Editorial Preface

Information Systems &
Small Business: Research Issues

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INTRODUCTION

Small Business forms a major component of a country’s economy (Balderson, 2003; Ballantine et al., 1998). Indeed, it is the small business sector that seems best in the position to respond appropriately to the ever-changing business environment. Information systems play a large part in supporting the functions of all organizations (Laudon & Laudon, 2001). This editorial presents an overview of previous research in this area, along with some issues that lead to some examples of what researchers are doing and a challenge to other researchers.

PREVIOUS RESEARCH

Previous research has shown that small business is different than large business. Business models that are appropriate for large business do not work all the time for small business. Small business managers face different issues than large business managers (Belich & Dubinsky, 1999; Pollard & Hayne, 1998). Some of these issues are discussed in the subsequent section of this editorial. Further, while large business is employing information systems for strategic purposes, small business tends to emphasize the use of information systems for more immediate daily operations. This comment is supported by the work of a number of researchers (Berman, 1997; Bridge & Peel, 1999; El Louadi, 1998; Fuller, 1996; Lin et al., 1993; Timmons, 1999). Further, Hunter et al. (2002) have emphasized this situation, suggesting that small business concentrates on employing information systems for efficiency gains rather than as a contribution to improved effectiveness.

Research (Burgess & Trethowan, 2002; Chapman et al., 2000; Dandridge & Levenberg, 2000) has also determined that the use of the Internet is not as pervasive as one would expect. This situation has been explained by a lack of knowledge and experience (Kuan & Chau, 2001) and lack of personnel and time (Bennett et al., 1999). This latter explanation relates to Thong et al.’s (1994) concept of resource poverty, which is discussed in the next section.

Another perspective that may be applied to the previous research presented could be geographic. That is, what regions are represented by currently available research studies? Unfortunately, there is a concentration of research on small business in North America and Europe. While the research from these regions is valuable, it is indeed unfortunate that other regions (e.g., Asia, Eastern Europe, and South America)
seem to be under-represented. To some
degree, this situation is being addressed by a
project described here in the penultimate
paragraph.

Given the importance of the small busi-
ness sector and its uniqueness, it is incum-
 bent upon those researchers to attempt to
understand not only the small business itself
but how information systems could be em-
ployed to facilitate operation and growth of
specific businesses.

ISSUES

The following paragraphs discuss some
of the issues regarding information systems
and small business that should be addressed.
At the very least these issues represent
perspectives that should be considered by
the small business stakeholders.

To begin, there is no common defini-
tion of “small business”. Researchers and
government agencies tend to adopt their
own definitions, provide this definition at the
start of a document, and proceed to present
results based upon this specific definition.
This makes comparisons between research
projects and government documents very
difficult. Definitions have included annual
revenue, total investment, or number of
employees, with the latter being the most
prevalent. However, even when number of
employees is used there is no consistency in
defining small business. To make matters
even more complicated, there is no consis-
tency in defining the various sub-categories
of small business. For instance, the Euro-
pean Parliament (2002) defines a range of
small business from micro (0 to 10), to small
(10 to 50) and medium (50 to 250).

Further, the uniqueness of small busi-
ness has been described by the Thong et al.
(1994) concept of “resource poverty”. This
concept relates to the lack of financial and
human resources. This relates to both
possession and access. With regards to
financial resources small business tends to
have limited cash flow. Also, because of a
lack of assets, the ability to borrow money is
limited. This situation also exists regarding
human resources. A small business tends
not to be able to employ many individuals.
Further, the individuals who are employed
may not possess all the necessary skills.
Thus, the small business manager is forced
to allocate scarce resources to only those
activities that are considered top priority in
the near term.

An interesting perspective has been
provided by Stevenson (1999). He provides
a conceptual interpretation of managers’
approaches to business practices. Table 1

<table>
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<tr>
<th>ASPECTS OF BUSINESS PRACTICE</th>
<th>PROMOTER</th>
<th>TRUSTEE</th>
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<tr>
<td>Strategic orientation</td>
<td>Capitalize on an opportunity</td>
<td>Focus on efficient use of current resources to determine the greatest return</td>
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<td>Resource commitment and control decisions</td>
<td>Act in a very short time frame</td>
<td>Long time frame, considering long-term implications</td>
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<td>Multi-staged</td>
<td>One-time up-front commitment</td>
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<td>Minimum commitment of resources at each stage</td>
<td>Large-scale commitment of resources at one stage</td>
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<tr>
<td></td>
<td>Respond quickly to changes in competition, market, and technology</td>
<td>Formal procedures of analysis such as capital allocation systems</td>
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Table 1: Approaches to Business Practice
presents this interpretation relative to a continuum. Small business managers are regarded as “promoters” and large business managers as “trustees”. It is Stevenson’s (1999) contention then that how managers carry out their business responsibilities will vary significantly. As a consequence, the approach to employing information systems by small business may also be unique according to their sector.

Another interesting perspective is provided by the theory of entrepreneurship (McMullan & Long, 1990), which suggests businesses of various sizes are ventures in progress. As the venture evolves through various stages (one of which is small business) different factors impinge upon the business manager’s use of resources and employment of information systems. In adopting this theory as a framework, researchers will recognize that small business is unique and evolving.

CONCLUSION

Thus, the manager of a small business will be limited in what activities can be initiated. Hence, the manager will emphasize allocating scarce resources in the near term. This may be interpreted in different ways for various stakeholders including consultants, vendors, and government. Consultants must realize that the near term focus of the small business manager may not be in the best interest of the manager. The multi-staged decision making approach of the small business manager should be placed within a long-term plan which will benefit the small business. Vendors should ensure that both software and hardware address the functional requirements of small business, responding to the appropriate level of capacity and capability. Also, government should provide financial and training incentives to stimulate small business in recognition of its major contribution to the country’s economy. Further, the results of cross-cultural studies could also be very edifying. Analyses of the approach taken by small business managers of similar firms in different cultures may provide novel ideas for future operations.

So, what can we do as researchers? It is incumbent upon us to attempt to understand the uniqueness of small business. There are many perspectives that may be adopted when investigating small business. We should further explore the issues that are considered important to small business managers. While there may be many examples of this, here are a few. Researchers are encouraged to explore various regional practices. There could be some interesting lessons to be learned about how small business applies information systems in different parts of the globe. An extension of this regional perspective could be the comparison of different regions. This comparison could further elucidate how information systems are applied by small business through an analysis of similarities and differences. Yet more may be learned by comparing similar industries in different regions or developing versus developed countries.

Stephen Burgess and Andrew Wenn of Victoria University in Melbourne, Australia, along with this associate editor are coordinating a special research cluster of the Information Resources Management Association regarding small business and information technology. There are a number of interesting project and research issues being discussed by the members of this research cluster. The URL is http://www.businessandlaw.vu.edu.au/sbirit/. Also, Burgess and Hunter are guest editors for a special issue of this journal, which will, “…examine the lessons that can be learned from research into the use of information technology in small businesses …”
In conclusion, this is an exciting area of research. There are many perspectives that may be taken and many theories that may be applied to this subject area. There are many opportunities to conduct research and to provide assistance to the small business manager.

REFERENCES


Dr. M. Gordon Hunter is currently an associate professor in information systems in the Faculty of Management at The University of Lethbridge. Gordon has previously held academic positions at universities in Canada, Hong Kong, and Singapore. He has held visiting positions at universities in Australia, Monaco, Germany, the US, and New Zealand. He has a Bachelor of Commerce from the University of Saskatchewan in Saskatoon, Saskatchewan, Canada, and a doctorate from Strathclyde Business School, University of Strathclyde, Glasgow, Scotland. Gordon has also obtained a Certified Management Accountant (CMA) designation from the Society of Management Accountants of Canada. He is a member of the British Computer Society and the Canadian Information Processing Society (CIPS), where he has obtained an Information Systems Professional (ISP) designation. He has extensive experience as a systems analyst and manager in industry and government organizations in Canada. Gordon is an associate editor of the *Journal of Global Information Management*. He is the Canadian world representative for the Information Resource Management Association. He serves on the editorial board of the *Journal of Global Information Technology Management* and the *Journal of Information Technology Cases and Application*. Gordon has published articles in *MIS Quarterly, Information Systems Research, The Journal of Strategic Information Systems, Journal of Global Information Management, Information Systems Journal, and Information, Technology and People*. He has conducted seminar presentations in Canada, the US, Asia, New Zealand, Australia, and Europe. Gordon’s current research interests relate to the productivity of systems analysts with emphasis upon the personnel component including cross-cultural aspects, the use of information systems by small business, and the effective development of information systems.