

Promoting SM-E-Business through Business Support Networks

Frank Wilson¹ Tony Swash² and Stephen Anderson³

¹*Interaction Design Ltd, 13 Stonehills House, Welwyn Garden City, AL8 6NH, UK*

Tel: +44 1707 338 751; Email fwilson@i-d.co.uk

²*Regeneration and Education, Islington Town Hall, London N1 2UD, UK*

Tel: +44 207 527 3496, tswash@urban.islington.gov.uk

³*Islington Enterprise Agency, 64 Essex Road, London N1 8LR, UK, stephen@islingtonenterprise.co.uk*

Abstract. A group of regional business support networks have together investigated the status of regional support for e-business development. A study of existing requirements has enabled production of a package of 'decision support' for business advisors working with small and medium sized companies in their respective regions. The initial package has been deployed for testing and refinement in advance of public launch. This paper reports on that experience and results, and provides conclusions relevant to future regional development actions aimed to improve access to e-business by small and medium sized enterprise.

1. Introduction and Background

The increasing digital economy, made possible by the ubiquitous presence of information and communications technologies (ICT), applications and infrastructures, is generally held to be a key determinant of the increasing Europeanisation and Globalisation of the economy. A significant by-product of this effect is that regions are increasingly exposed to international trends as the protection of National boundaries becomes reduced. One result of this shift of focus to the regional level is that regional authorities must now play a stronger role in maintaining regional prosperity through targeted development strategies and initiatives.

The information society (IS) introduces both opportunities and threats that, while presenting some general features common to all regions, have special implications based on regional characteristics. It is generally held that electronic commerce disrupts historical trading mechanisms and relationships since the relative stability of traditional commerce, as characterised by writers such as Porter [1], becomes open to new kinds of challenges enabled by the extreme flexibility of electronic working and trading methods [2]. This is of special concern for small and medium-sized enterprises (SMEs) who, despite being a primary source of employment and innovation, are greatly dependent on supply relationships towards larger business.

Previously, commercial advantage gained through raw materials, relative location, and proximity to consumer markets, was a prime determinant of regional prosperity. But it has been argued [3] that the IS (digital economy) brings increasing emphasis on innovation and supportive regional infrastructure (institutions), underpinned by knowledge and human resources. It has been further argued [4] that the threat of marginalisation faced by SMEs in the increasingly digital economy can be reduced by systematic support for transformation of traditional business approaches, sectors, and networks.

Systematic support for development of regional economies, with special emphasis on SMEs, is present to some extent in all regions. This is further supported by collaboration between regions (for exchange of ideas and experiences) through membership organisations such as EURADA [5] and ERISA [6], while initiatives such as GO DIGITAL [7] provide special support to SMEs and to the regional agencies on whom they depend for advice and guidance. Promotion of 'regional innovation strategies' is also addressed by RIS and RITTS [8], who support development of specific 'regional innovation strategy projects'.

An analysis of the operational level of support in a sample of regions, conducted in 1999-2000, showed that a gap existed between the strategic level of support for business development (regional focus) and the SME level of development (specific business development). This gap is typically populated by 'business advisors' who are the front-line of regional development agencies (RDAs) and regional business support networks, or who operate as advisors for investment or technology deployment interests (banks, suppliers, etc.), or who provide a private service in management consultancy or business development. In all cases it was found that the 'business advisor' (i.e. the worker providing information and decision support directly to SME managers), faces the same challenges as the business managers themselves. There are a host of competing claims about e-business strategies, processes, technologies, operational considerations, and benefits. Many of these emanate from interested suppliers, while others are based on specific experiences or general perceptions.

A group of 5 regional agencies decided to address this gap by developing a support package for business advisors, now known as USHER [9], to address the need for e-business information and decision support enhancement in the advisor-manager relationship. USHER is supported by the CEC IST Programme Key Action II – New Methods of Work and Electronic Commerce [10]. The regions involved are (in alphabetical order) Athens (Greece), Bologna (Italy), London (UK), Rotterdam (Netherlands) and Shannon (Ireland).

2. The USHER Approach

The USHER activity was initiated by analysing the 'baseline' of support in 5 European regions, in order to characterise the local economy, the existing business support networks, and the means of provision of advisor support to managers of SMEs [10]. As part of this activity, focus groups of local business advisors were formed, and workshops were conducted to elicit requirements for improved support in decision-making concerning uptake of e-Business methods. Based on agreed requirements, the USHER team developed a specification for a package of support measures, including information and tools to support decision making in interactions between advisors and their client SMEs. The developments involve pairings of business advisors and e-business/technology developers in each participating region, and this group provide the necessary balance of perspectives for responding to user requirements.

3. The USHER Contribution and Status

The USHER contribution to the decision support activities that occur between advisors and SMEs are focused on information and tools relevant to e-business decision making. They respond to a clear set of requirements that emphasise 'illustration and exposure' of:

- Types of SMEs conducting e-Business successfully
- Rationale underpinning the decision to embark on e-Business
- Methods and technologies employed, and decision path
- Experiences of conducting e-Business
- Benefits gained and problems experienced
- Main technology and business issues relevant to decision making
- Future scenarios of relevance to planning

Analysis of the above (summarised) requirements, produced an outline definition of the USHER package as follows:

- **Handbook** of e-Business for Advisors and Managers: E-Business advisory process (how to); Internet and Business (general review); Business to Consumer Trading; Business to Business Trading, Regional Portals; Enterprise Models, ERP and Supply Chains; E-Marketing; E-Procurement.
- SME e-Business **strategy analysis**.
- **Case studies** illustrating key issues as identified in requirements (above).
- **Evolution scenarios** addressing key decision areas: Technologies; Security; Legal Aspects; Process Integration.
- **Tools** to improve decision support activities.
 - Search tool accessing collected '**business assertions**' derived from e-Business literature and on-line resources.
 - Automated **checklists** for assessment of key areas of activity.
 - Advisor **materials index** showing resources available by region.
 - Business **support networks** – illustrated examples of operation.
 - **Checklists** for use by advisors (hard copy).

Each element of the USHER 'package' has now been developed into a prototype version for testing with selected groups of advisors in each participating region, and a wider European perspective on utility of the package is being acquired by allowing on-line access to selected package elements. At the present time, there are 60 active advisors in regional focus groups, and more than 200 registered advisors obtaining access to USHER on-line support. This latter group represent a wide range of regions in Europe, and are drawn from quite diverse organisation involved in provision of support to local SMEs. A further multiplier effect is obtained by exposure of USHER developments to RDAs via EURADA, and the use of this larger constituency as a sounding board via questionnaires and interviews.

At this stage the results of early tests have been analysed and refinements to the package elements have been initiated prior to full public exposure. The key lessons learned from the development and testing experiences are now considered.

4. Experiences, Lessons Learned and Conclusions

4.1 Business Support Networks and Advisors.

Although this partnership started out with the idea that ‘business advisory process’ would have many common features across regions, they have discovered that this is a largely heterogeneous arena. In some areas the ‘business advisor’ is trained and qualified, with membership of a professional body being available to guide professional development. In others the advisor is self-developing, and relies on experience of business operation, previous business training, mentoring experience, and other activities by which he/she obtains the status of a ‘trusted intermediary’. Furthermore, there is an explicit and organised relationship between advisors and RDAs in some regions, while in others the advisors are independent and may be contracted to support regional development initiatives ad-hoc. The benefit of USHER products in helping to reinforce the capacity of regional support networks is generally acknowledged by our users. However, since they recognise a need to focus regional concerns more clearly (localisation) they also demand improved support for e-Business decision making at a local level.

A conclusion from this observation is that future regional development in Europe could usefully address the question of harmonisation of ‘small business support’ and exchange of practice for regional benefit.

4.2 Access to Decision Support Information and Tools.

While on-line access to decision support resources is generally held to be valuable, it is clear from our results that not all business advisors like to work this way. There is a general demand for a ‘portable’ and ‘printable’ version of USHER package elements, and so they will now be further developed in that direction. In addition to the access modality issues, the users also identify two further access issues - these being language related. The first relates to the language used (English). Our initial assumption that professional advisors would be comfortable with English has proven to be inaccurate. Many advisors happily work with English materials, but some do not, and translation of key elements of USHER is now being undertaken in some regions. The second language issue relates to the contrast between ‘technical’ language and ‘business’ language. The technical concepts in e-Business are often described in a way that ‘assumes’ a relationship to business concepts. However, for many advisors it is necessary to articulate e-Business in the ‘language of business’, and to make relationships between technical concepts and business concepts explicit.

A conclusion from this experience is that the accessibility of decision support information and tools concerning e-Business must be enhanced by using local language where demanded, and by expressing e-Business in clear ‘business language’ and concepts wherever possible.

4.3 Learning By Example

The use of case studies is identified as being of high value by business advisors. They naturally incline towards acquisition of experiential knowledge through storyline illustration. Our experience also shows that good narrative has also to be backed up by hard data where use of technology, claims of benefits, or consideration of business process is an issue. While advisors value a clear narrative to convey the substance of someone else’s experience, they also expect to be able to respond to factual and quantified questions with example data. It has also been observed that advisors use case study material to educate both themselves and their clients. They require access to a large set of both contrasting and complementary cases to support reasoning about e-Business options, and they especially value ‘region’ and ‘business sector’ specific case materials.

A conclusion from this observation is that sharing of SME e-Business experience requires a rich set of case experiences to support learning and decision making, and that these should be conveyed through a detailed narrative to convey 'meaning', plus supporting data to establish 'factual parameters' of interest.

4.4 Learning From Expert Interpretation

The evaluation of the USHER handbook and other materials derived from expert interpretation of current knowledge has revealed significant features of usage. Our focus group members (users) appreciate the structure of the materials, its organisation and its expression. However, in test scenarios they evidence enquiries (business questions) not closely related to, or situated within, the current structure. The information required to answer questions is present, but they sometimes evidence problems in trying to respond to a business decision issue – for example, 'what is the best way to sell online?' requires analysis of a range of related themes and issues to develop a response. Their ability to mine the information expressed in one structure may be limited by a degree of unfamiliarity, and the situation may improve. However the ability of SMEs to present novelty may provide a continuing challenge.

A conclusion from this experience is that while 'expert interpretation' of e-Business knowledge may provide a 'starter' for self-education on general principles, the ability to respond to novel enquiries requires access to a 'search' facility that allows matching of patterns of meaning in a dynamic way (support tools).

4.5 Decision Support Tools for Dynamic Enquiry

The use of initial tools for decision support in test scenarios has shown that this approach is highly valued and, although not yet fully developed in USHER, promises to be the most attractive approach for business advisors. Entering search questions to be matched to 'business assertions', extracted from a wide range of literature and on-line resources, is something they do quite easily. Being provided with a range of possible 'matches' allows them to mix and match elements of information (distilled knowledge), based on their own understanding of their client and the business problems they face. Again the issue of 'business language' arose, and the need to 'interpret' technical concepts by articulating them in the language of business. The 'tools' approach avoids the need to internalise (learn) large amounts of e-Business information, and allows advisors to interrogate received knowledge (expertise) in a dynamic enquiry whereby they can 'construct' the decision support they need in a specific situation.

A conclusion from this experience is that dynamic access to e-Business knowledge has high value for advisors since it supports decision making in an immediate way. It allows them to secure the information they need and which is relevant to a specific enquiry. It also ensures access to a growing body of knowledge without onerous 'learning' commitment.

4.6 Summary Conclusions.

Our experience of the initial deployment and testing of the USHER package of e-Business decision-support for advisors is generally positive. Advisors work in very different professional and operational scenarios across Europe. Ongoing regional development could usefully address the question of harmonisation of 'small business support' and exchange of practice for regional benefit in the specific instance of 'e-Business decision support' using advisors. The worker who must assist the SME manager in transforming traditional business, or enhancing an increasingly digital business, requires access to multiple forms of information and different access modalities. The advisors are mainly local experts in business development, and the new concepts and practices of 'e-Business' must be conveyed in 'business' terms to support understanding. In many cases decision support

materials may have to be provided also in local language. Concerning the content of materials, a rich set of case studies is required, addressing different regional and sectoral concerns, and should be an ongoing provision to reflect experiences in the changing landscape of European business. This is also addressed by other activities in IST such as BEEP [11] which collects case materials to support regional development planning.

We have seen that provision of expert interpretation of e-Business to support the front-line advisor's initial understanding of the general concepts is of high perceived value. Of higher value is the provision of dynamic access to distilled knowledge and experience through interactive tools to support 'just-in-time' access to high value knowledge.

Knowledge management for regional business development may become a more critical issue as the digital economy becomes more established.

(All USHER materials referenced in this paper are available from www.usherproject.org.uk)

References

- [1] Porter, M., *Competitive Strategy, Techniques For Analysing Industries and Competitors*. Free Press, New York, 1980.
- [2] Timmers, P., *Electronic Commerce: Strategies and Models for Business to Business Trading*. Wiley, Chichester, 2000.
- [3] Wilson, F., *Supporting SME Entry to E-Business*. UKAIS Research Workshop Series, Warwick Business School, June 2001.
- [4] Wilson, F., Swash, T., Pardo, A., and Crump, M., *Structured Support for S-M-E-Business*. In Proceedings of Human Factors in Telecommunications-HFT'2001 Conference, Bergen, Norway, 2001.
- [5] European Association of Development Agencies, <http://www.eurada.org>
- [6] European Regional Information Society Association, <http://www.erisa.be>
- [7] GO DIGITAL, <http://www.go-digital.info>
- [8] Regional Innovation and Technology Transfer Strategies (RITTS) and Regional Innovation Strategies (RIS), CEC DG Enterprise, <http://www.innovating-regions.org>
- [9] USHER - Unified Support and Help for E-commerce enterprise by assisting RDAs. CEC IST Programme, Project Number 1999-20727, <http://www.usherproject.org.uk>
- [10] CEC IST Project 1999-20727, USHER, Deliverable Report No. D1, "Status and Requirements Definition", June 2001.
- [11] BEEP project web site, <http://www.beep-eu.org>