

Simon Plankenhorn

**Innovation Offshoring**

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Simon Plankenhorn

# **Innovation Offshoring**

From Cost to Growth:  
Analysis of Innovation Offshoring  
Strategies with Evidence from European  
Sponsors and Asian Contract Researchers

With a foreword by Prof. Dr. Dodo zu Knyphausen-Aufseß

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## Foreword

This contribution addresses a widespread phenomenon in today's economy: the offshoring of business activities. "Offshoring" in this context is defined as the "international relocation of product- and service-related activities to external contractors in low-wage countries" (p. 18), which consequently refers to a special form of general outsourcing. Starting right from the first sentence of the introduction, the author uses an overwhelming amount of data to demonstrate that offshoring has quickly become a central element of the corporate business world and that the issue has also attracted growing academic interest over the past few years.

In his dissertation, Simon Plankenhorn discusses whether offshoring is a sustainable trend, why senior managers decide to relocate their internal activities and how successful current offshoring programs are. After establishing today's focus on efficiency (as firms are primarily looking for cost advantages when they offshore functions), he asks if offshoring projects could also be applied to innovation and growth strategies, and if so, how such offshore projects need to be prepared, structured and executed.

Based on a sound and effective research methodology introduced by Christensen and Sundahl (2001), the author creatively links modern innovation theory to offshoring. Also, he empirically tests hypotheses with a comprehensive sample of 238 leading European companies (sponsors) and adds cases from the Indian pharmaceutical sector (agents) as a second empirical study. This remarkable combination of quantitative and qualitative testing provides a holistic offshoring picture, especially given the fact that both perspectives – European sponsors and Asian contractors – are included. The results from both studies serve not only senior management as a guide for corporate offshoring projects (blueprint model), but also the academic community as the author effectively maps empirical results back onto existing literature. Overall, this dissertation contributes considerably to understanding an emerging economic phenomenon and to developing a new research field. I hope it will receive broad acceptance by both practitioners and academics.

Prof. Dr. Dodo zu Knyphausen-Aufseß

## Preface

*"I can't understand why men make all this fuss about Everest - it's only a mountain."*  
Junko Tabei, 1975.

In the beginning of this project, it felt like pitching a tent in the Sagarmatha base camp. It was not only necessary to adapt to a different academic altitude and climate, but also find a reasonable climbing route for the ambitious expedition. Finding and conquering the supposed *direttissima* was not comparable to anything I have done before. In consulting, I was used to relatively short projects with clear deliverables, milestones and strong interaction, whereas this dissertation journey was sometimes more like a Morocco Des Sables. When looking back, the route and the journey were in fact the truly valuable experience while approaching the summit (in this case my personal academic Everest) was just the inevitable endpoint of the path.

As in most ventures, I would probably not even be able to enter the base camp without the generous support of many. Individuals and firms encouraged this dissertation throughout and their support came in many colors and forms. First of all, I would like to thank my doctoral advisor, Prof. Dr. zu Knyphausen-Aufseß, for granting this opportunity in the first place and for his valuable guidance over the past months. Also, I would like to thank Prof. Dr. Engelhard and Prof. Dr. Wimmer as members of the Ph.D. commission and as advisors of my work. My employer Roland Berger Strategy Consultants, my mentors and my colleagues deserve great appreciation for their support throughout the way. Industry experts, survey participants, interview partners, (former) doctoral students, alumnis and many friends have contributed much more than I could have ever expected. Without the intense interaction with them, it would have been much harder, probably impossible, to conquer this project in such a short period of time.

This contribution is dedicated to my parents in gratitude for their unconditional support over the past 30 years and to Kristina for the fabulous company throughout this journey.

Simon Plankenhorn

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**List of abbreviations**

ANOVA	Analysis of Variance
API	Active Pharmaceutical Ingredients
AR	Annual Report
BA	Bioavailability
BE	Bioequivalence
BEA	Bureau of Economic Analysis
bn	billion
BU	Business Unit
CAGR	Compound Average Growth Rate
CAP	Canadian Association of Pathologists
CAPEX	Capital Expenditure
CAPM	Capital Asset Pricing Model
CDA	Confidentiality Agreement
CEO	Chief Executive Officer
CF	Cash Flows
CFO	Chief Financial Officer
CNS	Central Nervous System
COO	Chief Operations Officer
CPO	Chief Procurement Officer
CRO	Contract Research Organization
CT	Clinical Trial
CTO	Clinical Trial Offshoring
CVC	Corporate Venture Capital
CVS	Cyclic Vomiting Syndrome
DCF	Discounted Cash Flow
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interests, Tax, Depreciation and Amortization
ed.	editor
EDC	Electronic Data Capture
eds.	editors
e.g.	for example (Latin: <i>exempli gratis</i> )



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EMEA	European Medicines Agency
EPO	Erythropoietin
EPS	Earnings Per Share
et al.	and others (Latin: et alii/alia)
EU	European Union
EUR	Euro Banking Code
FCF	Free Cash Flow
FDA	Food and Drug Administration
FDI	Foreign Direct Investment
fig.	figure
FY	Full/ Fiscal Year
GATT	General Agreement on Tariffs and Trade
GCP	Good Clinical Practices
GDP	Gross Domestic Product
GLP	Good Laboratory Practices
HPU	Human Pharmacology Unit
HR	Human Resources
HRM	Human Resource Management
ICH	International Conference on Harmonization
ICT	Information and Communication Technology
i.e.	that is (Latin: id est)
IND	Investigational New Drug Application
IPO	Initial Public Offering
IPR	Intellectual Property Rights
IR	Investor Relations
IT	Information Technology
IVR	Interactive Voice Response
m	million
M	Mean
M&A	Mergers & Acquisitions
M&S	Marketing & Sales
MIRP	Minnesota Innovation Research Program
MNC	Multi National Corporation

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NABL	National Accreditation Board for Testing and Calibration Laboratories
NAFTA	North American Free Trade Agreement
NCE	New Chemical Entities
ND	New Drug
NDA	New Drug Application
NDDS	Novel Drug Delivery Systems
NPV	Net Present Value
OECD	Organization for Economic Cooperation and Development
PM	Project Manager
PPP	Purchasing Power Parity
RBV	Resource Based View
R&D	Research and Development
RFP	Request For Proposal
ROE	Return on Equity
ROS	Return on Sales
ROW	Rest of World
RVG	Relative Value of Growth
SCM	Supply Chain Management
SD	Standard Deviation
SE	Standard Error
TC	Transaction Costs
TCE	Transaction Cost Economics
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
U.S.	United States
USA	United States of America
USD	U.S. Dollar Banking Code
V	Variance
VC	Venture Capital
vs.	versus
WACC	Weighted Average Cost of Capital
WTO	World Trade Organization

## List of survey variables

### 1. Dependents

<i>Code</i>	<i>Variable</i>	<i>Measure/ Description</i>
MC	Firm value	Market capitalization/ net revenues
RS	Profitability	EBIT margin (EBIT/ net revenues)
SG	Growth	CAGR (3-years) of net revenues

### 2. Independents

<i>Code</i>	<i>Variable</i>	<i>Measure/ Description</i>
COAL	Cost allocation	Cost distribution between COAL1-5
GRFC	Growth functions	Ordinal 6-point scale for 10 clusters
IMGF	Growth contributions	Distribution of functional contributions
OFFU	Offshoring functions	Nominal choice of 9 functions
OFGC	Actual growth offshoring	3 staged questions (OFGC1-3)
OFGP	Growth offshore plans	2 staged questions (OFGP1/ 2)
OFOB	Offshoring objectives	Nominal choice of 8 motive groups
OFRE	Offshoring relevance	Ordinal 4- / 6-point Likert scale
OFRI	Risks and controls	6-point scale and open format
OFSU	Effectiveness	3-point Likert/ indifference option
PRGR	Partnership relevance	4-point growth relevance scale
PSFI	Partnership strategy	Organizational involvement measure
PSMA	Monitoring/ adaptation	Open format variable
PTGR	Partnership types	Relevance ranks of 6 type clusters
RDOF	R&D offshoring	2 staged questions (RDOF1/ 2)

### 3. Controls

<i>Code</i>	<i>Variable</i>	<i>Measure/ Description</i>
IND	Industry	Controlling of 5 industry groups
REG	Region	Controlling of 4 regional clusters

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