INTRODUCTION

There is a growing interest in how the digital divide affects the operations of SMEs. The digital divide among businesses is defined as the disparity between the effective use of ICT for gains in productivity (Wielicki, 2008). Often, SMEs are found to be on the wrong side of this divide, with insufficient funds and/or access to ICT as the most cited reasons for falling behind big corporations. A further common barrier to the use of ICT is cited as the lack of education and training. A study conducted on micro and small-sized enterprises (SMEs) from selected regions in Spain, Portugal and Poland on the use of ICT produced interesting results. It was found that the main barrier to the utilization of ICT and e-Business, and thus the main reason why SMEs struggle with the digital divide, is not so much the lack of access to IT as the

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lack of proper knowledge, education and skilled owner-managers and employees
within the enterprise (Arendt, 2008).

Riccardini (2003), during the UNCTAD Expert Meeting on Measuring Electronic
Commerce in Geneva in September, 2003, underscored various policy actions needed
to bridge the digital divide among SMEs. He suggested that actions were particularly
necessary in the following areas: policies that govern businesses, households and
government in the use of ICTs; economic sector policies; infrastructure development,
especially broadband; e-government; and e-content and territorial development poli-
cies. The extent of the digital divide among SMEs can be established using various
indicators, such as ICT usage, level of e-commerce and e-business adoption, the e-
public sector and e-government statistics. Such statistics would include e-commerce
and e-business indicators such as purchases and sales of assets or services that occur
through the Internet, Electronic Data Interchange (EDI), mobile phones or other
computer-mediated networks. Other indicators would include the goods and services
ordered over those networks directly by an enterprise, although the payment and
the delivery of the goods or services may be conducted on or offline.

Arbore and Ordaini (2006) investigated the digital divide factors affecting SMEs
with regard to broadband access, and confirmed that the geographical situation of
SMEs can be an obstacle, especially for small-sized enterprises. In such instances,
specific ICT organizational strategies - namely outsourcing solutions - are an important
mitigating factor for size and location-based broadband disadvantages. Elsewhere,
the Small and Medium Enterprise Administration Ministry of Economic Affairs in
Taiwan identified some of the measures needed to bridge the digital divide among
the SMEs in that economy as (Lin, 2007): e-commerce empowerment; recruiting
an information society (IS) team; selecting e-products; delivering onsite services;
creating IS revenue; providing e-commerce training; developing industry specific
applications; developing e-applications; and promoting broadband.

A book launched in Costa Rica, written by Monge-Gonzalez, Alfaro-Azofeifa,
and Alfaro-Chamberlain (2005) on the access, use, adoption and impact of ICTs
on the productivity and competitiveness of micro-, small- and medium-sized enter-
prises (SMEs) in Central America, highlights how issues of the digital divide are
obstacles to small-sized enterprises participation in the Net economy. In particular,
the authors observed that access to ICTs is quite limited in the Central American
Region, with a general lack of telephone lines, mobile phones and Internet con-
nectivity. The authors therefore concluded that in order to make SMEs in Central
America more productive and competitive in a connected economy, there must be
a drive to increase access to ICTs and improve their adoption by SMEs through
training and implementation programs.
Risk-Off Method: Improving Data Quality Generated by Chemical Risk Analysis of Milk


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