contents

GENERAL INTRODUCTION • INTRODUCTION TO KNOWLEDGE MANAGEMENT • INTRODUCTION TO INNOVATION • INTRODUCTION TO ENTREPRENEURSHIP • INTRODUCTION • CONSTRUCTING KNOWLEDGE VALLEY • MANAGING FORMAL KNOWLEDGE • USING KVT TO IDENTIFY INNOVATION BOOSTING FACTORS • FACTORS THAT STOP INNOVATION • A SUMMARY OF LESSONS LEARNT FROM KVT • RECOMBINING KNOWLEDGE AND LEARNING PROVOKES INSPIRATION • SOME CONCLUSIONS AND SUMMING UP • CHOOSING POSSIBLE TECHNOLOGIES • CALCULATE YOUR BENEFIT • LARGER ORGANIZATIONS

1 general introduction

Among the theories presented and discussed in this book is Knowledge Valley Theory (KVT), a model based on simple mathematics which combines the field known as Knowledge Management with that called Innovation via the interlinking discipline of Entrepreneurship. The business consequences of this new hypothesis are then viewed through the lens of Information Systems. Theories borrowed from both Education (pedagogy) and e-commerce will be used to cement the relationship with practical Information Systems. It may be surprising to include e-commerce[1] here, but we are not talking about adWords on your intranet, rather that e-commerce is a sub-set of Knowledge Management because in e-commerce knowledge and information about products are taken and – through an IT-mediated interface – communicated to the customer in a meaningful fashion.

Thus the theories pertaining to e-commerce and the tools used (web 2.0 etc.) may be relevant to knowledge and information retrieval generally. Similarly pedagogy (learning and education) is included – again as a sub-set of Knowledge Management – because information has to be retrieved from an Information System in a human learnable form.

This new juxtaposition is needed because, on one hand as Kotler and Trias de Bes (2003) state; 'Companies need to innovate if they are to grow and prosper', but on the other hand 'an operational framework that distinguishes growth from non-growth small businesses does not exist' (Holmes & Zimmer, 1994). Thus this work and the resulting theory concentrates specifically on organizations the size of SMEs (after all, there are approximately 3.5 million SMEs in the UK, as opposed to a mere 7000 large companies) and focuses on revealing knowledge management-related and innovation-related growth factors for SMEs, especially those possessing no or little formally protected intellectual property. To put it bluntly, one often hears of 'innovative companies', but how do they become innovative? This work aims to illustrate factors theoretically important in producing innovations.

[1] Readers interested in e-commerce and outward-facing business models (which are not considered here) are referred to standard textbooks on the subject e.g. Turban and Volonino (2010).

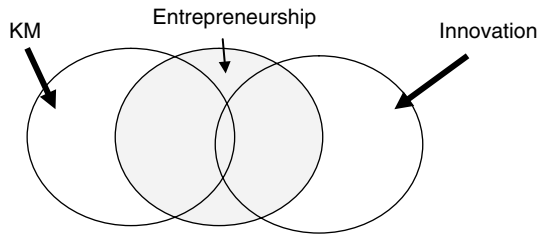

Figure 1.1 ***Overlapping fields. Knowledge Management (left) may overlap with Innovation (right). However Entrepreneurship overlaps with both fields and forms a strong link between them. This is because Knowledge Management (at least in SMEs) is directed towards entrepreneurial aims on one hand and, on the other hand, Innovation is the tool for entrepreneurship[2].***

Innovations restructure value chains into more efficient and profitable forms – the basis of entrepreneurship. These innovations could be administrative (e.g. in restructuring, in marketing, etc.) or technical. The jumping off point could easily be Tidd et al. (2001, p.45) who state 'Success in innovation appears to depend on two key ingredients – technical resources (people, equipment, knowledge, money etc.) and the capabilities in the organization to manage them'. Unfortunately Tidd et al. (2001) do not follow up on this theme and indeed Atherton and Hannon (2001) again remark that there has been 'a paucity of research' on how innovation can arise and spread in small companies. This gap is addressed here using a basic mathematical model. The point of this modelling is to illuminate how to cultivate processes of knowledge use and as such, should not be confused with pursuing knowledge per se; the model presented defines the extremes of the innovation landscape and some of the common individual trails, paths or streams – knowledge management techniques and systems – which decorate that landscape. As such, the model is like a map, insomuch as it shows the peaks that can be attained and some short cuts to get there, but companies, buffeted by the katabatic winds of the Porterian Forces (Porter, 1980) acting upon them, will have to work out their own best route themselves: The model presented here is convincing, semi-quantitative and powerful, but it is not a fix-all recipe for guaranteed success, at the end of the day a map is just a map, not a perfect representation of reality and is certainly not guaranteed to prevent you from falling down pot holes!

[2] Entrepreneurship is defined as an academic discipline in management and economics. In the framework of economics, entrepreneurship is an exception to classical input–output economics. In a social and management framework the entrepreneur is often an active 'change agent', using 'creative destruction' and disintermediation: The entrepreneur consciously uses innovation and creativity as tools to achieve enterprise. In the model presented here, by extension, Knowledge Management promotes innovation to drive the enterprise in an entrepreneurial direction. Note that 'Entrepreneurial' means establishing new value chains and may thus not equate to cash profit, as thus is equally applicable to charities and other non-profit/not for profit organizations, including Public Sector ones.

index