

# Entrepreneurship

Álvaro Cuervo · Domingo Ribeiro ·  
Salvador Roig (Eds.)

# Entrepreneurship

Concepts, Theory and Perspective

With 17 Figures

 Springer

Prof. Álvaro Cuervo  
University Complutense of Madrid  
Department of Business Economics  
Campus de Somosaguas  
28233 Madrid  
Spain  
acuervo@ccee.ucm.es

Prof. Domingo Ribeiro  
University of Valencia  
Department of Economics  
Av. de los Naranjos s/n  
46022 Valencia  
Spain  
Domingo.Ribeiro@uv.es

Prof. Salvador Roig  
University of Valencia  
Department of Economics  
Av. de los Naranjos s/n  
46022 Valencia  
Spain  
Salvador.Roig@uv.es

Library of Congress Control Number: 2006936629

ISBN 978-3-540-48542-1 Springer Berlin Heidelberg New York

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer. Violations are liable for prosecution under the German Copyright Law.

Springer is a part of Springer Science+Business Media  
springer.com  
© Springer-Verlag Berlin Heidelberg 2007

The use of general descriptive names, registered names, trademarks, 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.

Typesetting: Integra Software Services Pvt. Ltd., Pondicherry, India  
Cover design: Erich Kirchner, Heidelberg

Printed on acid-free paper    SPIN: 11919889    42/Integra    5 4 3 2 1 0

# Table of Contents

|   |     |
|---|-----|
| Entrepreneurship: Concepts, Theory and Perspective. Introduction<br><i>Cuervo, Á., Ribeiro, D. and Roig, S.</i>                                     | 1   |
| <b>Part I. Concepts</b>   |     |
| Entrepreneurship as a Scientific Research Programme<br><i>Veciana, J.M.</i>   | 23  |
| Differentiating Entrepreneurs from Small Business Owners:<br>A Conceptualization<br><i>Carland, J.W., Hoy, F., Boulton W.R. and Carland, J.A.C.</i> | 73  |
| Toward a Reconciliation of the Definitional Issues in the Field<br>of Corporate Entrepreneurship<br><i>Sharma, P. and Chrisman, S.J.J.</i>          | 83  |
| Fools Rush in? The Institutional Context of Industry Creation<br><i>Aldrich, H.E. and Fiol, C.M.</i>  | 105 |
| <b>Part II. Theory</b>  |     |
| Entrepreneurship: Past Research and Future Challenges<br><i>Low, M.B. and MacMillan I.C.</i>  | 131 |
| A Paradigm of Entrepreneurship: Entrepreneurial Management<br><i>Stevenson, H.H. and Jarillo, J.C.</i>  | 155 |
| The Promise of Entrepreneurship as a Field of Research<br><i>Shane, S. and Venkataraman, S.</i>   | 171 |
| The Cognitive Infrastructure of Opportunity Emergence<br><i>Krueger, N.F.</i>   | 185 |
| The Entrepreneurship of Resource-based Theory<br><i>Alvarez, S.A. and Busenitz, L.W.</i>  | 207 |

|  |     |
|--|-----|
| Is There an Elephant in Entrepreneurship?<br>Blind Assumptions in Theory Development<br><i>Gartner, W.B.</i>   | 229 |
| <b>Part III. Perspective</b>   |     |
| Levels of Analysis in Entrepreneurship Research:<br>Current Research Practice and Suggestions for the Future<br><i>Davidsson, P. and Wiklund, J.</i>                                   | 245 |
| Entrepreneurship Research in Emergence: Past Trends<br>and Future Directions<br><i>Busenitz, L.W., West III, G.P., Shepherd, D., Nelson, T.,<br/>Chandler, G.N. and Zacharakis, A.</i> | 267 |
| Many are Called, but Few are Chosen: An Evolutionary Perspective<br>for the Study of Entrepreneurship<br><i>Aldrich, H.E. and Martinez, M.A.</i>                                       | 293 |
| The New Venture Decision: An Analysis Based on the GEM<br>Project Database<br><i>Morales-Gualdrón, S.T. and Roig, S.</i>   | 313 |
| Entrepreneurship Research in <i>AMJ</i> : What Has Been Published,<br>and What Might the Future Hold?<br><i>Ireland, R.D., Reutzell, C.R. and Webb, J.W.</i>                           | 335 |

# Entrepreneurship: Concepts, Theory and Perspective. Introduction

Álvaro Cuervo<sup>1</sup>, Domingo Ribeiro<sup>2</sup> and Salvador Roig<sup>2</sup>

<sup>1</sup>Universidad Complutense de Madrid

<sup>2</sup>Universitat de València

The creation of a country's wealth and dynamism depends upon the competitiveness of its firms and this, in turn, relies fundamentally on the capabilities of its entrepreneurs and managers.

The essence of the modern firm lies in the specialization of functions. "The businessmen" that manage economic activity are, in the strictest sense, both managers and entrepreneurs, the latter in a double sense: the individual businessman (independent) and the "corporate entrepreneur" who, without participating significantly in terms of capital, controls the firm.

Studying business capabilities requires the differentiation between the functions of entrepreneur, manager and capitalist, although in many cases; the same person may perform all three (Table 1).

The individual entrepreneur detects or creates business opportunities that he or she then exploits through small and medium-sized firms, normally participating in funding the capital for that firm, carries out the role of arbitrator, or simply "sells the idea" of the business project. The "corporate entrepreneur" or the chief executive of large firms must also be considered. This figure is no longer limited to efficiently managing the firm's assets and coordinating and controlling its activities. He or she must anticipate, articulate and manage change. In other words, corporate entrepreneurs must reinvent the firm on a daily basis, creating new enterprise (*spin-offs*) and developing company networks. When discussing the figure of the corporate entrepreneur, one must also consider the key shareholders that take an active part in the firm, along with managers that share in making up the firm's basic competences.

However, the manager's function is first and foremost to supervise the process of combining resources, and efficiently manage the firm's business portfolio. They have a key function when, as is normally the case, firms do not operate efficiently (Leibenstein, 1979), and instead are a long way short of their production boundaries. A second but fundamental task of the manager is to build up a reputation and an atmosphere of trust that transforms a conflictive system (individuals with conflicting objectives) into a system of cooperation. Managers should create a climate of trust so that employees will not tend towards opportunist behaviour, even when it suits their short-term interests, as well as achieving a greater degree of efficiency by reducing supervision and agency costs.

**Table 1.** Entrepreneurs, managers and capitalists

|                        | <b>Entrepreneur</b>  | <b>Capitalist</b>   | <b>Manager</b>  |
|------------------------|--|---|---|
| <b>Characteristics</b> | Discovers and exploits opportunities<br><br>A creator who initiates and motivates the process of change  | Capital owner: shareholders<br><br>Controlling shareholder<br>Passive shareholder | Administrates and manages resources<br><br>An administrator   |
| <b>Behaviour</b>       | Accepts risks<br><br>Uses intuition, is alert, explores new business<br><br>Leadership, initiates new ways of acting<br><br>Identifies business opportunities<br><br>Creation of new firms | Risk averse<br><br>Assesses alternatives<br><br>Choice of venture assets          | Risk averse<br><br>“Rational” decision-maker<br>Exploits business<br><br>Creates and maintains competitive advantage<br><br>Creates trust to enhance cooperation<br><br>Supervision of the administrative process |

Finally, the capitalist is the provider of the firm’s funds, either in the form of a passive shareholder (in the case of small shareholders or institutional investors) or as a majority or active shareholder who, in many small and medium-sized firms, assumes both the entrepreneurial and managerial functions.

## Entrepreneurship

The entrepreneurial function implies the discovery, assessment and exploitation of opportunities, in other words, new products, services or production processes; new strategies and organizational forms and new markets for products and inputs that did not previously exist (Shane and Venkataraman, 2000). The entrepreneurial opportunity is an unexpected and as yet unvalued economic opportunity.

Entrepreneurial opportunities exist because different agents have differing ideas on the relative value of resources or when resources are turned from inputs into outputs. The theory of the entrepreneur focuses on the heterogeneity of beliefs about the value of resources (Alvarez and Busenitz, 2001: 756).

Entrepreneurship – the entrepreneurial function, can be conceptualized as the discovery of opportunities and the subsequent creation of new economic activity, often via the creation of a new organization (Reynolds, 2005).

Due to the fact that there is no market for “opportunities” where the entrepreneur could sell the opportunity to others who will develop it, the entrepreneur must exploit them, meaning that he or she must develop his or her capabilities to obtain resources, as well as organize and exploit opportunities. The downside to the market of “ideas” or “opportunities” lies in the difficulty involved in protecting

ownership rights of ideas that are not associated with patents or copyrights. There is no legal protection of the different expectations held by entrepreneurs and investors on the economic value of ideas and business opportunities, and of the entrepreneur's need to withhold information that may affect the value of the project.

Entrepreneurship is often discussed under the title of the entrepreneurial factor, the entrepreneurial function, entrepreneurial initiative, and entrepreneurial behaviour and is even referred to as the entrepreneurial "spirit". The entrepreneurial factor is understood to be a new factor in production that is different to the classic ones of land, labor and capital, which must be explained via remuneration through income for the entrepreneur along with the shortage of people with entrepreneurial capabilities. Its consideration as an entrepreneurial function refers to the discovery and exploitation of opportunities or to the creation of enterprise. Entrepreneurial behaviour is seen as behaviour that manages to combine innovation, risk-taking and proactiveness (Miller, 1983). In other words, it combines the classic theories of Schumpeter's innovative entrepreneur (1934, 1942), the risk-taking entrepreneur that occupies a position of uncertainty as proposed by Knight (1921), and the entrepreneur with initiative and imagination who creates new opportunities. Reference to entrepreneurial initiative underlines the reasons for correctly anticipating market imperfections or the capacity to innovate in order to create a "new combination". Entrepreneurial initiative covers the concepts of creation, risk-taking, renewal or innovation inside or outside an existing organization. Lastly, the entrepreneurial spirit emphasizes exploration, search and innovation, as opposed to the exploitation of business opportunities pertaining to managers.

All this explains why entrepreneurship is described in different ways. The business process includes the identification and assessment of opportunities, the decision to exploit them oneself or sell them, efforts to obtain resources and the development of the strategy and organization of the new business project (Eckhardt and Shane, 2003). Entrepreneurship is "a process by which individuals – either on their own or within organizations – pursue opportunities" (Stevenson and Jarillo, 1990: 23). It has recently been claimed that if the managers and businessmen of many firms were to adopt entrepreneurial behaviour when developing their strategies, firms would be facing a much brighter future than current perceptions suggest (Lee and Peterson, 2000).

The entrepreneur's central activity is that of business creation, which can be studied at an individual and/or group level – analyzing psychological aspects and social variables of education, background or the family, either at an environmental level focusing on factors that enable business development, or by analyzing aspects of the economic, social and cultural environments.

The study of entrepreneurs as individuals requires the analysis of variables that explain their appearance, such as personal characteristics, the psychological profile (the need for achievement, the capacity to control, tolerance of ambiguity and a tendency to take risks) and non-psychological variables (education, experience, networks, family, etc.).

Additionally socio-cultural and institutional focuses underline the role of exclusion and social change as motivators of the entrepreneurial function in minority or marginalized groups. Studies on environmental variables emphasize culture or shared values in society, institutions linked to the legal framework, variables of the

economic environment (demand) and the financial one (venture capital and cost), along with the spatial environment (clusters and economies of agglomeration).

Therefore, there are three basic ideas that explain the appearance of entrepreneurial activity. The first focuses on the individual, in other words, entrepreneurial action is conceived as a human attribute, such as the willingness to face uncertainty (Kihlstrom and Laffont, 1979), accepting risks, the need for achievement (McClelland, 1961), which differentiate entrepreneurs from the rest of society. The second fundamental idea emphasizes economic, environmental factors that motivate and enable entrepreneurial activity, such as the size of markets, the dynamics of technological change (Tushman and Anderson, 1986), the structure of the market – normative and demographic, (Acs and Audretsch, 1990) or merely industrial dynamics. The third factor is linked to the functioning of institutions, culture and societal values. These three approaches are not exclusive (Eckhardt and Shane, 2003: 2), given that entrepreneurial activity is also a human activity and does not spontaneously occur solely due to the economic environment or technological, normative or demographic changes.

As previously mentioned, when referring to entrepreneurs, there is normally a differentiation between individual entrepreneurs or businessmen (independent) and corporate entrepreneurs or businessmen associated with the higher echelons of a firm's management. Different names have been used to describe the latter such as "corporate entrepreneurship", "corporate venturing", "intrapreneurship", "internal corporate entrepreneurship" and "strategic renewal".

Entrepreneurial management can be considered as being different to traditional ways of managing organizations. Many managers are looking to new ways of making their organizations more entrepreneurial in multiple ways, aspects, from a general strategic orientation to reward schemes (Brown, Davidsson and Wiklund, 2001). Barringer and Bluedorn (1999) emphasized a positive relationship between the intensity of corporate entrepreneurship and the intensity of the search for opportunities, strategic adaptation and value creation. As pointed out by Hitt et al. (2001: 488) "firms need to be simultaneously entrepreneurial and strategic".

Entrepreneurship is an essential element for economic progress as it manifests its fundamental importance in different ways: a) by identifying, assessing and exploiting business opportunities; b) by creating new firms and/or renewing existing ones by making them more dynamic; and c) by driving the economy forward – through innovation, competence, job creation and by generally improving the wellbeing of society.

Entrepreneurship affects all organizations regardless of size, or age, whether they are considered a private or public body, and independently of their objectives. Its importance for the economy is reflected in its visible growth as a subject of interest for the economic press and in academic literature. It is a matter of interest to academics, businessmen and governments the world over.

The study of entrepreneurship leads us to attempt to answer a series of questions such as: *What* happens when entrepreneurs act? *Why* do they act? and *How* do they act? (Stevenson and Jarillo, 1990). Why, when and how do opportunities for the creation of goods and services come into existence? Why, when and how do some people and not others discover and exploit these opportunities? And finally, why, when and how are different modes of action used to exploit entrepreneurial opportunities? (Shane and Venkataraman, 2000).

We have limited knowledge of the opinion of entrepreneurs, business opportunities, the people that pursue them, the skills used for organizing and exploiting opportunities and the most favourable environmental conditions for these activities. Moreover, studies are carried out at different levels; individual, firm, sector and geographical space. There is no basic theory for carrying out this type of study, resulting in approximations based on casuistry, anecdotes or fragmented reasoning (Eckhardt and Shane, 2003: 12). The black box of entrepreneurial function is yet to be opened (Fiet, 2001).

The problems involved in a study of “entrepreneurship” are linked to the need to delimit the field of study and rely on a conceptual structure that enables the explanation and prediction of empirical phenomena that are not explained by other fields of knowledge; it is necessary to generate a paradigm, to develop a set of testable hypotheses, to overcome the existing casuistry and description and look further into longitudinal and cross-sectional analysis.

Despite all this, a considerable body of literature has accumulated on the subject of entrepreneurship to the point where, just as has happened in other fields, a sizeable number of entrepreneurship-related studies have been published in journals in the areas of administration and management, while other journals that specifically specialize in topics related entrepreneurship have appeared. The role of the entrepreneur has been analyzed in special issues in journals such: *Strategic Management Journal* and *Journal of Management* (Audretsch et al. 2005), *Academy of Management Journal* and *Journal of International Marketing* (Coviello and Jones, 2004). Almost a hundred journals can be adjudged to have published work related to entrepreneurship (*Entrepreneurship Division* of the Academy of Management, in research carried out in the summer of 2006).

The differentiation of the field of entrepreneurship from other areas depends upon the object of the research, the methodologies and the problems researchers are attempting to resolve (Bruyat and Julien, 2000). Busenitz et al. (2003: 286) underline the importance of recognizing “*entrepreneurship* as a field of study within management”, a field of knowledge that upholds the development of entrepreneurship. It is on these fundamental ideas that we base our reflections.

The study and teaching of entrepreneurship and the role played by professors dedicated to teaching and research on this topic are of growing importance, as reflected in the rapid growth in courses and chairships in entrepreneurship in the United States in the last few years (Finkle, Kuratko and Goldsby, 2006). The University of Valencia has joined this trend through the creation of the first Chair of this kind among Spanish universities: the Bancaja Chair for Young Entrepreneurs, dedicated to the study, research and development of all aspects related to entrepreneurship.

## **The Book**

The book consists of 15 chapters grouped into three sections. These are: Concepts, Theory and Perspective. Each chapter contains a published article that has played a relevant role in the scientific consolidation of the field of entrepreneurship, that

may do so in the future, or which presents some complementary element to the vision of the field of *entrepreneurship*. We are aware of the absence of some well-known, highly-regarded texts. This is due to the fact that, in the difficult task of reducing an original list of more than 100 references, we have opted for the complementarity of the contents, thus avoiding any superfluous inclusions. The final choice of articles inevitably reflects our own links with business management.

The first part of the book, Concepts, aims to provide a range of terminology and conceptual ideas. At the same time it provides an account of the historical evolution and theoretical location of the different approaches to *Entrepreneurship*. This first section consists of four chapters.

The first chapter, contributed by Professor Veciana, is the updated version of a study carried out in 1999. It presents, describes and classifies theories that have been used to give structure to and formalize the field of study. For such a classification, the author creates a matrix based on four theoretical approaches: economic, psychological, institutional and managerial – and three levels of analysis within *entrepreneurship*, micro, meso and macro. In the subsequent grid, twenty five theories on *entrepreneurship* are located. The comprehensive bibliography is an indication of the extensive and fruitful academic and research activity of one of Europe's pioneers in the study of *entrepreneurship*.

The second chapter contains the oldest of the texts that appear in this book, but it is one that has also had huge repercussions in the history of the field, in terms of citations. Carland et al. present *entrepreneurs* as being different from capitalists and from managers, and discuss the contribution of *entrepreneurship* to small businesses and to the economy as a whole. The authors underline the importance of the difference between entrepreneurial firms and new or small firms. They propose a criterion for identifying entrepreneurial firms, which consist of complying with at least one of the four conditions that, according to Schumpeter (1934), reflect entrepreneurial behaviour: the introduction of new products, the introduction of new modes of production, the opening up of new markets or an industrial reorganization.

The third chapter, provided by Sharma and Chrisman, addresses the problem of the differences that exist in the terminology used to describe *entrepreneurship*, with the idea of reducing the confusion that surrounds the field and reconciling differences between existing definitions. The authors provide a definition both for *entrepreneurship* and for the entrepreneur. For Sharma and Chrisman, entrepreneurship covers the occurrence of organizational creation or innovation that occurs inside or outside the existing organization, whilst entrepreneurs are individuals or groups of individuals that act independently, or as part of a corporate system, that create new organizations or instigate renewal or innovation within an existing one. The authors analyze *corporate entrepreneurship* and, following a discussion on internal and external firm creation, provide a classification of *internal firm* creation, with a particular focus on structural autonomy and the degree of the relationship with the lines of business of the firm that motivates such a creation.

In the fourth chapter, which concludes the first section, Aldrich and Fiol, point out the high levels of risk undertaken by firms that are created in emerging sectors. The text looks at certain procedures that can be employed in order for a

sector to obtain legitimacy at an institutional level. Several strategies are also presented that have been used by particular firms in newly emerging sectors.

The second section of the book, which includes chapters five to ten, deals with three important paradigms in the evolution of *entrepreneurship* and contributes two theoretical viewpoints that, despite having a more limited scope, have the advantage of strong links with other disciplines or bodies of knowledge.

Chapter five contains the work of Low and Macmillan, which appeared in 1988. The authors propose the definition of the field of *entrepreneurship* as “the creation of new enterprise” and from this standpoint, they suggest six requirements that research on *entrepreneurship* should comply with: purpose, theoretical perspective, focus, level of analysis, time frame and methodology. Having established these requirements, they assess previously published research in order to evaluate to what extent they comply and give guidelines for future research in the field.

In the sixth chapter, Stevenson and Jarillo begin by discussing the apparent conceptual conflict between *entrepreneurship* and corporate entrepreneurship. In order to surpass theoretical tradition that attempted to explain the causes of entrepreneurial behaviour, its economic and social outcomes or entrepreneurial activity in a way that can be considered too independent, they accept the concept of entrepreneurship as a process via which individuals – either on their own or within organizations – look for opportunities without taking into account the resources they have at their disposition at a given time. Using this definition, the subject may cease to be an individual and become an organization. From thereon in, they apply their conclusions to corporate entrepreneurship, laying down the characteristics of the entrepreneurial organization.

The seventh chapter corresponds to the study by Shane and Venkataraman, “The promise of entrepreneurship as a field of research”. The authors consider the existence, nature and discovery of opportunities as the real core of *entrepreneurship* and provide some reasons as to why certain people recognize these opportunities while others do not. At the same time, they research ways of developing and making the most of opportunities according to the form they take. By considering opportunities to be the core of *entrepreneurship*, they are indicating a specific field of research and establish differences with the classical, psychological approach, the strategic approach and that of economic equilibrium.

The eighth chapter constitutes a look at cognitive theory applied to *entrepreneurship*. Therein, Krueger proposes a cognitive model, based on intentions, that processes the perception of opportunities and assesses their desirability and feasibility. The article constitutes a detailed discussion on the importance of a strategic orientation towards new opportunities, as well as its basic nature. Cognitive theory is currently the main link between *entrepreneurship* and the science of psychology.

In the ninth chapter, Alvarez and Busenitz propose a relationship between a resource-based theory and *entrepreneurship*. By doing so, they offer new perspectives that extend the boundaries of resource theory while using such theoretical trappings to address important questions concerning *entrepreneurship*. From the perspective of a resource-based theory, they assess “the recognition of opportunities and opportunity-seeking behaviour” as a resource, along with “the process of

combining and organizing resources". The article also includes a discussion on cognition and business competence, the recognition of opportunities, strategic complementarity and causal ambiguity with regard to the ex post limitations to the act of competing.

In the tenth chapter, Gartner uses the six key recommendations for specifying research into *entrepreneurship* discussed by Low and Macmillan (1988), (purpose, theoretical perspective, focus, level of analysis, time frame and methodology), in order to analyze the article written by Shane and Venkataraman (2000), "The promise of entrepreneurship as a field of research". In other words, the methodology proposed in chapter five is used to analyze the study in chapter seven, thus demonstrating the usefulness of the methodology proposed by Low and MacMillan and underlining the soundness of the ideas included in the study by Shane and Venkataraman. It is their recommendation that communities of academics should arise within the field of entrepreneurship that identify themselves with specific questions and research topics.

The third part of the book is made up of five chapters, of which the first three focus on presenting suggestions for future investigation in entrepreneurship, with the aim of achieving consolidation as a scientific field. This section also includes an international project on entrepreneurship and recommendations for analyzing and facilitating the publication of research on entrepreneurship.

In chapter eleven, Davidsson and Wiklund, basing their ideas on the results obtained by Low and MacMillan (1988), study the levels of analysis that have been identified in studies on entrepreneurship. They then go on to provide examples of progress for specific levels of analysis: for example, individual and team, firm, industry/ population, regional and national. The authors propose that progress in the future will depend on a closer relationship between the theories of entrepreneurship and levels of analysis.

Chapter twelve is a study created by a group of professors from the Entrepreneurship Division of the Academy of Management. They propose the existence of three areas that are central to research on entrepreneurship: opportunities, ways of organizing and putting into effect the exploitation of opportunities and the study of the environment. They suggest that the most fertile ground is to be found at the intersections of those areas. They locate both at the intersections and in the areas themselves a sample of 97 articles published in the main academic journals for this topic. In addition, they use the same sample to assess the degree of consolidation of the scientific field of entrepreneurship, as well as its level of scientific legitimacy and the flow of exchange with other fields. The conclusions drawn from this assessment are not particularly encouraging and, although significant advances are recognized, it can be ascertained from this article that any real consolidation is still lacking in comparison with the enormous popularity and interest that the subject of entrepreneurship attracts today.

Chapter thirteen written by Aldrich and Martinez, presents three tendencies observed in the last decade: a) a switch from the theoretical emphasis on the characteristics of entrepreneurs as individuals to the consequences of their actions, b) a deeper understanding of how entrepreneurs use knowledge, networks and resources to create

businesses, and c) a more sophisticated taxonomy of the environmental forces at different levels of analysis (population, community and society) that affect entrepreneurship. The authors believe that progress has been made with regard to knowledge of the “process” of entrepreneurship, but that a better characterization of the “entrepreneurial context” is still needed, along with an analysis of a resource-based interaction of process and context. Together with a more sophisticated assessment of strategy and the environment, the authors suggest that progress can be made by creating theoretically derived hypotheses, adding longitudinal information and applying modern statistical techniques.

Chapter fourteen, provided by Morales and Roig, analyzes the influence of the main factors that appear in the relevant literature on the decision to start a new firm; identifying the perception of business opportunities, making use of the knowledge of other entrepreneurs and the perceptions held on the necessary skills as crucial elements of the process. They also analyze an aversion to risk-taking, especially when it affects the family’s expectations for the future, as well as higher income and a higher level of academic studies as limiting factors to the likelihood of starting a new firm. The conclusions are drawn from the database published with the results of the GEM (Global Entrepreneurship Monitor), which contains information from 29 different countries.

Chapter fifteen contains the ideas developed by Ireland, Reutzel and Webb, editors of the *Academy of Management Journal*, on the evolution of research on entrepreneurship published in this prestigious journal, in clear competition with research in other areas of management. This study offers some expectations for research into entrepreneurship that the AMJ might publish in the future, at the same time as calling for greater attention to technical statistics, such as measurements of validation and the interpretation of facts and results.

## **The Relevance of These Articles to the Field of Entrepreneurship**

The selection of articles included herein are, without doubt due to personal choice and are the sole responsibility of the editors, though attention has been paid to impact factors and citation indices, mainly the ISI/JCR and EBSCO. The impact of the journals, the authors and the articles on academic activity can be identified through measuring how widely they are used, thanks to the number of times they are cited in subsequent studies. For some time now, total numbers of citations have been considered an important yardstick for gauging the quality of an article, the relevance of the author’s work, and the status of the journal where the articles appeared (Garfield, 1972, 1979; Chandy and Williams, 1994; Johnson and Podsakoff, 1994; Knight, Hult, and Bashaw, 2000).

However, with regard to this field in particular, we have found two relevant biases; on the one hand, citation indexes have led to a surfeit of articles with a larger financial component, giving priority to those of an informative nature to the detriment of those that are more theory-based. On the other hand, it is natural for older articles to have received more citations than recent publications and thus the

influence of more up-to-date studies cannot be demonstrated by using citation counts, although there are a few exceptions, such as the case of Shane and Venkataraman (2000).

Articles published between 1945 and 2005, in journals appearing in the ISI under the categories of “business”, “management” or “economics” were chosen. If they appeared before 1991, they had to have received at least five citations according to the database of the Social Science Citation Index (SSCI), which provided an initial sample of 2,564 articles. In turn, these articles contained 102,331 citations pertaining to a total 61,336 different documents.

Table 2 lists articles from the initial sample published in academic journals and placed in order of decreasing number of citations received according to the database of the Social Science Citation Index. These are all ISI articles cited in ISI journals. It is, in our opinion, an endogeneous selection from an extremely limited sample and consequently is not representative of the population of documents that form the basis of research.

The fifty most frequently cited articles from the sample are shown, taken from the SSCI database between 1945 and 2005. In this listing, the time lapse between the publication of an article and the first citations can be clearly seen. Moreover, the older articles have had more exposure to new generations of authors and thus are more likely to receive a greater number of citations. This makes it appropriate to subdivide the citation according to when they were published.

**Table 2.** 50 Most frequently cited articles from the initial sample of the SSCI database

| Order | Citations | Article  |
|-------|-----------|--|
| 1     | 274       | Uzzi, B. 1997. Social structure and competition in interfirm networks: the paradox of embeddedness. <i>Administrative Science Quarterly</i> , 42 (1): 35–67 Mar.                                       |
| 2     | 225       | Petersen, M.A. & Rajan, R.G. 1994. The benefits of lending relationships – evidence from small business data. <i>Journal of Finance</i> , 49 (1): 3–37 Mar.  |
| 3     | 209       | Deshpande, R., Farley, J.U. & Webster, F.E. 1993. Corporate culture, customer orientation, and innovativeness in Japanese firms – a quadrad analysis. <i>Journal of Marketing</i> , 57 (1): 23–27 Jan. |
| 4     | 206       | Evans, D.S. & Jovanovic, B. 1989. An estimated model of entrepreneurial choice under liquidity constraints. <i>Journal of Political Economy</i> , 97 (4): 808–827 Aug.                                 |
| 5     | 185       | Brickley, J.A. & Dark, F.H. 1987. The choice of organizational form – the case of franchising. <i>Journal of Financial Economics</i> , 18 (2): 401–420 Jun.  |
| 6     | 165       | King, R.G. & Levine, R. 1993. Finance, entrepreneurship, and growth – theory and evidence. <i>Journal of Monetary Economics</i> , 32 (3): 513–542 Dec.   |
| 7     | 156       | Treadway, A.B. 1969. Rational entrepreneurial behaviour and demand for investment. <i>Review of Economic Studies</i> , 36 (2): 227–239.  |
| 8     | 155       | Nee, V. 1992. Organizational dynamics of market transition – hybrid forms, property-rights, and mixed economy in China. <i>Administrative Science Quarterly</i> , 37 (1): 1–27 Mar.                    |
| 9     | 148       | Miller, D. 1983. The correlates of entrepreneurship in 3 types of firms. <i>Management Science</i> , 29 (7): 770–791.  |

(Continued)

| Order | Citations | Article  |
|-------|-----------|--|
| 10    | 136       | Miller, D. & Friesen, P.H. 1982. Innovation in conservative and entrepreneurial firms – 2 models of strategic momentum. <i>Strategic Management Journal</i> , 3 (1): 125.                                    |
| 11    | 135       | Lafontaine, F. 1992. Agency theory and franchising – some empirical results. <i>Rand Journal of Economics</i> , 23 (2): 263-283 sum.   |
| 12    | 133       | Eisenhardt, K.M. & Schoonhoven, C.B. 1996. Resource-based view of strategic alliance formation: strategic and social effects in entrepreneurial firms. <i>Organization Science</i> , 7 (2): 136–150 Mar–Apr. |
| 13    | 124       | Aghion, P. & Bolton, P. 1992. An incomplete contracts approach to financial contracting. <i>Review of Economic Studies</i> , 59 (3): 473–494 Jul.  |
| 14    | 123       | Banerjee, A.V. & Newman, A.F. 1993. Occupational choice and the process of development. <i>Journal of Political Economy</i> , 101 (2): 274–298 Apr.  |
| 15    | 122       | Shane, S.A. & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. <i>Academy of Management Review</i> , 25 (1): 217–226 Jan.  |
| 16    | 116       | Mintzberg, H. & Waters, J.A. 1982. Tracking strategy in an entrepreneurial firm. <i>Academy of Management Journal</i> , 25 (3): 465–499.   |
| 17    | 115       | Baumol, W.J. 1990. Entrepreneurship – productive, unproductive, and destructive. <i>Journal of Political Economy</i> , 98 (5): 893–921 part 1 Oct.   |
| 18    | 114       | Gartner, W.B. 1985. A conceptual-framework for describing the phenomenon of new venture creation. <i>Academy of Management Review</i> , 10 (4): 696–706.   |
| 19    | 114       | Kihlstrom, R.E. & Laffont, J.J. 1979. General equilibrium entrepreneurial theory of firm formation based on risk aversion. <i>Journal of Political Economy</i> , 87 (4): 719–748.                            |
| 20    | 112       | Petersen, M.A. & Rajan, R.G. 1995. The effect of credit market competition on lending relationships. <i>Quarterly Journal of Economics</i> , 110 (2): 407–443 May.   |
| 21    | 110       | Caves, R.E. & Murphy, W.F. 1976. Franchising – firms, markets, and intangible assets. <i>Southern Economic Journal</i> , 42 (4): 572–586.  |
| 22    | 109       | Blanchflower, D.G. & Oswald, A.J. 1998. What makes an entrepreneur? <i>Journal of Labor Economics</i> , 16 (1): 26–60 Jan..  |
| 23    | 108       | Burgelman, R.A. 1983. Corporate entrepreneurship and strategic management – insights from a process study. <i>Management Science</i> , 29 (12): 1349–1364.   |
| 24    | 101       | Carland, J.W., Hoy F., Boulton, W.R., et al. 1984. Differentiating entrepreneurs from small business owners – a conceptualization. <i>Academy of Management Review</i> , 9 (2): 354–359.                     |
| 25    | 101       | Hart, O. & Moore, J. 1994. A theory of debt based on the inalienability of human-capital. <i>Quarterly Journal of Economics</i> , 109 (4): 841–879 Nov.  |
| 26    | 100       | Brockhaus, R.H. 1980. Risk-taking propensity of entrepreneurs. <i>Academy of Management Journal</i> , 23 (3): 509–520.   |
| 27    | 99        | Bates, T. 1990. Entrepreneur human-capital inputs and small business longevity. <i>Review of Economics and Statistics</i> , 72 (4): 551–559 Nov.   |

(Continued)

| Order | Citations | Article   |
|-------|-----------|---|
| 28    | 96        | Holtzeakin, D., Joulfaian, D., & Rosen, H.S. 1994. Sticking it out – entrepreneurial survival and liquidity constraints. <i>Journal of Political Economy</i> , 102 (1): 53–75 Feb.                                      |
| 29    | 94        | Norton, S.W. 1988. An empirical look at franchising as an organizational form. <i>Journal of Business</i> , 61 (2): 197–218 Apr.  |
| 30    | 91        | Dewatripont, M. & Maskin, E. 1995. Credit and efficiency in centralized and decentralized economies. <i>Review of Economic Studies</i> , 62 (4): 541–555 Oct.   |
| 31    | 89        | Millson, M.R., Raj, S.P. & Wilemon, D. 1992. A survey of major approaches for accelerating new product development. <i>Journal of Product Innovation Management</i> , 9 (1): 53–69 Mar                                  |
| 32    | 83        | Stuart, T.E., Hoang, H. & Hybels, R.C. 1999. Interorganizational endorsements and the performance of entrepreneurial ventures. <i>Administrative Science Quarterly</i> , 44 (2): 315–349 Jun.                           |
| 33    | 82        | Fiol, C.M. 1994. Consensus, diversity, and learning in organizations. <i>Organization Science</i> , 5 (3): 403–420 Aug.   |
| 34    | 82        | Gersick, C.J.G. 1994. Pacing strategic change – the case of a new venture. <i>Academy of Management Journal</i> , 37 (1): 9–45 Feb.   |
| 35    | 82        | Sandberg, W.R. & Hofer, C.W. 1987. Improving new venture performance – the role of strategy, industry structure, and the entrepreneur. <i>Journal of Business Venturing</i> , 2 (1): 5–28 win.                          |
| 36    | 82        | Vandeven, A.H., Hudson, R. & Schroeder, D.M. 1984. Designing new business startups – entrepreneurial, organizational, and ecological considerations. <i>Journal of Management</i> , 10 (1): 87–107.                     |
| 37    | 77        | Oviatt, B.M. & McDougall, P.P. 1994. Toward a theory of international new ventures. <i>Journal of International Business Studies</i> , 25 (1): 45–64.   |
| 38    | 75        | Busenitz, L.W. & Barney, J.B. 1997. Differences between entrepreneurs and managers in large organizations: biases and heuristics in strategic decision-making. <i>Journal of Business Venturing</i> , 12 (1): 9–30 Jan. |
| 39    | 74        | Holtzeakin, D., Joulfaian, D., & Rosen, H.S. 1994. Entrepreneurial decisions and liquidity constraints. <i>Rand Journal of Economics</i> , 25 (2): 334–347 sum.   |
| 40    | 73        | Cooper, A.C., Woo, C.Y. & Dunkelberg, W.C. 1988. Entrepreneurs perceived chances for success. <i>Journal of Business Venturing</i> , 3 (2): 97–108 spr.   |
| 41    | 72        | Begley, T.M. & Boyd, D.P. 1987. Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. <i>Journal of Business Venturing</i> , 2 (1): 79–93 win.                     |
| 42    | 72        | Peterson, R.A. & Berger, D.G. 1971. Entrepreneurship in organizations – evidence from popular music industry. <i>Administrative Science Quarterly</i> , 16 (1): 97–107.   |
| 43    | 70        | Jacobson, R. 1992. The austrian school of strategy. <i>Academy of Management Review</i> , 17 (4): 782–807 Oct.  |
| 44    | 68        | Stevenson, H.H. & Jarillo, J.C. 1990. A paradigm of entrepreneurship – entrepreneurial management. <i>Strategic Management Journal</i> , 11: 17–27 sp. iss. si sum.   |

(Continued)

| Order | Citations | Article   |
|-------|-----------|---|
| 45    | 67        | Cooper, R.G. & Kleinschmidt, E.J. 1995. Benchmarking the firms critical success factors in new product development. <i>Journal of Product Innovation Management</i> , 12 (5): 374-391 nov.    |
| 46    | 66        | Kalleberg, A.L. & Leicht, K.T. 1991. Gender and organizational performance – determinants of small business survival and success. <i>Academy of Management Journal</i> , 34 (1): 136–161 Mar. |
| 47    | 66        | Straub, D., Limayem, M., & Karahannaevvaristo, E. 1995. Measuring system usage – implications for is theory testing. <i>Management Science</i> , 41 (8): 1328–1342 Aug.                       |
| 48    | 64        | Baumol, W.J. 1968. Entrepreneurship in economic theory. <i>American Economic Review</i> , 58 (2): 64–71.  |
| 49    | 64        | Rao, C.H.H. 1971. Uncertainty, entrepreneurship, and sharecropping in india. <i>Journal of Political Economy</i> , 79 (3): 578–595.   |
| 50    | 63        | Black, B.S. & Gilson, R.J. 1998. Venture capital and the structure of capital markets: banks versus stock markets. <i>Journal of Financial Economics</i> , 47 (3): 243–277 Mar.               |

The disparity in the amount of citations received by the articles in Tables 2 and 3 clearly reflects the greater exposure time enjoyed by the articles from the second period. The time lapse between the appearance of an article and the receipt of citations is also relevant, especially if only citations in ISI journals are included in the count, where time scales for revision, acceptance and publication tend to be extensive. However, as a reflection of these differences, we decided to focus our attention on the more recent articles.

**Table 3.** 25 Most frequently cited articles from the period 2000–2005 from the SSCI database

| Order | Citations | Articles published between 2000 and 2005   |
|-------|-----------|--|
| 1     | 122       | Shane, S.A. & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. <i>Academy of Management Review</i> , 25 (1): 217–226 Jan.  |
| 2     | 52        | Shane, S.A. 2000. Prior knowledge and the discovery of entrepreneurial opportunities. <i>Organization Science</i> , 11 (4): 448–469 Jul–Aug.   |
| 3     | 45        | Amit R. & Zott, C. 2001. Value creation in e-business. <i>Strategic Management Journal</i> , 22 (6–7): 493–520 Jun–Jul.  |
| 4     | 45        | Autio, E., Sapienza, H.J. & Almeida, J.G. 2000. Effects of age at entry, knowledge intensity, and imitability on international growth. <i>Academy of Management Journal</i> , 43 (5): 909–924 Oct. |
| 5     | 36        | Heaton, J. & Lucas, D. 2000. Portfolio choice and asset prices: the importance of entrepreneurial risk. <i>Journal of Finance</i> , 55 (3): 1163–1198 Jun.   |
| 6     | 30        | Hamilton, B.H. 2000. Does entrepreneurship pay? an empirical analysis of the returns to self-employment. <i>Journal of Political Economy</i> , 108 (3): 604–631 Jun.                               |
| 7     | 29        | McDougall, P.P. & Oviatt, B.M. 2000. International entrepreneurship: the intersection of two research paths. <i>Academy of Management Journal</i> , 43 (5): 902–906 Oct.                           |

(Continued)

| Order | Citations | Articles published between 2000 and 2005  |
|-------|-----------|---|
| 8     | 27        | Guillen, M.F. 2000. Business groups in emerging economies: a resource-based view. <i>Academy of Management Journal</i> , 43 (3): 362–380 Jun.   |
| 9     | 26        | Petersen, M.A. & Rajan, R.G. 2002. Does distance still matter? the information revolution in small business lending. <i>Journal of Finance</i> , 57 (6): 2533–2570 Dec.   |
| 10    | 26        | Miner, A.S., Bassoff, P. & Moorman, C. 2001. Organizational improvisation and learning: a field study. <i>Administrative Science Quarterly</i> , 46 (2): 304–337 Jun.   |
| 11    | 26        | Chandy, R.K. & Tellis, G.J. 2000. The incumbent's curse? incumbency, size, and radical product innovation. <i>Journal of Marketing</i> , 64 (3): 1–17 Jul.  |
| 12    | 23        | Lu, J.W. & Beamish, P.W. 2001. The internationalization and performance of smes. <i>Strategic Management Journal</i> , 22 (6–7): 565–586 Jun–Jul.   |
| 13    | 23        | Stein, J.C. 2002. Information production and capital allocation: decentralized versus hierarchical firms. <i>Journal of Finance</i> , 57 (5): 1891–1921 Oct.  |
| 14    | 22        | Ahuja, G. & Lampert, C.M. 2001. Entrepreneurship in the large corporation: a longitudinal study of how established firms create breakthrough inventions. <i>Strategic Management Journal</i> , 22 (6–7): 521–543 Jun–Jul. |
| 15    | 21        | Wallsten, S.J. 2000. The effects of government-industry r&d programs on private r&d: the case of the small business innovation research program. <i>Rand Journal of Economics</i> , 31 (1): 82–100 spr.                   |
| 16    | 21        | Etzkowitz, H., Webster A., Gebhardt C., et al. 2000. The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm. <i>Research Policy</i> , 29 (2): 313–330 Feb.   |
| 17    | 21        | Simon, M., Houghton, S.M. & Aquino, K. 2000. Cognitive, biases, risk perception and venture formation: how individuals decide to start companies. <i>Journal of Business Venturing</i> , 15 (2): 113–134 Mar.             |
| 18    | 20        | Friedman, E., Johnson, S., Kaufmann, D., et al. 2000. Dodging the grabbing hand: the determinants of unofficial activity in 69 countries. <i>Journal of Public Economics</i> , 76 (3): 459–493 Jun.                       |
| 19    | 20        | Casper, S. 2000. Institutional adaptiveness, technology policy, and the diffusion of new business models: the case of german biotechnology. <i>Organization Studies</i> , 21 (5): 887–914.                                |
| 20    | 20        | Hult, G.T.M. & Ketchen, D.J. 2001. Does market orientation matter?: a test of the relationship between positional advantage and performance. <i>Strategic Management Journal</i> , 22 (9): 899–906 Sep.                   |
| 21    | 20        | Shane, S.A. & Cable, D.M. 2002. Network ties, reputation, and the financing of new ventures. <i>Management Science</i> , 48 (3): 364–381 Mar.   |
| 22    | 19        | Johnson, S., McMillan, J. & Woodruff, C. 2002. Courts and relational contracts. <i>Journal of Law Economics &amp; Organization</i> , 18 (1): 221–277 Apr.   |
| 23    | 19        | Rothaermel, F.T. 2001. Incumbent's advantage through exploiting complementary assets via interfirm cooperation. <i>Strategic Management Journal</i> , 22 (6–7): 687–699 Jun–Jul.  |

(Continued)

| Order | Citations | Articles published between 2000 and 2005   |
|-------|-----------|--|
| 24    | 19        | Thursby, J.G. & Thursby, M.C. 2002. Who is selling the ivory tower? sources of growth in university licensing. <i>Management Science</i> , 48 (1): 90–104 Jan.                             |
| 25    | 19        | Berger, A.N., Klapper, L.F. & Udell, G.F. 2001. The ability of banks to lend to informationally opaque small businesses. <i>Journal of Banking &amp; Finance</i> , 25 (12): 2127–2167 Dec. |

In the following tables, we will see the citations, received by any type of document, out of the 61,336 quoted by the articles from our initial sample. In practice, this methodology incorporates published articles in journals that are not included in the ISI databases and also includes books and reference material. In fact, 27 of the 50 most frequently cited documents are indeed books, and articles published in journals that do not appear in the ISI can also be found, despite the fact that the initial sample is made up of ISI articles.

Table 4 very clearly shows the origin of the theoretical antecedents of the field of entrepreneurship.

**Table 4.** 50 Most frequently cited documents in the 200 most frequently cited articles in the SSCI

| Order | Document  | Citations |
|-------|---|-----------|
| 1     | Schumpeter, J.A. 1934. The theory of economic development: an inquiry into profits, capital, credit, interest, and the business cycle. Harvard University Press, Cambridge, MA. | 31        |
| 2     | Porter, M.E. 1980. Competitive Strategy. The Free Press, New York.  | 25        |
| 3     | McClelland, D.C. 1961. The Achieving Society. The Free Press, New York.   | 22        |
| 4     | Penrose, E.T. 1959. The Theory of growth of the firm. John Wiley and Sons, New York.  | 17        |
| 5     | Miller, D. 1983. The correlates of entrepreneurship in 3 types of firms. <i>Management Science</i> , 29 (7): 770–791.   | 17        |
| 6     | Vesper, K.H. 1990. New venture strategies. Prentice-Hall, Englewood Cliffs, NJ.   | 17        |
| 7     | Williamson, O.E. 1975. Markets and Hierarchies: Analysis and Antitrust Implications. The Free Press, New York.  | 15        |
| 8     | Schumpeter, J.A. 1942. Capitalism, Socialism, and Democracy. Harper, New York.  | 15        |
| 9     | Nunnally, J.C. 1978. Psychometric Theory. McGraw-Hill, New York.  | 15        |
| 10    | Kirzner, I.M. 1973. Competition and Entrepreneurship. University of Chicago Press, Chicago.   | 15        |
| 11    | Lawrence, P.R. & Lorsch, J. 1967. Organization and Environment: Managing Differentiation and Integration. Irwin, Homewood, IL.  | 15        |
| 12    | Brockhaus, R.H. 1982. The Psychology of the entrepreneur, in Sexton & Smilor & Vesper "The Encyclopedia of Entrepreneurship" Prentice Hall, Englewood Cliffs, NJ.               | 14        |
| 13    | Peters, T.J. & Waterman, R.H. 1982. In Search of Excellence. Harper & Row, New York.  | 13        |
| 14    | Weick, K.E. 1969. The Social Psychology of Organizing. Addison-Wesley, Reading, Mass.   | 13        |

(Continued)

| Order | Document  | Citations |
|-------|---|-----------|
| 15    | Burgelman, R.A. 1983. A Process Model of Internal Corporate Venturing in the Diversified Major Firm. <i>Administrative Science Quarterly</i> , 28 (2): 223–244.                                 | 13        |
| 16    | Begley, T.M. & Boyd, D.P. 1987. Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. <i>Journal of Business Venturing</i> , 2 (1): 79–93. | 13        |
| 17    | Low, M.B. & MacMillan, I.C. 1988. Entrepreneurship: Past research and future challenges. <i>Journal of Management</i> , 14 (2): 139–161.  | 13        |
| 18    | Stinchcombe, A.L. 1965. Social Structure and Organizations. In: J.G. March (ed) "Handbook of Organizations"   | 13        |
| 19    | Chandler, A.D. 1962. Strategy and Structure: Chapters in the History of the Industrial Enterprise. MIT Press, Cambridge, Mass.  | 13        |
| 20    | Collins, O.F. & Moore, D.G. 1964. The Enterprising Man. Michigan State University Press, Michigan.  | 13        |
| 21    | Rubin, P.H. 1978. The Theory of the Firm and the Structure of the Franchise Contract. <i>Journal of Law and Economics</i> , 21(1): 223–233.   | 13        |
| 22    | Hannan, M. T. & J. H. Freeman. 1984. Structural inertia and organizational change. <i>American Sociological Review</i> 49(2):149–64.  | 12        |
| 23    | Nelson, R. & Winter, S. 1982. An Evolutionary Theory of Economic Change. Harvard University Press, Cambridge, MA.   | 12        |
| 24    | Cyert, R.M. & March, J.G. 1963 A Behavioral Theory of the Firm. Prentice Hall, Englewood Cliffs, NJ.  | 12        |
| 25    | Covin, J.G. & Slevin, D.P. 1989. Strategic Management of Small Firms in Hostile and Benign Environments. <i>Strategic Management Journal</i> , 10(1): 75–87.                                    | 12        |
| 26    | Mathewson, G.F. & Winter, R.A. 1985. The Economics of Franchise Contracts <i>Journal of Law and Economics</i> , 28(3):503–526.  | 12        |
| 27    | Drucker, P. 1985. Innovation and entrepreneurship: practice and principles. Heinemann, London.  | 12        |
| 28    | Sandberg, W.R. & Hofer, C.W. 1987. Improving new venture performance – the role of strategy, industry structure, and the entrepreneur. <i>Journal of Business Venturing</i> , 2 (1): 5–28.      | 11        |
| 29    | Kanter, R. M. 1983. The Change Masters: Corporate Entrepreneurs at Work. Simon & Schuster, New York.  | 11        |
| 30    | Mintzberg, H. 1979. Structuring of organizations: a synthesis of the research. Prentice Hall, Englewood Cliffs, NJ.   | 11        |
| 31    | Miller, D. & Friesen, P.H. 1982. Innovation in Conservative and Entrepreneurial Firms – 2 Models of Strategic Momentum. <i>Strategic Management Journal</i> , 3 (1): 1–25.                      | 11        |
| 32    | Hornaday, J.A. & Aboud, J. 1971. Characteristics of Successful Entrepreneurs. <i>Personnel Psychology</i> , 24(2): 141–153.   | 11        |
| 33    | Knight, F.H. 1921. Risk, Uncertainty and Profit. Houghton Mifflin, New York.  | 11        |
| 34    | Diamond, D. 1984. Financial intermediation and delegated monitoring, <i>Review of Economic Studies</i> , 51, 393–414.   | 11        |
| 35    | Burgelman, R.A. 1983. Corporate entrepreneurship and strategic management – insights from a process study. <i>Management Science</i> , 29 (12): 1349–1364.                                      | 11        |
| 36    | Williamson, O.E. 1985. The Economic Institutions of Capitalism. The Free Press, New York.   | 11        |

(Continued)

| Order | Document   | Citations |
|-------|--|-----------|
| 37    | Pfeffer, J. & Salancik, G.R. 1978. The External Control of Organizations: A Resource Dependence Perspective. Harper and Row, New York.                                   | 10        |
| 38    | Pinchot, G. 1985. Intrapreneuring. Harper and Row, New York.   | 10        |
| 39    | Evans, D. & Leighton, L. 1989. Some empirical aspects of entrepreneurship. <i>American Economic Review</i> , 79(3): 519–535.   | 10        |
| 40    | Porter, M.E. 1985. Competitive Advantage. The Free Press, New York.  | 10        |
| 41    | Hannan, M.T. & Freeman, J. 1977. The Population Ecology of Organizations. <i>American Journal of Sociology</i> , 82: 929,964.  | 10        |
| 42    | Smith, N.R. 1967. The Entrepreneur and his Firm. Michigan State University Press, Michigan.  | 10        |
| 43    | Caves, R.E. & Murphy, W.F. 1976. Franchising – firms, markets, and intangible assets. <i>Southern Economic Journal</i> , 42 (4): 572–586.                                | 10        |
| 44    | Child, J. 1972. Organization Structure, Environment, and Performance: The Role of Strategic Choice, <i>Sociology</i> , 6: 1–22.  | 10        |
| 45    | Aldrich, H.E. & Zimmer, C. 1986. Entrepreneurship through Social Networks. in Sexton D.; Smilor, R.W.(eds) The Art and Science of Entrepreneurship. Ballinger, New York. | 10        |
| 46    | Brickley, J.A. & Dark, F.H. 1987. The choice of organizational form - the case of franchising. <i>Journal of Financial Economics</i> , 18 (2): 401–420.                  | 10        |
| 47    | MacMillan, I.C. & Day, D. 1987. Corporate ventures into industrial markets: Dynamics of aggressive entry. <i>Journal of Business Venturing</i> , 2(1): 29–39.            | 10        |
| 48    | Guth, W.D. & Ginsberg, A. 1990. Guest Editors' Introduction: Corporate Entrepreneurship. <i>Strategic Management Journal</i> , 11(5): 5–15                               | 10        |
| 49    | Burns, L.R. & Stalker, G.M. 1961. The Management of Innovation. Oxford University Press, Oxford  | 10        |
| 50    | Stiglitz, J.E. & Weiss, A. 1981. Credit rationing in markets with imperfect information, <i>American Economic Review</i> , 71: 393–410.                                  | 10        |

**Table 5.** 25 Most frequently cited documents in the 100 most frequently cited ISI (2000–2005) articles in the SSCI

| Order | Document   | Citations |
|-------|--|-----------|
| 1     | Schumpeter, J.A. 1934. The theory of economic development: an inquiry into profits, capital, credit, interest, and the business cycle. Harvard University Press, Cambridge, MA.  | 19        |
| 2     | Barney, J.B. 1991. Firm resources and sustained competitive advantage. <i>Journal of Management</i> , 17(1): 99–120.   | 16        |
| 3     | Venkataraman, S. 1997. The distinctive domain of entrepreneurship research: An editor's perspective, in: Katz, J. & Brockhaus (eds) "Advances in entrepreneurship, firm emergence, and growth, Vol. 3, p. 119–138, Greenwich, CT: JAI Press. | 12        |
| 4     | Schumpeter, J.A. 1942. Capitalism, Socialism, and Democracy. Harper, New York.   | 11        |
| 5     | Burt, R.S. 1992. Structural Holes: The Social Structure of Competition. Harvard University Press, Cambridge, MA.   | 11        |

(Continued)

| Order | Document  | Citations |
|-------|---|-----------|
| 6     | Busenitz, L.W. & Barney, J.B. 1997. Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. <i>Journal of Business Venturing</i> , 12(1): 9–30.                                      | 10        |
| 7     | Nelson, R. & Winter, S. 1982. <i>An Evolutionary Theory of Economic Change</i> . Harvard University Press, Cambridge, MA.   | 10        |
| 8     | Stinchcombe, A.L. 1965. Social Structure and Organizations. In: J.G. March (ed) "Handbook of Organizations"   | 10        |
| 9     | Shane, S.A. & Venkataraman, S. 2000. The promise of entrepreneurship as a field of research. <i>Academy of Management Review</i> , 25(1): 217–226.  | 10        |
| 10    | Gompers, P.A. & Lerner, J. 1999. <i>The Venture Capital Cycle</i> . MIT Press, Cambridge.   | 10        |
| 11    | Lumpkin, GT, & Dess, GG 1996. Clarifying the entrepreneurial orientation construct and linking it to performance. <i>Academy of Management Review</i> , 21(1): 135–172.   | 10        |
| 12    | Aldrich, H.E. & Zimmer, C. 1986. Entrepreneurship through Social Networks. in Sexton D., Smilor, R.W.(eds) <i>The Art and Science of Entrepreneurship</i> . Ballinger, New York.  | 9         |
| 13    | Evans, D. & Leighton, L. 1989. Some empirical aspects of entrepreneurship. <i>American Economic Review</i> . 79(3): 519–535.  | 9         |
| 14    | Low, M.B. & MacMillan, I.C. 1988. Entrepreneurship: Past research and future challenges. <i>Journal of Management</i> , 14 (2): 139–161.  | 9         |
| 15    | Gartner, W.B. 1988. Who is an entrepreneur? Is the Wrong Question. <i>American Journal of Small Business</i> , 12(4): 11–22   | 9         |
| 16    | Aldrich, H.E. 1999. <i>Organizations evolving</i> . Sage, Thousand Oaks, CA.  | 9         |
| 17    | Shaver, K.G. & Scott, L.R. 1991. Person, process, choice: the psychology of new venture creation. <i>Entrepreneurship Theory and Practice</i> , 16(2): 23–45.   | 8         |
| 18    | Kirzner, I.M. 1973. <i>Competition and Entrepreneurship</i> . University of Chicago Press, Chicago.   | 8         |
| 19    | Petersen, M.A. & Rajan, R.G. 1994. The benefits of lending relationships – evidence from small business data. <i>Journal of Finance</i> , 49 (1): 3–37.   | 8         |
| 20    | Zucker, L.G., Darby M.R. & Brewer M.B. 1998. Intellectual Human Capital and the Birth of US Biotechnology Enterprises. <i>American Economic Review</i> 88(1): 290–306.  | 8         |
| 21    | Cohen, W.M. & Levinthal, D.A. 1990. Absorptive-Capacity – A New Perspective on Learning and Innovation. <i>Administrative Science Quarterly</i> , 35(1): 128–152.   | 7         |
| 22    | Arrow, K. J. 1962. "Economic Welfare and the Allocation of Resources for Invention." In <i>The Rate and Direction of Inventive Activity: Economic and Social Factors</i> , National Bureau of Economic Research. Princeton University Press, Princeton. | 7         |
| 23    | Jaffe, A.; Trajtenberg, M. & Henderson, R. 1993. Geographic localization of knowledge spillovers as evidence by patent citations. <i>Quarterly Journal of Economics</i> , 108(3): 577–598.  | 7         |
| 24    | Penrose, E.T. 1959. <i>The Theory of growth of the firm</i> . John Wiley and Sons, New York.  | 7         |
| 25    | Petersen, M.A. & Rajan, R.G. 1995. The Effect of Credit Market Competition On Lending Relationships. <i>Quarterly Journal of Economics</i> , 110 (2): 407–443.  | 7         |

Table 5 shows the evolution of the underlying arguments that lend weight to research and thus to new theories on entrepreneurship. Despite maintaining a nucleus of references that are of a more stable nature than one would expect, they substitute, slowly but surely, the psychological analysis of individuals for, on the one hand, a focus on groups and teams, and on the other, moves towards placing attention on opportunities as an economic cause and effect of disequilibrium and on income for businesses. A methodological change can also be described, along with the attempt to develop a theoretical basis for the study of the business function.

## References

- Acs, Z.J. and Audretsch, D.B. (1990). *Innovation and Small Firms*. Cambridge, MA: MIT Press.
- Alvarez, S.A. and Busenitz, L.W. (2001). The entrepreneurship of resource-based theory. *Journal of Management*, 27, 755–775.
- Audretsch, D.B., Castrogiovanni, G.J., Ribeiro, D., and Roig, S. (2005). Linking *entrepreneurship* and management: Welcome to the International *Entrepreneurship* and Management Journal. *International Entrepreneurship and Management Journal*, 1, 5–7.
- Barringer, B.R. and Bluedorn, A.C. (1999). The relationship between corporate *entrepreneurship* and strategic management. *Strategic Management Journal*, 20, 421–444.
- Brown, T.E., Davidsson, P. and Wiklund, J. (2001). An operationalization of Stevenson's conceptualization of *entrepreneurship* as opportunity-based firm behaviour. *Strategic Management Journal*, 22, 953–968.
- Bruyat, C. and Julien, P.-A. (2000). Defining the field of research in *entrepreneurship*. *Journal of Business Venturing*, 16, 165–180.
- Busenitz, L.W., West III, G.P., Shepherd, D., Nelson, T., Chandler, G.N., and Zacharakis, A. (2003). *Entrepreneurship* research in emergence: Past trends and future directions. *Journal of Management*, 29, 285–308.
- Chandy, P.R. and Williams, T.G.E. (1994). The impact of journals and authors on international business research: A citational analysis of JIBS articles. *Journal of International Business Studies*, 25, 715–728.
- Coviello, N.E. and Jones, M.V. (2004). Methodological sigues in international *entrepreneurship* research. *Journal of Business Venturing*, 19, 485–508.
- Eckhardt, J.T. and Shane, S.A. (2003). Opportunities and entrepreneurship. *Journal of Management*, 29, 333–349.
- Fiet, J.O. (2001). The pedagogical side of entrepreneurship theory. *Journal of Business Venturing*, 16, 101–117.
- Finkle, T.A., Kuratko, D.F. and Goldsby, M.G. (2006). An examination of entrepreneurship centers in the United States: A national survey. *Journal of Small Business Management*, 44, 184–206.
- Garfield, E. (1972). Citation analysis as a tool in journal evaluation. *Science*, 178, 471–479.
- Garfield, E. (1979). Citation indexing-Its theory and application in science, technology, and humanities. New York: Wiley.
- Hitt, M.A., Ireland, R.D., Camp, S.M. and Sexton, D.L. (2001). Guest editors' introduction to the special issue strategic *entrepreneurship*: entrepreneurial strategies for wealth creation. *Strategic Management Journal*, 22, 479–491.
- Johnson, J.L. and Podsakoff, P.M. (1994). Journal influence in the field of management: An analysis using Salancik's index in a dependency network. *Academy of Management Journal*, 37, 1392–1408.

- Kihlstrom, R.E. and Laffont, J.J. (1979). General equilibrium entrepreneurial theory of firm formation based on risk aversion. *Journal of Political Economy*, 87, 719–748.
- Knight, F. (1921) *Risk, uncertainty and profit*. Boston, MA: Houghton Mifflin.
- Lee, S.M. and Peterson, S.J. (2000). Culture, entrepreneurial orientation, and global competitiveness. *Journal of World Business*, 35, 401–416.
- Leibenstein, H. (1979). Branch of economics is missing – Micro-Micro theory. *Journal of Economic Literature*, 17, 477–502.
- Low, M.B. and Macmillan, I.C. (1988). Entrepreneurship: Past research and future challenges. *Journal of Management*, 14(2): 139–161.
- McClelland, D.C. (1961). *The achieving society*. Princeton, NJ: Van Nostrand.
- Miller, D. (1983). The correlates of *entrepreneurship* in three types of firms. *Management Science*, 29, 770–791.
- Reynolds, P.D. (2005). Understanding business creation: Serendipity and scope in two decades of business creation studies. *Small Business Economics*, 24, 359–364.
- Schumpeter, J.A. (1934). *The theory of economic development*. Cambridge: Harvard University Press.
- Schumpeter, J.A. (1942). *Capitalism, socialism and democracy*. New York: Harper.
- Shane, S.A. and Venkataraman, S. (2000). The promise of *entrepreneurship* as a field of research. *Academy of Management Review*, 25, 217–226.
- Stevenson, H.H. and Jarillo, J.C. (1990). A paradigm of *entrepreneurship* research: Entrepreneurial management. *Strategic Management Journal*, 11, 17–27.
- Tushman, M.L. and Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative Science Quarterly*, 31, 439–465.

# Part I

---

## Concepts

# Entrepreneurship as a Scientific Research Programme\*

José Maria Veciana

Universitat Autònoma de Barcelona

## Abstract

In this article *entrepreneurship as a scientific research programme* is developed and presented. In this relatively new field of study many different theories have emerged that try to explain the phenomenon of new enterprise or venture creation. After a brief treatment of the antecedents and historic development of entrepreneurship, the author discusses and suggests what should be the distinctive domain of entrepreneurship research. He then develops and presents the different paradigms or theoretical approaches that have emerged in this field. An attempt is made to classify the diverse theories based on the various theoretical approaches to the study of entrepreneurship. The aim of this paper is not only to delimit this broad field of study but also to offer a guide for future empirical research and theoretical developments.

## Objective

The aim of this article is to develop *entrepreneurship as a scientific research programme*. This is a relatively new field of study which, however, goes back to the writings of some classical economists in the 18th and 19th centuries. Anyhow, to understand the present “state of the art” we deem it advisable to give an overview of its origins and evolution.

Therefore, we will start with a brief treatment of the antecedents and historic development, in which we distinguish 4 stages. These will help us to better understand both its gradual development and present state as well as its future development possibilities.

For reasons of space limitation, the three first stages will be treated very briefly, focussing more on the fourth or present stage.

We will then treat entrepreneurship research as a distinctive domain, one of the most controversial but highly important questions for academic legitimation, thereby suggesting what should be the distinctive domain of this field of study.

The central part of this article deals with the development of the different paradigms or theoretical approaches that have emerged in the field of entrepreneurship. Under the four theoretical approaches we will present the different theories that try to explain entrepreneurship from very different perspectives.

The article ends with some final considerations.

---

\* Originally published in *Revista Europea de Dirección y Economía de la Empresa*, 1999, 8(3). The present version is a revised, updated and extended version of the original paper. The most relevant recent bibliography has been incorporated into it.

## Stages

### *First Stage: Defining the Entrepreneur*

This stage, which starts with Cantillon's work, goes from 1775 until the end of the 19th century.

Its main features are:

1. The authors working in this field try to define **who an entrepreneur is and what he does, that is, what the function that he performs in the economic process is, the so called "entrepreneurial function"**.

The main economists who write on the subject are: Cantillon, Say, von Thünen, Mill, Hermann, von Mangoldt, Clark and Marshall to mention only the most outstanding.

Notice that in this list neither Adam Smith nor David Ricardo are mentioned, since for them the **entrepreneur** does not exist; they only know the capitalist.

For reasons that we will mention later, these economists never came to an agreement on the definition of the entrepreneur nor on the entrepreneurial function.

In the last decades much has been written to analyse and reproduce what the above mentioned economists wrote on the entrepreneur, without achieving clarity.

Some writings worth mentioning are:

- Zieschang, H.O. (1936): "Wandlung des Unternehmerbegriffs in the Wirtschaftstheorie", Doctoral dissertation, Universität Köln.
- Turin, G. (1948): "Der Begriff des Unternehmens", Doctoral Dissertation, Universität Zurich.
- Redlich, F. (1964): "The Unternehmer", Wirtschafts- und sozialgeschichliche Studien.
- Sanchez Gil (1969): "The nature and evolution of the entrepreneurial function"
- In Spain there have been several doctoral dissertations that have treated the subject as the central topic or obliquely (1).
- Hébert and Link (1982): "The entrepreneur".

As an example, we will quote Hébert & Link who have synthesized in twelve points, the ideas of the above mentioned economists on the entrepreneur's definition and function, i.e.:

1. The entrepreneur is the person who assumes the risk associated with uncertainty.
2. The entrepreneur is a supplier of financial capital.
3. The entrepreneur is an innovator.
4. The entrepreneur is a decision maker.
5. The entrepreneur is an industrial leader.
6. The entrepreneur is a manager or superintendent.

7. The entrepreneur is an organizer or coordinator of economic resources.
  8. The entrepreneur is a proprietor of an enterprise.
  9. The entrepreneur is an employer of factors of production.
  10. The entrepreneur is a contractor.
  11. The entrepreneur is an arbitrager.
  12. The entrepreneur is the person who allocates resources to alternative uses.
2. The lack of consensus on the entrepreneur's definition and function lies in the fact that the above mentioned authors, and the present ones who attempt to elaborate a definition of the entrepreneur still live in the framework of the **essentialist definitions** that try to identify through intuition "the" or "the most **essential**" characteristics of an object; and obviously each author considers differently what are **essential characteristics or** features. We will revert to this question later on.
3. In general, it can be affirmed that the main interest of the economists of this first stage was to define the entrepreneur and his function, to be able to explain the **entrepreneur's profit**, a kind of rent different from the three production factors (land, labour and capital), a fact that has been completely overlooked by the present scholars writing on the subject.

### ***Second Stage: Historical Studies***

From the twenties of the 20th century onwards, undoubtedly under Max Weber's influence, historical studies proliferate on enterprises, entrepreneurs and the entrepreneurial function, most of which were published under the title Harvard Studies in Business History and in the Journal of Business and Economic History.

The interest in the study of the entrepreneur as a factor of economic development from an historical perspective reached its highest point in 1958 with the foundation of the Research Center in Entrepreneurial History at Harvard University which under the leadership of Arthur H. Cole formed a group of historians, sociologists, and economists interested in entrepreneurship. In this group, besides Cole, worked Thomas C. Chorán, Fritz Redlich, Alfred Chandler and Hugh Aikten.

Earlier, Cole (1942) had already indicated the main lines of what a scientific research programme on entrepreneurship from an historical perspective should be. According to this author, it should include:

- Biographies of entrepreneurs and the history of their enterprises.
- Analysis of different types of entrepreneurs.
- Studies of the leading entrepreneurs in each industrial sector.
- Studies of the entrepreneurial functions.
- Studies of the entrepreneurial functions in a certain epoch, for instance the entrepreneurial function in the decade of 1830–1840.

The main publication of the Research Center in Entrepreneurial History was the journal *Explorations in Entrepreneurial History*. Although other very interesting publications appeared outside this journal. One paradigmatic publication of the Harvard historical approach in this epoch is the study by Cochran of the effect of

cultural differences on the entrepreneurial behaviour in which he compared the United States with three Latin American countries (Mexico, Puerto Rico y Argentina).

### ***Third stage: The Beginning of the Scientific Research Programme in the Field of Business Administration***

In our opinion a scientific research programme does not begin with a publication by an author proposing a new approach or a new theory. It emerges when the following three circumstances jointly occur:

1st: A group of researchers, generally a small group, begin to take interest in a new field of study or a new approach.

2nd: This new group of researchers feels the need to exchange information on and discuss the results of their research, and decide to organize a conference or congress.

3rd: A new specialized journal is edited in which the results of the research in the new field and the papers presented in the conferences are published.

Therefore, we feel that we can trace the beginning of the third stage of the present research programme to 1949 and the end of this stage in 1979. In this period, this new scientific research programme is formed in its two initial lines of research: a) the study of small and medium sized enterprises, and b) the study of the entrepreneur and new firm formation.

The main milestones in this third stage are, in our opinion, the following:

#### **Topic: Small and Medium-Sized Enterprises (SMEs)**

1948: 1st. Biennial conference “Rencontres de St. Gall”.

1956: 1st. Conference at the Colorado University, organized by the “National Council for Small Business”, the predecessor of the ICSB (1977).

1963: Edition of the Journal of the Small Business Management.

1971: Publication of the “Bolton Report” (U.K.).

1975: Publication of the American Journal of Small Business.

#### **Topic: Entrepreneur and New Venture Creation**

1961: Publication of McClelland’s book “The Achieving Society”.

1964: Publication of Collins and Moore’s book “The Enterprising Man”.

1970: Organization of the first scientific congress on entrepreneurship at the University of Purdue (USA): 12 participants.

1974: Creation of the “Entrepreneurship” division in the Academy of Management, USA.

1975: Organization of the “International Symposium of Entrepreneurship and Enterprise Development”, in Cincinnati: 230 participants from all over the world (2).