Chapter 2
Leveraging University Research to Assist SMEs in Legacy Industrial Era Regions: The Case of I-99 Corridor

Arvind Karunakaran
The Pennsylvania State University, USA

Sandeep Purao
The Pennsylvania State University, USA

Brian Cameron
The Pennsylvania State University, USA

ABSTRACT
Small and Medium Enterprises (SMEs) in legacy industrial era regions face unique challenges that vary from the challenges faced by SMEs in other regions. Especially, SMEs in legacy industrial regions face problems with respect to the access to knowledge networks. The authors discuss an approach that focuses on enabling the SMEs in legacy regions towards accessing these knowledge networks. The authors base their discussion upon the ongoing debate within the IS community regarding ‘rigor-relevance’ gap, and they take the specific case of SME’s in I-99 corridor to illustrate this. The chapter highlights the challenges faced by SMEs in legacy industrial era regions, and briefly describe the ongoing research project called LAIR (Leveraging Advanced IT Research), aimed at understanding the risks that SMEs in the I-99 Corridor are likely to face as they grow, with a specific focus on risks associated with upgrading, implementing and integrating their existing and new Information Systems.

INTRODUCTION
An enduring debate within the Information Systems (IS) community focuses on the ‘rigor’ of research, in terms of the methodological strength and soundness, versus its ‘relevance’ to practice. Oftentimes, there have been many concerns raised about the minor impact IS research has towards guiding practice (Baskerville & Myers, 2004; Benbasat & Zmud, 1999; Davenport & Markus, 1999; Lyytinen & King, 2004). Benbasat and Zmud argue that the
field of IS became irrelevant to practice since they emulated other academic fields within the business school - which placed a great deal of emphasis on rigor – but failed to emulate the cumulative research tradition of those fields. They conclude that there should be greater consensus within the IS community about its core theoretical concepts and the best way to facilitate increased relevance is to conduct applied theoretical research (Benbasat & Zmud, 1999).

On the other hand, Davenport and Markus argue that other academic disciplines within the business schools are wrong role models for IS, since a cumulative research tradition, instead of bridging the gap between academic rigor and practical relevance, would prevent the discipline in keeping up with the rapid changes in the business environment and the associated changes happening within the technological environment (Davenport & Markus, 1999). They argue towards emulating fields like medicine and law, which attempt to find a balance between rigor and relevance. To facilitate this, they propose ‘evaluation research’ and ‘policy research’ as alternatives to the ‘applied theory research’ put forth by Benbasat and Zmud (Benbasat & Zmud, 1999; Davenport & Markus, 1999).

This long-standing debate exists not only within the IS community but also within other academic disciplines within the business schools. While some propose a combined effort of researchers and practitioners using “engaged scholarship” (Van de Ven, 2007; Van De Ven & Johnson, 2006) to bridge the gap between research rigor and practical relevance, others have proposed a “relational scholarship of integration” (Bartunek, 2007) and “action research” (Baskerville & Myers, 2004) as alternatives towards bridging this gap. There are also counter-arguments that show how practitioners find little value in academic research and how practitioner and academic knowledge may be unrelated to each other (McKelvey, 2006; Nyden & Wiewel, 1992). To quote (McKelvey, 2006),

Practitioners keep looking for T-bone steaks, but what keeps flowing are turkeys. I don’t quite see how any amount of engaged scholarship, paradigm pluralism, arbitrage, conflict resolution, big questions, and so forth is going to turn turkeys into T-bones, even if the flow from the left is renewed.

While we acknowledge the importance of this debate, we argue that the only way to appraise the strengths and weaknesses of any model of scholarship – be it ‘engaged’ or ‘relational’ - is by indulging in more research studies of this nature. Further, most debates arise within a disciplinary context and largely ignore the value that research universities as a whole could bring-in to the practitioner community by leveraging and combining specialized, and sometimes, esoteric knowledge across disciplines.

Drawing upon Pasteur’s quadrant from Stokes’ taxonomy (Stokes, 1997; Tushman & O’Reilly, 2007), we argue that both the academic and practitioner community could be better served if the research-in-context is more grounded in the phenomena. Instead of looking for an ideal model of scholarship to bridge the ‘rigor’ and ‘relevance’ gap, we suggest a focus on designing and conducting studies, and fostering relationships that would let the practitioners leverage knowledge that research universities generate as a whole, in essence, letting them find the T-bone steaks they need amidst the disciplinary turkeys (a la (McKelvey, 2006)). Through this interactive process, researchers could identify issues of communication and other barriers which hinder collaboration between the academic and the practitioner communities. Techniques to understand these can include self-reflexive analyses and/or by using a separate team of researchers to observe the interaction between the academic and practitioner communities in order to improve the understanding of those barriers.

This chapter provides the specific case of SME’s in I-99 corridor to take the above discus-