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The development of ICT advisors for SME businesses: An innovative approach

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Abstract

The potential contribution of information and communications technology (ICT) to improving the competitiveness of small and medium-sized enterprises (SMEs) has long been recognised. However, the realisation of this potential has been problematic and over recent years there have been a number of initiatives supported by government agencies and the European Union which have endeavoured to aid and encourage the up take of ICT to enable access to such promised benefits. One of the range of factors that has been identified as impacting upon the level of ICT adoption amongst SMEs is access to, and confidence in, external specialist advice. [IOM, 1997. IT Means Business?: a survey of managers' attitudes in smaller businesses to information and technology. IoM Report. IOM, 2000 Does Technology Mean Business. IoM Report]. This article reviews one related initiative 'Technology Means Business' and offers a number of unique insights for individuals and organisations who may be involved in the development of similar initiatives now and in the future.

Keywords: ICT Advisors; SME development; TMB; ATEB.

1. Introduction

Information and communications technology (ICT) has been defined as 'the convergence of telecommunications and computing' (Gibbs and Tanner, 1997). For many years ICT has been recognised as a critical factor in the effective operation and prosperity of modern organisations. Bensaou and Earl (1999) identified that the management and dissemination of information is central to the enterprise. Utilisation of, and access to, technology was also a key feature in the explosion of the Internet and usage of the World Wide Web. The key characteristics of this included exploring and exploiting ICT to enhance communication and information exchange between organisations and individuals. However, Cornfield and Gillespie (1993) reported concerns that 'the adoption of ICT is uneven at the local level, where small firms operate, which given the improved ability of larger firms may give rise to a two tier society in local areas'. Thomas et al. (2002) signalled that the slow adoption of ICT by some firms could cause them to be technologically disabled and unable to compete effectively, becoming preoccupied with their inability to use the technology available.

There has been much discussion of the hype surrounding the business benefits of ICT, particularly e-business, so it is interesting to note a recent Department of Trade and Industry (DTI) 'Business in the Information Age' (international benchmarking) survey of 2001 (DTI, 2001). This report (undertaken annually) states that the proportion of all firms that use ICT to buy and sell goods and services fell in the UK by 12 percentage points compared to the previous year (and also in the majority of the 8 countries covered in the survey). Is this evidence of the hype of e-commerce being realised in expensive sophisticated Web sites discarded through failure to deliver or through the firms' inability to keep them up to date and operational? The declining numbers may also be a reflection of a lack of effective and appropriate advice provided to these firms when they made the original decision to invest. The time involved and cost implications of the long-term maintenance of Web sites may be considerable. Brink et al. (2002) found common problems involving time and workload pressures associated with learning and keeping abreast

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of technology developments for improving productivity and for ensuring the company maintains a competitive edge in the marketplace in SMEs.

Following a number of reviews, (for example Graham and Dominy, 1991), it was recognised that for whole economies to flourish, the smaller companies (SMEs), which make up the vast proportion of all businesses in the UK (over 99% in Wales, WDA, 2001), also needed to embrace information technology and the benefits it can bring. In addition the current government has placed great emphasis on the adoption of ICT across all sectors of society and the economy (one government target is to 'ensure that 1.5 million micro, small and medium-sized businesses are on-line by 2002'), and has recognised the potential for ICT to contribute to the growth and competitive gains of SMEs (Southern and Tilles, 2000).

A perception that in peripheral regional areas existing ICT infrastructures were inadequate and usage by SMEs was low was reported by Gibbs and Tanner (1997). They claim this has led to interventionist strategies resulting in fragmented adhoc approaches to implementation. In the same study on local development policies the regional leader in ICT initiatives was identified as Wales (53.8% of respondents had a current ICT initiative). This appears to be due to substantial tele-cottage developments related to funding provided through the WDA particularly, although not wholly dependent, on European Union funding.

Part of the problem for SMEs with take up and effective usage was 'cost of equipment and lack of suitable expertise with which to exploit it'. Thomas et al. (2002) confirmed that technical changes have resulted in impressive increases in productivity (particularly) in ICT manufacturing which, together with falling costs, facilitate rapid diffusion of ICT as a pervasive technology. In order to clarify the role which ICT is able to play for SME development, Miles and Thomas (1990) sub-divided ICT services into three types: (i) information, (ii) communication, and (iii) transactional, to which Thomas and Sparkes (2000) added a fourth type, relational. The benefits that the facilitation and support provided by independent ICT advisers to access the potential of these in a co-ordinated and business-focused manner are enormous, particularly, given the limited time and resources which the SME is able to bring to bear on the issue.

This paper considers the management of an innovative government and private sector supported initiative led by the Institute of Management—Technology Means Business (TMB)—which has been stimulated directly by the recognition of the needs of SMEs (particularly smaller firms) for appropriate and high-quality business ICT advice. By developing and confirming the capabilities of the providers of such advice, TMB aimed to contribute to the increased uptake and usage of ICT within UK business. The research question posed in this paper is as follows ''Is the TMB accreditation programme an important development and does the model of development adopted address the real development needs of ICT advisers in SME businesses?'' The paper describes the TMB initiative and the development of a model of supported development designed for ICT advisors in SME businesses. In particular three aspects are highlighted:

- The operation and structure of the initiative
- The success of the initiative from a participant's perspective
- The introduction of a blended learning model to support and continue development of the programme.

2. Background

2.1. The Technology Means Business (TMB) initiative

Although there has been considerable finance and effort invested in increasing the volume of, and access to, ICT business advisers/consultants (particularly through public sector agencies), less energy and resources have been applied to ensuring the quality and appropriateness of the advice provided notwithstanding the fact that this has been identified as a key success factor in the up take of ICT by SMEs (IoM, 1997, 2000).

Recognition that SMEs were likely to have a range of differing needs with respect to ICT related to the type of business, the markets operated within, as well as the background of individuals involved led the Institute of Management to undertake 'A survey of managers' attitudes in smaller businesses to information and technology' (IoM, 1997). The project was funded by the DTI and Compaq—a further indication that the necessity to consider the needs of SMEs in the 'ICT revolution' was being recognised by both government and the ICT industry. Three thousand IoM members (those working in SMEs) were surveyed through a questionnaire, with 709 responding (24% response rate). Along with identifying general usage of IT it was found that SMEs used ICT less when compared to larger organisations, and issues such as time and costs were significant inhibitors. One of the starkest findings was the expressed need of a significant majority of respondents for independent external support and advice when considering investment in IT.

Prompted by these findings a pilot initiative, 'TMB', was sponsored by the DTI and four commercial ICT companies to devise a 'professional industry standard aimed at developing providers of integrated business advice, and improving the service offered to small businesses' (IoM, 2000). The IoM undertook a further survey which produced broadly similar conclusions but this work clearly illustrated the shift in the focus of SMEs' use of ICT from support functions such as 'word processing, desk top publishing (DTP) and storage of information', reflected in the initial survey, in contributing to the core of the business in the second. This strategic movement was identified through 'the need to improve efficiency, the need to

improve business information and the need to improve customer satisfaction'. Additionally, many SMEs were found to consider the nature and potential benefits of 'e-business' (a term not mentioned in the earlier survey) and a significant proportion intimated they were developing an 'e-business strategy'. It is also interesting to note that at the same time 45% of sole traders responding viewed e-business as not being relevant to them. Although the report offered no clarification why this might be so the finding suggests the needs of micro-businesses require a better understanding and indicates the possibility of a service designed specifically to meet their requirements.

It was in this context that effective external support and advice to SMEs in relation to the adoption of ICT was seen to take on an increasing level of importance. The difficulty of finding expert external advice and support was identified by roughly 50% of respondents working in firms employing 50 people or less.

2.2. Programme description

TMB established a number of accredited centres in the UK one of which was in Wales based at the University of Glamorgan (under the centre operating name of ATEB). The aim of the TMB accreditation process is to provide a framework, which will assist and support the participant in becoming an accredited TMB adviser. Although TMB attempts to provide information and knowledge to business ICT advisers relating to the effective use of ICT within SMEs, its predominant role is in assessing and then accrediting advisers against a set of occupational standards. These standards have been designed to reflect both the performance and knowledge required by an 'effective' ICT business adviser, and candidates are assessed against these via the development of a portfolio of evidence (performance and knowledge focused) and through an on-line knowledge test. The original standards consisted of five performance units and three areas of knowledge (Fig. 1). The headings provide an overview of the requirements of the TMB programme.

Essentially, participants, progress through eight stages in the process, which leads to TMB accreditation by an accredited centre:

- Self-assessment exercise—review of knowledge and experience against the standards
- Induction, allocation of personal mentor/assessor
- Generating and collecting evidence against the standards requirements
- Organising evidence within the portfolio (under the guidance of the mentor/assessor)
- Final review of portfolio by mentor/assessor
- Undertaking an on-line knowledge and understanding test.
- Assessment Interview
- Accreditation by TMB Agency.

The IoM (2000) claims that the programme provides "a mark of quality endorsed by industry leaders and government" and is "raising the standard of ICT business advice". Although the TMB programme has an underlying development objective its predominant focus is in assessing and then accrediting ICT business advisers. Following the pilot, the full programme was launched in 2000, and has now been rolled out across the whole of the UK through a network of 'TMB Accreditation Centres'.

2.3. Development as opposed to accreditation

The need to develop advisers and the limitations of an accreditation-only programme was quickly recognised by ATEB. But TMB was not tasked with resourcing the construction and delivery of a complementary development programme due to limited finances and potential costs (although it has developed a Web-site of support material and information). Indeed, it is likely that cost will always remain an inhibiting factor to the up take of TMB if the perceived value of accreditation (especially by advisers) is low. However, with the increasing requirement to hold TMB accreditation (at least for publicly funded work) and the availability of 'Objective 1' funding covering a large

Factor	Unit/Area	Description
Performance	Unit 1	Establish and maintain the capacity to act as an inform ation and communication technology adviser to sm all and medium-sized enterprises
	Unit 2	Enable clients to identify the potential of ICT to contribute to the competitiveness of their business
	Unit 3	Enable the client to plan an ICT intervention
	Unit 4	Enable the client to implement an ICT intervention
	Unit 5	Evaluate and review the outcomes of ICT interventions
Knowledge	Area A	ICT knowledge and orientation
	Area B	SME Knowledge
	Area C	Performance skills and business ICT development cycle knowledge

Fig. 1. ICT business adviser 'occupational standard ' units. *Source*: IoM (1999).

part of Wales, ATEB in conjunction with the University of Glamorgan, created a comprehensive training and development programme. The aim of this was to complement and enhance the existing TMB accreditation programme in Wales and locate the development programme within a designated Development Centre.

The University of Glamorgan, through its Enterprise College Wales (ECW) on-line initiative has developed significant expertise in the design and delivery of on-line learning and being situated within an Objective 1 area sought to establish a business ICT Adviser Development Centre with related funding. The proposal featured workshops with a strong emphasis on electronic access to learning materials and tutor support supplemented by group learning activities designed to enhance the existing experiential and one-to-one development contained within the original programme. Built around the accreditation stages listed earlier, the Development Centre aimed to offer:

- Detailed (on-line) initial needs analysis identifying learning and experience gaps
- Access to on-line learning material and tutor support
- SME business and ICT related seminars
- Case study workshops
- Guided SME consultancy accompanied by an experienced mentor.

3. Survey methodology

A survey was undertaken to identify the value which participants placed on the programme of development, in particular the survey sought to address two main questions:

"Is the development of ICT advisers for SME businesses an important development from the advisers' perspective?"

"Does the model of development adopted address the real development needs of these advisers?"

With the growth of the Internet, and in particular the World Wide Web, the electronic questionnaire is becoming a more widely used survey instrument. Electronic surveys take many forms including distribution as electronic mail messages to potential respondents or they can be posted as World Wide Web forms on the Internet. The strengths of electronic surveys include cost-savings, ease of editing/analysis, faster transmission time, a higher response rate, more candid responses and a potentially quicker response time with a wider magnitude of coverage. The weaknesses, on the other hand, include sample demographic limitations, lower levels of confidentiality, layout and presentation issues, additional orientation/instructions, potential technical problems and the response rate.

E-mailed questionnaires were distributed to two categories of participants, those who had already completed their accreditation under the terms of the scheme (referred to as Advisors) and those who were in the process of undertaking the scheme (referred to as Candidates).

The numbers involved in the survey were as follows: ATEB had 55 registered Candidates with a further 20 who had completed the ICT advisor accreditation programme. All but two of the responses received arrived within the first five days following dispatch. Despite two further reminders being sent no further responses were received. There is no evidence in support but it may be speculated upon that the disappointing response rate may include the failure of the programme to maintain accurate contact details. The problem of potential non-response bias was considered during the questionnaire design and prior to its distribution and follows Armstrong and Overton (1977).

4. Survey findings

4.1. Response profile

For the purposes of this discussion the respondents are separated into two groups: accredited, being those ICT advisors who had completed the TMB accreditation process and candidate, being those who are currently undertaking but have not yet completed the accreditation process.

Responses were received from 12 accredited advisers (60% response rate) and 11 candidate advisers (20% response rate). The overall response rate was 31%. Of the 23 respondents, 19 were male and 4 female. The average time spent as an ICT Adviser was 3.5 years (range:1–10 years). The vast majority were educated to at least first degree level (above 70%) with only 9% not holding an HE qualification.

The employment background varied for accredited ICT advisers with 25% coming from the public sector and 73% coming from the private sector. For the candidate ICT advisers' group the figures are almost reversed with 72% having a public sector background and 28% coming from the private sector. Client SMEs were separated into categories to identify the level of take up by SMEs of ICT business advice in a particular category. The categories are defined as follows:

- Micro, i.e. those employing between 1 and 10 people
- Small, i.e. those employing between 11 and 50 people
- Medium, i.e. those employing between 51 and 250
- Large, employing over 250.

The average client company makeup, by size, for advisers is shown in Table 1.

Nearly two-thirds of the total number of SMEs supported by ICT advisers employ 10 people or less. This figure rises to 86% if the next category of SME, that is those SMEs that employ 50 people or less, is included. This suggests that ICT advice-based skills within these sizes of organisation are either more valued or scarcer. The likelihood is that the relative size of the SME has some relationship with the availability of in-house ICT-related skills.

Table 1
Average client company makeup, by size, for advisers

	Micro enterprises (1–10) (%)	Small enterprises (11–50) (%)	Medium enterprises (51–250) (%)	Large enterprises (over 250) (%)
Overall	62	24	11	2
Accredited	50	29	17	4
Candidate	75	19	5	

4.2. Accreditation Process

The average time taken to complete the accreditation process (accredited advisers) was 9.75 months (range: 3–14 months). Of the 11 candidate advisers 4 had already been registered on the programme for longer than 14 months and 2 had joined within 2 months prior to the research.

With respect to the TMB standards themselves, no respondent felt there was a complete mismatch between the standards, knowledge and capabilities required of an effective SME business ICT adviser, with over 86% indicating they matched well or very well (90% for accredited advisers, 82% for candidates). Clearly there appears to be an overwhelming view, from an advisor's perspective, that the TMB standards fairly accurately reflect the profile of an 'effective' business ICT adviser.

Upon entering the programme, when considering their existing knowledge and experience against the TMB standards, unsurprisingly less than half of the respondents (48%) did not feel they had any development needs with the remainder indicating a minor or not significant need. However, during the course of the programme individual ICT advisers had reformed this initial opinion and confirmed there was a 'considerable' range of issues included with which they were unfamiliar. Amongst the most noted included knowledge of current WDA supported initiatives. The second most frequently mentioned factor was 'acting in a professional consultancy role'. Neither of these factors is related to technical knowledge, rather they are operational issues. In a later feedback, this point on technical knowledge was reconfirmed related to the re-use of the on-line knowledge test in the re-accreditation process.

The views of all respondents (advisers and candidates) on the role of ATEB, the TMB Agency and the effectiveness of the accreditation process as a whole are summarised in Table 2.

It can be seen there is general satisfaction with both ATEB and TMB and with the ATEB induction process. There is a very positive response regarding ATEB assessor support, but less so regarding the initial needs analysis. The picture with this latter aspect is probably somewhat clouded by a change in the form of the initial needs analysis process some 18 months ago, but clearly this is an area which TMB through ATEB need to review with the opportunity of enhancing the process as part of the Development Centre activities.

Table 2
The role of ATEB and the effectiveness of the accreditation process

Management issues	Good (%)	Fair (%)	Poor (%)
General support and communication from ATEB	48	48	4
General support and communication from TMB	27	54	19
ATEB induction process	45	49	6
Initial needs analysis (ATEB)	27	40	33
Support of assessor (ATEB)	71	23	6
Inclusion of knowledge test	53	41	6
Relevance of knowledge test questions	13	61	26
TMB Web site and resources	9	52	39

Inclusion of the knowledge test is clearly supported, but greater ambivalence is evident regarding the relevance of the questions. This has been an issue recognised locally and nationally by both ATEB and TMB from the commencement of the programme and both parties are involved in the process of developing a new assessment to ensure the continued relevance of the test. The most negative view of all was expressed regarding the TMB Web site and resources where only 9% felt they were good and nearly 40% considered them poor. This is ironic given the core activity of the participants and the aims of the programme.

When asked about specific issues or difficulties with the process, the most common response related to the time advisers was available to undertake the work, either to gain the evidence or the necessary experience and the difficulties experienced in collating evidence, or understanding what evidence was required.

Access to the knowledge base via the ICT adviser support network was quoted as a factor which offered significant added value to all ICT advisers.

4.3. Impact on professional activity

Several questions relating to the impact on professional activity of undertaking the TMB accreditation process were asked. The percentage responses are shown in Table 3.

When asked for an absolute indication of whether or not seeking TMB accreditation had been worthwhile, 78% responded 'yes'. But when compared with the figure of 74% who responded that the programme had not greatly improved their skills or knowledge it suggests that a better

Table 3
Impact on professional activity

Management issues	Greatly (%)	Somewhat (%)	Not at all (%)
Improved understanding and awareness of what's required of a business ICT adviser	22	61	17
Improved skills and knowledge as a business ICT adviser	26	39	35
Helped you to more effectively support your clients	26	38	26
Overall, found seeing TMB accreditation to be a developmental experience	35	39	26
Overall, found seeking TMB accreditation to be beneficial professionally	39	52	9

question might have separated out some of the specific factors involved in the skills and knowledge category. This would have then enabled respondents to clarify exactly what aspects achieved the greatest impact and which did not.

4.4. Re-accreditation

In the revised accreditation programme the requirement to maintain up-to-date skills and knowledge was included and monitored through the introduction of a process of re-accreditation to be undertaken every 2 years. There was strong support for the inclusion of the re-accreditation requirement, with 3 respondents definitely not in favour and a further 4 candidate advisers indicating they were unsure. Accredited advisers were asked their view on the four main aspects of the re-accreditation process: the need to produce evidence of current practice; retaking the knowledge test; capturing evidence of performance on line and the feedback and assessment practice of the assessor.

Advisers were first asked if they had experienced the re-accreditation process, and if so, what their views were. Respondents were asked to rate the requirement to undertake these tasks as Good, Fair or Poor, the breakdown is shown in Table 4.

The inclusion of the requirement to retake the knowledge test received the strongest criticism with 72% of respondents suggesting the knowledge test needs to be reconsidered. Generally those who had been through re-accreditation were positive about the experience, although an appreciable percentage (around 30%) held negative assessments of the aspects canvassed. The inclusion of the retake of the knowledge test gained the strongest criticism. Having said that it is clear that there is a high level of dissatisfaction with all the aspects suggesting the requirement for re-accreditation was not being well received.

4.5. ATEB Development Centre

In the final section of the questionnaire, advisers were asked to rate the features of the planned Development Centre. All suggested features were thought to be of merit, with the on-line learning material and the tools and templates being particularly strong. Percentage responses in detail are shown in Table 5.

Table 4
Views on the re-accreditation process

Requirements	Good (%)	Fair (%)	Poor (%)
Evidence requirement	57	14	29
Retaking the knowledge test	29	29	43
On-line capture of evidence	57	14	29
Feedback and judgement of assessor	43	29	29

Table 5
Features of the planned development centre

Features	High (%)	Moderate (%)	Low (%)
Comprehensive on-line learning materials	59	32	9
Portal to other useful and related websites	37	46	18
Tools and templates to aid consultancy role	76	14	9
Rolling series of seminars	54	41	4
Case study workshops	54	32	14
Mentored SME consultancies	50	32	18

General support for all these features of the planned Development Centre confirms the informal canvassing undertaken to inform its structure.

5. Discussion

The potential contribution of ICT in improving the competitiveness and performance of businesses has long been recognised. However, this has not always been realised even in large multinationals, and there are particular difficulties facing micro, small and medium-sized SMEs in accessing such promised benefits. Lack of ability to enhance the opportunities offered by ICT especially in terms of conducting e-business potentially may be an inhibiting factor in the process and development of the enterprise and the frequency of change in IT capability is also likely to limit exploitation as increasingly sophisticated software packages require a commensurate level of IT skills to engage with both within the SMEs and the ICT advisors. Over recent years there have been a number of initiatives supported at local and national

government level including the European Union (for example, GoDigital, 2001) which have endeavoured to aid and encourage SMEs in the up-take of ICT. One of the many factors that have been identified as impacting upon the level of ICT adoption amongst SMEs is their access to, and confidence in, external advice in this area (IoM, 1997, 2000).

This development of encouraging the growth of ICT development in SMEs is not unique to the UK and there are a number of other initiatives which aim to achieve similar objectives. What is perhaps unique is the way in which the programme has been developed over the 4 years of its existence. The construction of a competence-based model of accreditation is also not new but in this sector it is the way in which the model has first been applied and then developed which invites consideration in particular to the more general encouragement of good practices that are not limited to the role of ICT advisors but are related to the introduction of good practices in the wider operation of the enterprise. Of course, not all individuals carrying out consultancy roles as ICT advisors have or will undergo this development and there is little evidence at present that suggests the role they fulfil is any more or less meaningful; however, by undertaking an accredited programme such as offered by TMB the relative level of confidence that can be placed in advisors to deliver on expectations may be considerably enhanced.

Three main features of the initiatives reviewed in this paper include

- The operation and structure
- The success from a participant's perspective
- The development of a model of blended learning to support and continue development of the programme.

The idea of an accreditation programme appears able to offer a range of promising benefits and there is a clear and growing interest in its continued provision from umbrella organisations like the Welsh Development Agency. Feedback from the advisers and candidates has been used to inform and update the accreditation programme and access to on-line information and support has been a significant aspect. The parallel development of the informal, but arguably more important, support network is also an important feature of developing a community of practice founded on a joint interest in ICT and SME development.

The status and value placed on accreditation by both advisers and clients have been issues. It is difficult to promote the idea of accreditation and until there is a demand from the clients themselves or the funders, then commercial consultants will see little value in it. However, there are clear moves towards this end with the DTI Small Business Service (SBS) in England requiring its ICT advisers to gain TMB accreditation, and the Welsh Development Agency requiring contracting consultants working on its 'smEBusiness' project to register with the programme, and similarly the EU funded 'Opportunity Wales' programme.

Although the provision of an internet-accessed 'knowledge resource' is an element of the TMB initiative, the improvement and development of candidates' skills and capability (rather than simply assessing and accrediting existing competences) were not integral components. (See Hyland, 1994; Stevens, 2001, for further discussion on the capability debate). Thus, the programme, although providing a valuable 'stamp of quality' for existing and existing 'effective' advisers, was not initially able to directly address the development needs of those who are unable to meet the standards as defined, and therefore did little to support the expansion of the pool of advisers and their skills. The shortcoming was addressed following recognition of this shortfall and a process is now in place able to offer a developmental route to accreditation. The way in which the lessons derived from experience can be integrated into the programme has resulted in a responsive and flexible programme that is able to retain its relevance in a constantly changing environment both technologically and from a business environment perspective.

Other key benefits of introducing the accreditation programme include the following aspects:

- The development of a set of standards which existing advisers and aspiring advisers can work towards.
- Accreditation as a kite mark of adviser competence to provide appropriate advice and guidance in business ICT applications to SMEs.
- Establishing a developmental route leading to increasing the numbers of advisers to support SMEs in ICT development.
- Use of technology to support such developments.
- The establishment of a supporting network and online community led by ICT advisors and facilitated by TMB.

6. Summary

Establishing a system that ensures as far as possible the individuals within whom the responsibility for supporting such development has been vested are competent offers considerable advantages. Both the development process, which this particular form of advisory service to SMEs offers, as well as the opportunity to adopt a quality standard for advisers in which SMEs may have confidence are clear. The programme makes no claim to the benefits which investing in ICT may bring, and there exists little empirical evidence that is able to demonstrate this. Instead, it points out that if an SME is intending to invest in ICT then they would be well advised to seek out an adviser who is also accredited in order to ensure the investment has a clear strategic focus and the business opportunity is enhanced. Involvement in a such process may also encourage a different type of approach within SMEs

towards adopting better informed approaches to their business generally. The development of a more systematic approach that involved a review of the business process and strategy could offer a clearer picture where appropriate and related investment might produce the best results which may include a decision not to invest in ICT. Taken on its own it is fair to say there already exists a wide range of these types of support. The point is if the need for investment in ICT has been correctly identified then the intervention of an advisor skilled in its implementation might consequently be more valuable and valued thereby creating its own demand.

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