

SPRINGER BRIEFS IN BUSINESS

Shunzhong Liu



Innovation Management in Knowledge Intensive Business Services in China

 Springer

SpringerBriefs in Business

For further volumes:
<http://www.springer.com/series/8860>

Shunzhong Liu

Innovation Management in Knowledge Intensive Business Services in China

Shunzhong Liu
School of Economics
Central China Normal University
Wuhan
People's Republic of China

ISSN 2191-5482 ISSN 2191-5490 (electronic)
ISBN 978-3-642-34675-0 ISBN 978-3-642-34676-7 (eBook)
DOI 10.1007/978-3-642-34676-7
Springer Heidelberg New York Dordrecht London

Library of Congress Control Number: 2012952293

© The Author(s) 2013

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher's location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

In the knowledge-based economy, the development of a particular type of services, knowledge intensive business services (KIBS), becomes one of the marking trends in economic evolution. KIBS are private companies or organizations which rely heavily on professional knowledge, i.e., knowledge or expertise related to a specific (technical) discipline or (technical) functional domain to supply intermediate products and services that are knowledge based. The KIBS sector constitutes one of the characteristics of the contemporary economic, and become one of the most dynamic components of the services sector in most industrialized countries. It has become clear that KIBS do innovate and hold an increasingly dynamic and pivotal role in innovation system, and a large share of innovative efforts in KIBS are related to the development of new services.

With the increasing customer expectations, competition and speed of technological development, service firms must constantly look for new approaches to service design and delivery. The management of new service development (NSD) has not only become an important competitive concern in many service industries, but also raised academic interest of researchers in innovation management, marketing management, and operation management. Current research has been a lot of focus on service innovation in developed countries, but very little discussion or thought on that in developing countries.

As gradual opening of the services sector as it has committed to World Trade Organization (WTO), China has paid more and more attention to the service sector in recent years. However, Chinese KIBS are still in its initial stage of development, and the accession to WTO makes them face fiery competition environments. As constant adaptation to a turbulent environment requires a continuous flow of new offers, the management of service innovation has become more important to Chinese KIBS than that of the developed countries.

On the base of empirical research, this book aims to contribute to a better appreciation and understanding of the innovative characteristics of KIBS in China. Data for this study were gathered through enterprise questionnaire investigation in Chinese knowledge intensive business services across four sectors according to Miles's industry classification: management consulting, engineering consultancy,

advertising, and software service. This book is organized in the following ways. [Chapter 1](#) introduces the Concepts and Characteristics of Knowledge Intensive Business Services. [Chapter 2](#) describes Innovative Characteristics of Knowledge Intensive Business Services in China. [Chapter 3](#) explores New Service Development Performance within knowledge intensive business services context. [Chapter 4](#) discusses Determinants of Top Performing New Service Development Activities. [Chapter 5](#) explores Knowledge Intensive Service Activities in Chinese Software Industry.

The primary market for this book is faculty in innovation and operation management and their graduate and undergraduate students who have an interest in service innovation. Business students who have an entrepreneurial desire to start their own knowledge intensive business service firms will find the book of interest. Practitioners who are responsible for the marketing and innovation also will find this a readable book that contains useful ideas.

Contents

1	The Concepts and Characteristics of Knowledge Intensive Business Services	
	Intensive Business Services	1
1.1	Concept of Knowledge Intensive Business Services	2
1.2	Typology of Knowledge Intensive Business Services	3
1.3	Characteristic of Knowledge Intensive Business Service	4
	References	5
2	Innovative Characteristics of Knowledge Intensive Business Services	
	2.1 Theory of Service Innovation	7
2.1.1	The Characteristic of Service Innovation	7
2.1.2	Model of Service Innovation	9
2.2	Method	10
2.2.1	Sample	10
2.2.2	Measures	11
2.3	Analysis and Results	11
2.3.1	Descriptive Statistics	11
2.3.2	Statistical Analysis	13
2.4	Discussion	14
	References	15
3	New Service Development Performance	
3.1	Introduction	17
3.2	A Literature Review on NSD Performance Dimension	19
3.3	Conceptual Framework of NSD Performance	20
3.3.1	Financial Performance	21
3.3.2	Customer Performance	21
3.3.3	Internal Process Performance	22
3.3.4	Learning and Growth Performance	22

3.4	Research Method	23
3.4.1	Level of NSD Performance Measure	23
3.4.2	Research Subject	24
3.4.3	Item and Scale Construction	25
3.4.4	Analyses	30
3.5	Conclusion	37
	References	39
4	Identifying Determinants of Top Performing New Service Development Activities	43
4.1	Introduction	43
4.2	Research Conceptualization	45
4.2.1	Macro Level Dimensions	45
4.2.2	Meso Level Dimensions	46
4.2.3	Micro Level Variable	47
4.3	Research Methods	49
4.3.1	Pretests and Measures	49
4.3.2	Sample and Procedure	50
4.3.3	Performance Measure	50
4.3.4	Identification of the Predictive Factors for Top Performing NSD Activities	51
4.4	Finds	51
4.5	Discussions	56
4.6	Conclusion	58
	References	59
5	Knowledge Intensive Service Activities in Chinese Software Industry	63
5.1	The Innovative Source of Manufacturing Informationization	64
5.1.1	Classification of Manufacturing Informationization Technologies	64
5.1.2	The Relationship of Different Manufacturing Informationization Technologies	64
5.1.3	The Characteristics of Manufacturing Informationization	65
5.1.4	Conclusion	67
5.2	Performance of Software Industry in China	68
5.2.1	The Indictors Measuring the Inputs and Outputs of Software Industry	68
5.2.2	The Theory of DEA	69
5.2.3	Data Processing Method and Result	71
5.2.4	Conclusion	72
	References	73
Index	75