

REVIEW OF BUSINESS GROWTH MODELS: RESEARCH STRATEGIES AND EMPIRICAL EVIDENCE

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Abstract:

This study reviews research on growth configurations, often referred as stages of growth or lifecycle perspectives, for business growth. Numerous stage models have attempted to clarify management priorities during the early stages of business growth. However, current literature does not offer an extensive review of the methodologies and underlying assumptions of the configuration perspective. In academic discussions, the absence of that level of analysis often leads to confusion. For example, the configuration perspective is often described as overly conceptual even though many of the studies seem to be empirically based. This research problem above mentioned can be condensed into two research questions: What kinds of research strategies and empirical evidence are used in growth configuration studies? This meta-analysis focuses on configuration models of company growth and development. The aim of this study is to fill a gap in the literature by analysing 90 configuration studies conducted over the past 60 years. By the assessing selected attributes in the models, this study identifies well-covered areas, highlights trends and provides ideas for fresh research approaches. This meta-analysis functions as a gateway to the research strategies of a broad collection of literature. The analysis reveals the great diversity within the configuration perspective and provides guidelines for future development of the field.

Keywords: business growth, growth configurations, stages of growth, research strategies, meta-analysis, review.

1. INTRODUCTION

Business growth can be studied from different perspectives. According to Davidsson and Wiklund (2006), the resource-based perspective, the motivation perspective and the strategic adaptation perspective focus on factors leading to survival and growth, while configuration studies are concerned with how growing organisations should be managed. The configuration perspective can also be called the stages of growth perspective or the company life-cycle perspective; in this study, the term *configuration perspective* is used. Miller and Friesen (1984) are among the first authors to use the term configuration in this sense, stating, 'there is [a] somewhat "gestalt" or configural nature to the phases of the life-cycle. When we classify periods of organisational history according to their phase using a few key typing attributes, many other aspects of the organisation and its environment can be predicted—they reflect the themes delineated for each phase by the conceptual literature on the life-cycle.' Miller, Friesen, and Mintzberg (1984) and Hanks, Watson, Jansen, and Chandler (1993) agree that life-cycle stages are best characterized as configurations. According to this view, the key typing attributes (for example, structures, systems, information procedures, etc.) tend to influence each other in such a manner that gives rise to a small number of configurations representing common developmental or transitional sequences.

The configuration perspective divides early business growth into growth stages and/or transitions. The need for configuration studies is based on the multidimensional nature of growth. On one hand, growth indicators such as number of employees, sales, and assets show whether or not a company is growing. On the other, management has to focus on many other dimensions in a growing company such as complexity. Configuration literature reveals diverse managerial problems specific to the different growth stages. Here, the term *stage* corresponds to a unique configuration of variables including strategies, problems and priorities that growing firms are likely to face (see Miller & Friesen, 1984). The term *configuration* suggests the clusters or frameworks of common variables used to analyse stages. In the typologies, the configurations are derived heuristically and in the taxonomies empirically. Configuration studies seek to describe what new opportunities or challenges growth brings to a company and how a growing company should be managed; numerous models have been derived from the configuration perspective.

As pointed out in the authors' earlier study (see Muhos, Kess, Phusavat, & Sanpanich, 2010), a number of attributes limit the implementation of the models in any given context. The models vary widely in type, level of empirical evidence, focus business, growth dimension, number of stages, etc. Some efforts to synthesise a limited number of former studies into a compound model exist. However, the aim of this study is neither a new model nor a synthesis but rather an assessment of the research strategies and use of empirical evidence in these models. An earlier review by the authors identified the configurations models and focused first on a descriptive level of analysis. This current study is based on the idea that existing literature does not offer an extensive review of the methodologies of the configuration perspective. In the academic discussion, the absence of this level of analysis often leads to confusion. The configuration perspective has been criticised as overly conceptual (Hanks & Chandler, 1994). The focus of this study is on analysis of claimed conceptual nature of these models. This study takes closer look to the research strategies and use of empirical evidence in the growth configurations studies by analysing 90 configuration studies conducted over the past 60 years. By assessing selected attributes in the models, this study identifies research strategies and use of empirical evidence. The above-mentioned can be condensed into these research questions:

RQ1. What kinds of research strategies and empirical evidence are used in growth configuration studies?

This meta-analysis (see Glass, 1976) focuses on the configuration models of company growth and development. As configuration models are reviewed, three layers of analysis can be presented: the identity of the studies, the descriptive attributes and the methodology and underlying assumptions. The key attributes related to each layer were selected through preliminary meta-analysis (Muhos, 2009). Two of these layers were analysed in an earlier study (Muhos et al., 2010). The first layer provided the attributes essential for the identification of the model, such as the name of the author(s) and the publication year. The descriptive layer included the number of stages and transition periods, size measures utilised, the focus business size categories, focus industries studied, and the focus processes. Based on these two levels of analysis, the common patterns and trends were described and implications for further research were provided.

In this study, 90 previously identified configuration studies and groups for analysis are presented. Second, the analysis of the research strategies and research evidence is provided. Based on this analysis, the common patterns and trends are described, and implications for further research are provided.

The sample of configuration studies was collected during the three first quarters of the year 2008 at the University of Oulu, and the qualitative and quantitative analysis of the sample was carried out during the third and fourth quarters at Kasetsart University as part of the Duo-Thailand Fellowship Program. The main findings were determined during the winter of 2008–2009. The first part of this analysis was published in 2010. This study is addressed to persons interested in the process perspective on company growth and development.

2. METHOD

This study is a meta-analysis. Meta-analysis focuses on analysis of a collection of research results in order to integrate some of the findings. Meta-analysis is needed when the literature of a certain type contains tens or even hundreds of studies dealing with the same area of interest (see Glass, 1976). This is the case with growth configuration studies.

The focus of this study is on configuration studies related to private companies. The population was limited to studies conducted in the past 60 years in order to provide comparable episodes. Preliminary analyses showed that models earlier than 1948 are relatively rare in the literature. The preliminary sample consisted of 120 configuration studies from the 1940s until today, including studies not primarily focusing on company growth such as those focused on growth of nations, mass movements, industries, clusters, networks, individuals in the organisation and models related to public, non-profit and volunteer organisations. Only the 90 models focused on private firms were selected for further analysis.

The 90 reviewed models analysed in this study are presented in Table 1. Of the studies analysed, 69% are journal articles, 27% are books or book contributions and the rest are conference proceedings, research reports and available unpublished studies. The meta-analysis provided in this study is of both the entire sample and three groups of analysis: three 20-year periods starting from 1948 will be described as early, central, and recent hereafter. The analysis of the sample as a whole provides an overview of studies, and the separate analyses of three groups seek to detect commonalities and trends. The groups are presented in Table 1 and were made to provide a comparison and clarify the general trends in the configuration school of thought.

Table 1: The sample of studies

The early studies (1948–1968)	The central studies (1969–1988)	The recent studies (1989–2008)
1. Whyte, 1948	19. Steinmetz, 1969	60. Hasenfeld & Schmid, 1989
2. Fayol, 1949	20. Rhenman, 1973	61. Kazanjian & Drazin, 1989
3. Davis, 1951	21. Scott, 1971	62. Adizes, 1989
4. Drucker, 1954	22. Greiner, 1972	63. Kazanjian & Drazin, 1990
5. Newman & Logan, 1955	23. Mintzberg, 1973	64. McCann, 1991
6. Herbst, 1957	24. Kroeger, 1974	65. Hanks et al., 1991
7. Moore, 1959	25. Torbert, 1974	66. Dodge & Robbins, 1992
8. Haire, 1959	26. Stanworth & Curran, 1976	67. Hanks & Chandler, 1992 and Hanks et al., 1993
9. Filley, 1960	27. McGuire, 1976	68. Terpstra & Olson, 1993
10. Chandler, 1962	28. Thompson, 1976	69. Hanks & Chandler, 1994
11. Christenson & Scott, 1964	29. Abernathy, 1976	70. Dodge et al., 1994
12. Collins et al., 1964	30. Hosmer et al., 1977	71. Eggers et al., 1994
13. Blake et al., 1966	31. Normann, 1977	72. Flamholtz, 1995
14. Katz & Kahn, 1966	32. Parks, 1977a & b	73. Garnsey, 1998
15. Starbuck, 1966	33. Gervais, 1978	74. Gudmundsson, 1998
16. Buchele, 1967	34. Lavoie & Culbert, 1978	75. Poutziouris et al., 1999
17. Lippitt & Schmidt, 1967	35. Robidoux & Dell'Aniello, 1978	76. Gartner & Brush, 1999
18. Cannon, 1968	36. Adizes, 1979	77. Mitra & Pingali, 1999
	37. Minzberg, 1979	78. Shim et al., 2000
	38. Cooper, 1979	79. Abetti, 2001
	39. Kimberly, 1979	80. Beverland & Lockshin, 2001
	40. Schollhammer & Kurifoff, 1979	81. Jawahar & McLaughlin,

41. Filley & Aldag, 1980	2001
42. Scanlan, 1980	82. Hite & Hesterly, 2001
43. Aplin & Cosier, 1980	83. Kuratko & Hodgetts, 2001
44. Naoum, 1981	84. Ndonzuau et al., 2002
45. Galbraith, 1982	85. Swiercz & Lydon, 2002
46. Perry, 1982	86. Kaulio, 2003
47. Churchill & Lewis, 1983	87. Rutherford et al., 2003
48. Quinn & Cameron, 1983	88. Zadek, 2004
49. Tyebjee et al., 1983	89. Garengo & Bernardi, 2007
50. Mintzberg, 1984	90. Stam, 2007
51. Miller & Friesen, 1984 and Miller et al., 1984	
52. Vargas, 1984	
53. Van de Ven et al., 1984	
54. Smith et al., 1985	
55. Flamholtz, 1986	
56. Olson, 1987	
57. Scott & Bruce, 1987	
58. Baird & Meshoulam, 1988	
59. Kazanjian, 1988	

3. REVIEW OF THE METHODOLOGY USED IN STAGES OF GROWTH MODELS

As the studies were analysed from the methodology perspective, it was determined that not all the studies clearly defined the research strategy used. Of the 90 studies, 56 defined the research strategy clearly, while 34 did not.

3.1 Research strategies, choices and time horizons

Both mono-method studies and multiple-methods studies were conducted. Of the studies that define their research strategy, 47 were classified as mono-method studies and 9 as multiple-method studies. The number each type of study is presented in Table 2 according to its analysis group. In each group, particularly among the central studies, the number of studies not describing the method is clearly high.

Table 2: Research choices

	Early studies	Central studies	Recent studies
Mono-method	9	17	21
Multiple-method	1	5	3
Not clearly defined	8	19	7

As research strategies are concerned, 27 studies can be classified as case studies, 23 as surveys, 9 as action research, 4 as archival research, 4 as grounded theory, and 1 as experiment. The multi-method studies are classified into more than one category. Table 3 describes the research strategies. The studies using multiple methods are shown in more than one category in the table.

Table 3: The methods presented clearly by the authors

Early studies (number)	Central studies (number)	Recent studies (number)
Case study (5)	Case study (15)	Survey (17)
Action research (3)	Survey (5)	Case study (7)
Archival research (3)	Action research (4)	Grounded theory (3)
Survey (1)	Archival research (1)	Action research (2)
	Grounded theory (1)	
	Experiment (1)	

The most common type of case study across the sample was the descriptive, longitudinal-retrospective multiple case study. The early case studies all belong to this category. However, from central studies forward, variation increased. The speciality of the central case studies was single case studies and three longitudinal-observational studies. Moreover, exceptional examples of explorative and explanatory as well as cross-sectional case studies were provided. Among the recent case studies, the explanatory studies are most common along the descriptive studies; exploratory research and cross-sectional data are provided as well.

There was only one survey among the early studies. More surveys were found among the central studies, but their popularity grew dramatically in the recent studies. Among the central surveys, both descriptive and explanatory approaches were found. Similarly, both longitudinal and cross-sectional data were shown. As the popularity of surveys grew among the recent studies, both descriptive and explanatory research are used equally, and some explorative research is also conducted. Both cross-sectional and longitudinal evidence are shown. Among the recent studies, there were more surveys to analyse: seven descriptive, seven explanatory, and three explorative studies were found. Both longitudinal and cross-sectional data were used.

The early, central and recent action research studies were all descriptive longitudinal studies. The action research was usually based on the author's extensive experience as a manager, management consultant and/or lecturer.

The most archival studies were found among the early studies and included explorative and descriptive studies as well as longitudinal and cross-sectional studies. The only central archival study was explanatory-longitudinal. There were no archival research studies among the recent studies.

There were no grounded theory studies among the early studies. The only central grounded study was explanatory and longitudinal. The recent grounded studies were both explanatory and descriptive; all of them were longitudinal.

There were no studies described as experiments among the early and recent studies. There were only one experiment among the central studies, which was part of an explanatory and cross-sectional study with multiple methods.

3.2 Use of empirical evidence

The use of empirical evidence varies widely according to the selected research strategy and the time of publication. These numbers are presented in Table 4.

Table 4: Number of companies analysed according to the selected research strategies

Research strategies	Number of companies studied		
	Early studies	Central studies	Recent studies
Case studies	-, 4, 6, 4, -	-, 9, 1, 2, 1, 5, 1, 2, 1, -, 8, 2, -, 24, 2	2, 2, 362, 645, 2, 20, 8
Surveys	50	272, -, 36, 27, 107	71, 105, 100, 166, 133, 500, 133, 237, 26, 100, 40, 416, 15, 27, 2903, 100, 174
Action research	-, -, 2	-, 2, -, -	-, -
Archival research	220, 70, -	36	<i>not applicable</i>
Grounded theory	<i>not applicable</i>	109	73, 20, 107
Experiment	<i>not applicable</i>	4	<i>not applicable</i>

- = information about the number of companies analysed not provided

The stage configurations studies can be classified into *taxonomies* and *typologies*. For example, Miller (1996) divides the configuration studies into groups of conceptual typologies and empirical taxonomies. Of the studies analysed here, 38 were typologies and 52 were taxonomies.

Taxonomies are used for classifying empirical entities. Taxonomy begins empirically, with the goal of classifying cases according to their measured similarity or observed variables (see Bailey, 1994). The exception is the subsequent identification of empirical cases for conceptual typologies. Typologies are used for classifying conceptual entities (see Bailey, 1994). According to Bailey (1994), the typologies can be identified as qualitative classifications that are verbal and conceptual and lack empirical evidence. Bailey (1994) continues that even if empirical cases are identified for typologies, this can be accomplished without quantification. According to Miller (1996, p. 506) good typologies are more than anything products of inspired synthesis and a strong sense of conceptual aesthetics. However, Miller (1996) proposes three criteria for good typologies: First, they are well informed by theory and thus draw distinctions and relationships of conceptual importance. Second, their types invoke contrasts that facilitate empirical progress. Third, the elements or variables used to describe each type are shown to cohere in thematic and interesting ways.

The number of typologies and taxonomies in each episode are presented in Table 5:

Table 5: The number of typologies and taxonomies

	Early studies	Central studies	Recent studies
Typologies	7	24	7
Taxonomies	11	17	24

Among the early studies, there were more taxonomies than typologies throughout the group. However, the difference was not that great. Among the central studies, a majority of the studies were typologies. However, prior to year 1980, a vast majority of studies were typologies, and from 1980 onwards, a vast majority of the studies were taxonomies. Therefore, the 1970s can be characterised as a decade of typologies and the 1980s as a decade of taxonomies. This phenomenal rise of interest in taxonomies continued through the 1990s and the beginning of new millennium; in the group of recent studies, the vast majority of studies were taxonomies.

The main motivation of configuration theorists for providing conceptual typologies seems to be presenting a fresh and innovative viewpoint to the popular field. First, some of these studies proposed new conceptual approaches to stages of growth such as open-system approach, key-crises approach, hurdles approach, evolutions and revolutions approach, organisational structure approach and entrepreneurial approach. Second, some of the studies provided new approaches or applications of formerly presented approaches to new contexts such as small business, industry, high-tech ventures, human service organisations and firm in network. Third, some of the studies provided a review and/or synthesis of the former concepts and based new approaches and theory building on these concepts. Finally, some studies provided adjustments of viewpoints or more detailed views to the former concepts.

4. DISCUSSION

The purpose of this study is to review growth configurations research on business growth from the perspectives of methodology and an underlying assumption of determinism. Growth is a multidimensional and heterogeneous phenomenon. The configuration perspective offers tools for managing growth inside companies and supporting the growth of companies. This study searches for patterns, trends and potential blind spots of configuration research through a review of research strategies and use of empirical evidence through six decades of literature. Further, this study proposes some implications for future research.

For this meta-analysis, the sample was selected from the broad expanse of available configuration literature. The sample is divided into three periods for analysis. The sample and three periods of analysis are presented in Table 2. In the meta-analysis described in sections 3 and 4, both quantitative and qualitative methodologies are used. The selected studies are analysed through the methodologies and from the perspective of the most commonly referred to underlying assumption of the stage models, the deterministic nature of growth.

The key findings are condensed in the following answers to the research question: *What kinds of research strategies and empirical evidence are used in growth configuration studies?*

The research question was answered in section 3. First, the research strategies, choices and time horizons were analysed. Growth configuration research included examples of almost all commonly used research strategies, including case studies, surveys, action research, archival research, grounded theory and experiments. The case studies were most common among the early and central studies while the survey was the most common research strategy among the recent studies. The most common type of case study across the sample was a descriptive, longitudinal-retrospective multiple case study. Most typical surveys across the sample were descriptive/explanatory longitudinal studies. All action research studies were descriptive-longitudinal. The studies with grounded theory strategy were explanatory/descriptive and longitudinal. Both mono-method studies and multiple-methods studies were found. The only example of an experiment was explanatory and was used as part of a multiple-method study. Altogether, 34 of the studies did not describe the method clearly, which is a large portion of the studies. Almost half of the early and central studies fail to describe the research methodology, while a great majority describes it successfully among the recent ones. The trend is for the better.

Second, the relationship to configuration studies to empirical evidence was clarified. As pointed out in the beginning of this study, the configuration perspective has been criticised as being overly conceptual. Many of these studies have remained as nice, but untested, concepts. However, based on this analysis, there has been both conceptual and empirical analysis in the configuration perspective. Prior to the year 1980, a vast majority of studies were typologies. However, and from 1980 onwards, a vast majority of the studies were empirically based taxonomies and this phenomenal rise of interest in taxonomies continued through the 1990s and the beginning of new millennium; in the group of recent studies, the vast majority of studies were taxonomies. In the future studies, the empirical evidence should be shown in order to provide added value to this extensive growth configuration school of thought.

There are several limitations associated with this study. To some extent, this study is interpretative, and some subjectivity must be accepted. This study is meta-analytical in nature and in this sense does not contain any preliminary or secondary data. The data of this study consist of company-focused configuration studies conducted during the six previous decades and is limited to configuration studies published between 1948 and 2008. One challenge in the meta-analysis of the configuration viewpoint is that the original data is in many cases missing from the studies. There are configuration studies published earlier and later than the selected timespan, but these are not within the focus of this study. There may be configuration studies that are not mentioned in this study, but a reasonable proportion of the widely accepted configuration studies published during the last six decades are included in this analysis.

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