Enterprise office has made a tangible difference with a 42% growth in enquiries over the past 12 months. Looking ahead one of the areas of growth for the Interface service is supporting the adoption of new product development for the tourism and leisure industry.

In summary, the core activities of the Interface project are delivering impacts that relate to Open Innovation and Smart Specialisation policies and strategies.

Global leader in microwave-based technologies to heat and condition liquids and gases on an industrial scale, **Advanced Microwave Technologies (AMT)** has increased sales and expanded the company through an increase in its workforce. This success is as a result of Interface introducing the company to **Queen Margaret University, Edinburgh** to explore the use of the technology to pasteurise fruit juice and develop demonstrator facilities. "Our Division of, Dietetics, Nutrition and Biological Sciences at QMU now has a very strong working relationship with AMT.... Without the initial introduction brokered by Interface this fruitful arrangement would not have occurred." Dr Mary Warnock Queen Margaret University

Renowned for its innovative approach to creating premium food ingredients, **Macphie of Glenbervie**, approached Interface to identify areas of academia which could help them address 4 key business challenges. These ranged from reducing saturated fat content and the use of chemical emulsifiers to create "cleaner label" products whilst maintaining food flavour, texture and shelf life to improved packaging for their products. From a collaboration with **Glasgow Caledonian University** Macphie have taken new products to market incorporating natural emulsifiers with sales value of c£100,000. They expect, with "clean label" demands from retailer and customer requirements, this value to continue growing.

Interface linked **UWI Technology Ltd with Heriot-Watt University**, the firm behind the award-winning packaging label that indicates a warning when a product has gone past its 'use within' date once opened. This collaboration to access unique microfluidic technology has resulted in 4 new licence deals for the University this year and will continue throughout the development of the product for application in other markets as well as food including cosmetics, pharmaceuticals and aerospace.

Propeller Multimedia is a specialist software company developing speech and language therapy rehabilitation tools. To aid further development of its products, Interface brokered a partnership between the company and the Scottish research pool for brain imaging (SINAPSE). The collaboration has injected fresh new approaches to the business and driven new product development. The results include a20% increase in sales, expansion of premises and new global markets. "This is the sort of research that we as a small company could never fund ourselves, but through Interface and SINAPSE, we are working with the foremost brain imaging specialists in the world. It's fantastic." Dean Turnbull, Managing Director

Sitekit is recognised as the leading provider of web solutions to the NHS in England. With no previous links to Scottish Universities, Sitekit approached Interface in relation to setting up a collaborative project within the field of software agents. "Interface was instrumental in helping Sitekit to establish invaluable links with the **University of Stirling and MIT** which have been influential in developing the R&D and innovation culture within the company fulfilling both immediate term and long term objectives." Campbell Grant, SiteKit CEO

For example **Equal Adventure** developed and created a prototype of snowboard bindings for double leg amputees and needed to complete stringent laboratory based assessments of the prototype to validate the bindings. They approached Interface to provide assistance in accessing a biomechanist expertise to conduct the testing of the prototype. "Interface linked us to the expertise in the **University of Strathclyde** which has been invaluable and enabled us to extend our product range making outdoor adventure even more accessible to all." Suresh Paul, Principal Advocate, Equal Adventure

3.4 Bodies and stakeholders involved

Policy in innovation and higher education has long recognised the need for measures to help remove barriers, fill information gaps, facilitate interaction with the knowledge base and incentivise engagement. Interface encompasses all of these elements, and has demonstrated consistently strong performance in encouraging new interactions between SMEs and academia. The Strategic direction for Interface is in line with the Scottish Funding Council Policy on knowledge exchange, the Scottish Government National Outcomes and Universities Scotland policy. Interface aligns with and contributes to a number of key policy objectives for local, regional and national strategies as described below:

- Sustainable Economic Growth The Scottish Government Economic Strategy (GES)
- Science for Scotland Science Framework
- Innovation for Scotland Innovation Framework
- New Horizons Responding to the Challenges of the 21st Century

The **Scottish Funding Council Corporate Plan** has a dedicated outcome of "Knowledge Exchange" that looks to achieve: (i) an effective, demand-driven exchange of knowledge and expertise with business and public

and third sector organisations, which enhances competitiveness and promotes economic growth; (ii) easy access for small and medium-sized enterprises (SMEs) to the facilities and services of colleges and universities; and (iii) continued investment in Scotland to exploit knowledge, develop solutions, and demonstrate applications. By providing the link between the private sector and the HEI/RI base in Scotland, Interface actively contributes to the successful achievement of these aspirations.

The core funding for the Interface programme since its inception has been through The Scottish Funding Council (SGC) which is the national, strategic body that is responsible for funding teaching and learning provision, research and other activities in Scotland's 37 colleges and 19 universities and higher education institutions.

The Interface programme is managed, monitored and evaluated by the Interface Advisory Board which includes Vice Principals, heads of Research and Knowledge Transfer Offices, 3 leading industrialists and representatives from SFC, and Scotland's enterprise agencies Scottish Enterprise and Highlands and Islands Enterprise. The Advisory Board for Interface provides independent advice on the development and implementation of strategy in support of the mission for Interface, and on the operational activities through its quarterly meetings.

3.5 Timescale and maturity

Interface, The knowledge connection for business, was founded in August 2005 and formally launched in March 2006. Since then it has steadily increased resource capacity across the team and tailored the service to meet the needs to businesses and the University partners. Today it can be regarded as a mature initiative, which is widely accepted by the business community and staff based in regional offices throughout the length and breadth of Scotland.

3.6 Legal framework

The Interface staff are hosted by University of Edinburgh (through its wholly owned subsidiary Edinburgh Research and Innovation Ltd) on behalf of all the 24 University and research institute partners. The Interface Advisory Board provides independent advice on the development and implementation of strategy in support of the mission for Interface and on the operational activities. Members are drawn from the business, academic and stakeholder communities.

3.7 Financial framework

The current funding for the service is provided by Scottish Funding Council, European Regional Development Fund and Highland and Islands Enterprise. The service is completely financed through public sources and has limited possibility of generation fee based income due to the early stage businesses that are supported.

4 Monitoring and Evaluation

The work of the Interface programme is monitored on a yearly basis through an annual survey to the companies supported. The outputs are distilled into an annual report Interface Annual Report 2011/12

The results from the survey in August 2012 indicate that businesses are continuing to reap the benefits from the academic partnerships facilitated by Interface. The response rate was 31% (179 respondees). The overall satisfaction ratings for the Interface service from its client businesses was 97%. Highlights include:

- 50% of the businesses experiencing a significant increase in profits
- 18% of the companies forecasting an increase in sales and exports of over £17 million.
- 6 out of 10 stated that their company's reputation had been enhanced as a result of academic collaborations
- 55% indicated an improved business strategy.
- It was forecasted that 441 jobs will be created 225 jobs to be safeguarded over the next three
 years.

In addition an indepth independent evaluation of Interface programme commissioned by the SFC was undertaken in Nov 2010 and demonstrated beneficial outcomes, results and impacts and can be accessed via the link below:

http://www.sfc.ac.uk/web/FILES/Our Priorities Knowledge Exchange/Interface Evaluation Final Report
Nov 2010.pdf

The report indicated professional and expert capacity to deliver the project and the effectiveness of the programmes in delivering against targets and a steady and consistent year on year increase in the numbers of projects initiated despite the economic downturn.

It was recognized in the evaluation that Interface is a distinctive model, and one that is strongly aligned with market demand and critical market failures. The evaluation concluded that Interface has helped companies to establish new contacts within the academic sector and has saved them time and money in doing so.

The main benefits forecast by companies were in relation to increased turnover, profitability and productivity, as well as new products, services and processes. Evidence suggests that much of this is additional and would not have otherwise happened. Other reported benefits include increased awareness and improved perceptions of the capabilities of the academic sector. A net GVA of £23.7M p.a. was estimated and the overall value to the academic sector of initial projects initiated by Interface in excess of £11 million not accounting for follow on activity from sustained relationships.

Established to support companies, particularly hard to reach SMEs, to make new links with academic research providers in Scotland and collaborate for mutual benefit, Interface has generated the following activity and outcomes to the end of 31st October 2012:

- over 1903 enquiries progressed to establishing capability and capacity
- 621 company academic collaborative projects initiated
- 257 companies in discussion or negotiation with Universities and Research Institutes

66% of enquiries are from Scottish SME's

Most notably 74% of companies that have initiated projects have not previously worked with that academic partner and 60% of projects facilitated are cross sectoral and multi-disciplinary reflecting the broad business requirements.

That demand has consistently grown, even through the recession period, suggests growing interest among companies in working with HEIs. Indeed, with growing pressure on businesses as a result of the recession, it is arguably even more important that they invest in innovation to improve company performance and develop new products and services

5 Lessons Learnt

Many of the activities developed by Interface have been informed by the client companies to ensure that demand led approach. This close co-operation with businesses and key stakeholders can be distilled into the **following success factors**:

Supply side 'push' from universities is extremely important but is not itself the complete answer. Development of business demand for knowledge and expertise is crucial. This is a well-established challenge - in Scotland and internationally - which involves culture change in both academia and in business.

Knowledge exchange works best when the partners work closely together and establish a **lasting relationship** based on trust, respect and an understanding of how their different talents produce mutual benefits. The Interface process is highly dependent on the quality of the staff and the personal contact at each stage in the process. While this face-to-face approach is resource intensive, it was consistently identified as a major strength of the Interface model by all stakeholder groups. Most notably regional offices are now established in Inverness and Glasgow to enable a more accessible face-to-face service for businesses in the Highlands & Islands and West of Scotland and deliver more proactive engagement with hard to reach SMEs.

Interface takes as its starting point the needs of its business clients, and seeks the expertise most appropriate to meeting those needs, regardless of where that is located. This **neutrality** allows Interface to act as an honest broker, a feature that was consistently identified as a strength by stakeholders and HEIs alike. It is also a 'one-stop-shop' offering a single point of entry for businesses seeking academic expertise.

From the initial phase of the project the team at Interface has developed a **specific and central role** in the knowledge exchange landscape, and has worked to ensure that this is understood by other actors and intermediaries in the innovation system. For businesses using the service, Interface effectively simplifies this picture by directing companies to the expertise that they require and any suitable sources of support.

Interface has developed very strong operational links to each partner institution and the evidence is that Interface is an effective and **cost-effective** means of engaging SMEs, and facilitating company interactions that would not otherwise happen. These interactions add value to research activities as well as generating income.

Notably the impacts achieved are being highlighted by other UK and European regions. In recognition of its unique model Interface was included as a case study in the UK Government's Innovation and Research Strategy for Growth, published by BIS in December 2011 and endorsed in the Wilson Review of Business—University Collaboration published in February 2012. As an enabler of company innovation and empowering a new breed of business innovators the Interface model is now well established and demonstrable impacts being noted.

But its wider impact of impartially overcoming barriers for business – academic engagement and demonstrating how 24 academic institutions can come together for mutual benefit is leaving a lasting legacy of **co-operation**.