Government Procurement ICT's Impact on the Sustainability of SMEs and Regional Communities

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INTRODUCTION

SMEs (small and medium sized enterprises) are a dynamic force for sustainable economic growth and job creation within developed and developing communities (MFT, 2001; NOIE, 2003; BRTF, 2003). SMEs stimulate private ownership and entrepreneurial skills; they are flexible and can adapt quickly to changing market demand and supply conditions; they generate employment, help diversify economic activities and make significant contributions to export and trade. An economy's overall economic health and well-being can be measured by the growth of SMEs-so it is vital to enhance the capacity of SMEs to compete domestically, nationally, and internationally (APPC, 1999).

The sustainability of SMEs is compromised by their struggle to gain a significant share of the government procurement pie, and this impacts on the economic, social and cultural capital of countries and communities and the distribution of wealth. So governments need to foster an appropriate business and policy environment to improve the growth prospects of SMEs (Loudon, 2003). In particular, the implementation of Information and Communication Technologies (ICT) can provide an enabling environment for SME access to government procurement markets (Calarco, 2003).

BACKGROUND: SMEs AND GOVERNMENT PROCUREMENT MARKETS

Definitions of SMEs differ from economy to economy, and are based on specific criteria such as the number of employees, level of assets or turnover. However the economic, social and cultural contributions of SMEs that are common across economies are their ability to (MFT, 2001):

- create jobs with low capital costs;
- create conditions for development and introduction of new technologies;
- function as subcontractors for large corporations;
- adapt faster to the demands and fluctuations of the market place;
- fill marginal areas of the market, which are not targeted by large corporations;
- decentralise business activity and help foster faster development of regions, small towns and rural communities; and
- alleviate the negative impact of structural changes.

By opening up the public sector procurement market to SMEs, governments in Australia, the USA, the UK, New Zealand, and the developing economies are attempting to use their buying power to build the business capabilities of SMEs, foster economic growth, and get "value for money" in public spending (Breen & Demediuk, 2003; BRTF, 2003). Whilst the opportunity space for SMEs in the government procurement market is currently limited in developing countries (Wittig, 1999) and in developed nations (BRTF, 2003; DCITA, 2002), globalisation, the acceleration of technological change and innovation create expanded opportunities for SMEs (OECD, 2000). In particular, the use of ICT is a major driver for improving SME access to local and international government procurement (Calarco, 2003).

IMPACT OF ICTs ON GOVERNMENT PROCUREMENT SYSTEMS

ICTs facilitate the development of purchaser-supplier systems that have been termed e-procurement or e-tendering. In practice, systems can be as simple as providing orders via an e-mail message or as complex as integrated supply chain ordering, delivery and payment systems (Calarco, 2003). E-procurement functionality is about the business not just the technology. The major functions of such electronic systems can range across registration of suppliers; notification of tenders; issuing and downloading of tender documents; receiving and responding to enquiries; submission of tender offers; notification of contract award; and ongoing supply man-

agement (Calarco, 2003). The use of ICT in E-procurement can involve (Wittig, 2002, p. 7):

- procurement planning & budget control;
- tracking supply needs (including demand forecasting, inventory management, etc.);
- preparing catalogues of approved items (e.g., for common use items, framework contracts) and providing information on the buyer's procurement catalogue;
- communicating the buyer's procurement program (e.g., yearly, quarterly) and advertising previous contract awards;
- tracking the solicitation approval process, advertising the buyer's solicitation notices, providing suppliers' access to the buyer's solicitation documents, and buyer/supplier communications on technical and other clarifications regarding solicitation;
- sharing of information in networks of public procurement agencies on topics like: membership, news, public procurement events, common texts on public procurement laws and regulations, regulation guidelines, standard procurement documents and contracts, and standard management and record-keeping forms;
- managing supplier data, like expressions of interest, suppliers' registration and pre-qualification, suppliers' submission of bids, quotations and proposals;
- buyer processing and evaluation of bids, quotations, proposals and buyer communication of award to supplier;
- communications as needed between buyer & supplier prior to closing the contract;
- communications between buyer & supplier on supply management (delivery and progress of awarded contracts, including tracking supplier delivery schedules), and invoicing & payment; and
- data archiving for purposes of audit trail and security.

ICT may improve the functionality of government procurement marketplaces through e-procurement systems that facilitate transparency, accountability and access through an open system; reduce the transaction costs to all parties of doing business by minimising non-valued added activities (telephoning, printing, postage, re-keying, etc.); reduce process cycle times; and provide a platform for competitiveness and growth (Calarco, 2003). While such ICT-based reforms benefit all firms, it should have a more significant impact on SMEs since ".... SMEs have fewer resources, (and) anything that makes the process easier and lowers the cost of involvement will have a greater relative result for them" (Holden & Dade, 1998, p. 2).

Governments can provide a more level playing field in information access that not only assists SMEs to find and respond to market opportunities, but also acts as an incubator for the uptake of new technologies that can improve businesses generally. In one region the state-of-the-art technology may be the general introduction of e-mail capacity, whereas in another more developed community it may be the ability to make a binding contract over the Internet (Wittig, 2002).

The goal of relative improvement in SME access to government procurement markets requires technology solutions such as aggregated, simplified or standardised access portals, along with good help-desk options and technology and training support (BRTF, 2003). What is also required is a revision of the processes to which the technology is to be applied. If ICT innovations simply embed into an electronic form some existing procurement policies and procedures that inhibit SME access, the problems for SMEs may become relatively worse. For example, the use of larger contracts in government procurement is often driven by the need for greater efficiency. These larger contracts require less staff to manage them and there is a single point of contact for dealing with problems. However the contracts generally result in a reduced number of larger suppliers, effectively ruling out smaller firms and the advantages they potentially bring in agility and focused solutions. Where tender evaluation criteria are geared towards lowest tender price, the perceived innovation, flexibility and quality advantages of SMEs are discarded, as the potential for wider societal and economic community development is lost. SMEs are also disadvantaged where small-scale tenders are left off generally advertised lists, or SME tenderers are required to provide unlimited liability or reach unrealistic experiential or financial pre-qualification hurdles (Breen & Demediuk, 2003).

FUTURE TRENDS

Given the limited success of many ICT-based government procurement initiatives (Breen & Demediuk, 2003; OGC, 2002), in the future full account must be taken of SME perspectives when government agencies are designing new ICT-based policies, processes or initiatives. There also needs to be greater awareness among SMEs of the benefits of the ICT and the "Information Society" and of integrating Internet use and electronic commerce in their business strategies. Awareness, interest and capability of SMEs in relation to ICT-based

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