The WH questions of the Organizational Life Cycle models. A review of the literature

Luigi Mosca
"M. Fanno" Department of Economics and Management
University of Padova
Via del Santo 33, 35123 Padova (Italy)
luigi.mosca@studenti.unipd.it

Martina Gianecchini
"M. Fanno" Department of Economics and Management
University of Padova
Via del Santo 33, 35123 Padova (Italy)
martina.gianecchini@unipd.it

Diego Campagnolo
"M. Fanno" Department of Economics and Management, University of Padova
Via del Santo 33, 35123 Padova (Italy)
Department of Technology and Management
Bocconi University
diego.campagnolo@unipd.it

Abstract submitted to 16th WOA Workshop

Padova, May 21-22, 2015

Track 1 - Organization: Theory and Design

Abstract

A number of scholars have suggested that the design, development and behaviour of organizations can be predicted by means of organizational life cycle (OLC) models.

This paper reviews the articles on Organizational Life Cycle (OLC) models and discuss the *why, when, who, what,* and *how* of different OLC models. This paper specifically considers the organizational design characteristics that identify each stage. Results show that literature on the subject seems not to have yet achieved consensus about model features, nor has any particular model become dominant in the field. Venues for future research are discussed.

Introduction

An historical bias in the literature on organizational analysis and design has been the tendency to generate studies, which focus on mature and large organizations (e.g. Kazanjian and Drazin, 1990). But, the same emphasis is not placed on the small enterprises and on the risks associated with mismanaged growth processes, even though there are numerous examples of failure in growth processes (Churchill and Lewis 1983; Furlan and Grandinetti, 2011).

A number of scholars have suggested that the design, development and behaviour of organizations can be predicted by means of organizational life cycle (OLC) models. The most relevant OLC models, developed in the period between 1960s and 1990s, shared the organism life cycle analogy proposed by W. Gardner (1965). Indeed like people and plants, organizations have a life cycle: “They have a green and supple youth, a time of flourishing strength, and a gnarled old age” (p. 20).

However, as suggested by Levie and Lichtenstein (2010) in a literature review about 40 years of effort in stages of growth modelling, the principal propositions shared by these models appear to have no empirical validity when tested with large samples. As an example, Tushman, Newman, and Romanelli (1986, p. 36), testing a growth model on large samples of companies, conclude that “There are no patterns in the sequence of frame-breaking changes, and not all strategies will be effective”. Analogously, Eggers et al. (1994) testing Churchill and Lewis’ (1983) five stages model on a large sample of high-potential firms found that nearly 40% of the companies sampled did not follow the predicted growth model. Other empirical analysis found that firm stages do not follow a deterministic and identifiable sequence (Miller and Friesen, 1984; Raffa, Zollo and Caponi, 1996).

Such brief review of the literature suggests that the aim of creating a “universal” OLC model that fits all the firms, with different sizes and operating in different sectors, is far from

reaching its results. One of the reasons of this “failure” is due to the fact that these models superficially analyse how the organizational features changes along the life cycle of the firm.
As a consequence, the aim of this paper is review the literature about OLC models in order to study the organizational design characteristics that identify each stage and discuss the *why*, *when*, *who*, *what*, and *how* of different OLC models.
The paper is organized as follows: the following two sections describe the research methodology of our literature review and the selected OLC models. The third section presents an analysis of the organizational design characteristics through the information-gathering questions and then a brief conclusion discusses the venues for future research.

Research methodology

Our literature review is focused on the OLC models published in management journals. We searched the “ISI Web of Knowledge” database. Among the databases it contains, we selected the Social Sciences Citation Index (SSCI). The database takes into account the period 1950 to 2014, that fits with the time period in which OLC were elaborated.
In order to find the articles related to our aim we chose the following keywords: “Organizational life cycle”, “Organizational life cycle growth”, “Organizational life cycle model”, “Organizational stage and growth”, “Organizational model growth”[1] that represent the most common terminology adopted in the literature. In order to select the most relevant articles, we sorted them by “times cited” (highest to lowest), founding 2832 articles. Observing the rapid decrease in the number of citations moving from the highest cited articles to the following, we decided to analyze only the first fifty results per each keyword. Then, reading the abstract of the selected 250 articles, we excluded the ones concerned with topics distant from organizational design, e.g. the paper by Larson (1992) that investigates network dyads in entrepreneurial settings.
Such preliminary analysis ended up in the extraction of 29 articles. Among them we therefore selected 5 articles, each one of them presenting an original OLC model. The three criteria adopted for the selection of the articles were: 1) the article should be theoretical (and not empirical), 2) the model presented should be “new”, hence not based on some previous models and 3) the model should present and discuss how organizational design characteristics change in life cycle of the firms. As a consequence, we excluded highly cited articles that adopted a OLC model to study managerial problems not related to organizational design, such

[1] The database” ISI Web of Knowledge” does not allow to do a research of the articles that include all words together.

as Koberg, Uhlenbruck, Sarason (1996) and Kallunki and Silvola (2008) that use Greiner's model to study respectively the organizational innovation and the use of Activity Based Costing in the life cycle of the firms.

The literature review process is summarized in Table 1.

Table 1: Steps of the literature review

I STEP	**ISI Web of Knowledge database** Social Sciences Citations Index (SSCI)- Time period 1950-2014- Times cited: highest to lowest
II STEP	**Five Keywords**: "Organizational life cycle growth", "Organizational life cycle", "Organizational life cycle model", "Organizational stage and growth", "Organizational model growth". Total articles: 2832
III STEP	50 most cited articles per each key word: 250 articles OLC Models: 29 articles **Five selected models**: Lippitt and Schmidt (1967), Greiner (1972), Adizes (1979), Galbraith (1982), Churchill-Lewis (1983).

Organizational Life Cycle: a description of the most relevant theoretical models

In order to have an overview of the five models (see Table 2), we briefly describe them and then through the information-gathering questions, we focus on their organizational design characteristics.

Lippitt and Schmidt (1967) - Lippitt and Schmidt developed one of the earliest OLC models in the private sector. They suggest that corporations progress through three stages of development, facing six major managerial concerns in order to progress from one stage to the next. At *birth* the critical concerns are creation of the system and achieving a survival threshold. During *youth* the main concerns are stability and earning a reputation. During *maturity*, achieving uniqueness and responding to diverse societal needs become major concerns. Failures happen when managers do not recognize the significant crises that occur in the organizational life cycle.

Greiner (1972) - Greiner assumes that the history of the firm unfolds through a sequence of five stages of *evolution* and *revolution*. A stage of evolution is a period of growth where no major upheaval occurs in organization practices. Instead a *revolution* is a period of substantial turmoil in organization life. The resolution of each revolutionary period is the go-ahead for the next stage. The growth stages are described on the basis of five parameters (management focus, organizational structure, top management style, control system, management reward emphasis): 1) creativity-led growth, broken off by a crisis of leadership; 2) direction-led growth, broken off by a crisis of autonomy; 3) delegation-led growth, broken off by a crisis of control; 4) coordination-led growth, broken off by a crisis of bureaucracy or red-tape crisis; 5) collaboration-led growth, broken off by a crisis of lack of internal solutions for growth.

Evolutionary periods range from four to eight years, according to the industry: in fast-growing industries periods may be shorter, while in mature industries periods may be longer.

Adizes (1979) - Adizes' model of organizational development suggests that organizations develop through stages because of changes in emphases on four activities-producing results (P), acting entrepreneurially (E), administering formal rules and procedures (A), and integrating individual into the organization (I). The model suggests that organizations develop through ten stages from infancy to maturity. Progression across stages occurs primarily by overcoming the major problems of successive stages. Organizations begin with an emphasis on entrepreneurial activity that later becomes coupled with an emphasis on producing results. Accordingly, activities for motivating managers are proposed.

Galbraith (1982) - The model developed by Galbraith intended to capture the predictable dynamics of the stagewise development of a new organization. His model is based on five stages and focus on start-up ventures. Such companies develop a business idea that consists of: a market to be served, products to be sold, the basis for dominating the niche, the resources and resource combinations that are needed to achieve dominance. The crises of growth are the transition into new phases of development of the business idea or a fundamental shift in the idea itself.

Churchill and Lewis (1983) - Churchill-Lewis used a combination of empirical research and review of previous theoretical works in order to develop a new OLC model. Their theoretical development derives from the identification of three weaknesses of previous models: 1) they assume that a company must grow and pass through all stages of development or die in the attempt, 2) the models fail to capture the important early stages in a company's origin and growth, 3) these frameworks characterize company size mainly in terms of annual sales (although some mention number of employees) and ignore other factors such as value added, number of locations, complexity of product line, and rate of change in products or production technology. As a consequence, they propose a model with five stages, each one of them characterized by an index of size, diversity, and complexity and described by five management factors: managerial style, organizational structure, extent of formal systems, major strategic goals, and the owner's involvement in the business. The model focuses on small enterprises. In order to grow the firms have to adapt to the environment and have to increase in size and profitability.

An analysis of the main features of the OLC models

In order to analyze the OLC models illustrated in the previous paragraph, we decided to adopt a framework which answer to the following information-gathering "questions" (Table 2):

- *Why* and *where*: What are the reasons why the firm moves from one stage of development to the following and where the pressures for change come from?
- *When*: How is length of each stage and what are the variables used by the model in order to define the organizational evolution within each stage?
- *Who*: Who are the actors managing the organizational development?
- *What*: What are the organizational design characteristics that characterize the firm during each stage?
- *How*: How firms move from one stage to the following?

Before describing in details the analysis of the OLC models related to the previous questions, an overview of the models confirms that there is not a general agreement about the characteristics of the life cycle of the firms. Indeed all the models suggest different numbers of stages from three to ten stages, even if after Greiner's model most of the researchers have based their model on five stages.

Why and where: the pressure to change

Concerning the analysis of the reasons that explain why organizations move across the stages, it is possible to identify two main categories of factors: internal pressures (such as strategic and managerial decisions) and external pressures (such as market and competitive pressures).

Lippitt and Schmidt (1967) and Churchill and Lewis (1983) consider both the external and endogenous problems in explaining why organizations evolve. Such factors are faced by organizations in different phases of their life cycle: initially firms confronts external problems in order to affirm and survive into the competitive market, then they face internal issues related to the organizational structure and the management of the human resources.

According to Greiner (1972) the transitions across stages are mainly determined by internal factors: the "revolution" moments are indeed caused by changes in firm strategy, managerial objectives and/or organizational structure's issues.

Both Adizes (1979) and Galbraith (1982) consider only external pressures. According to Adizes, firms have to adapt to their external environment in order to grow: for instance, during the first stages of the OLC, organization can affirm themselves in the market through sales therefore responding to the customers' needs. Similarly, Galbraith focuses on market share as a mean to sustain growth and profitability of the firm.

When: the length of the stages

The second question concerns the "unit of measure" adopted by the OLC models in order to describe the length of each stage. The models do not explicitly indicated a time-length for the stages and, in some cases, they associate the duration of the stage with the size of the firm.

In particular, Lippitt and Schmidt (1967), Greiner (1972) and Adizes (1979) measure the duration of the stages using "time", even if they do not indicate a number of years for each stage but they focus on the general idea of the flow of time. According to Lippitt and Schmidt, time is relevant because organizational issues may become significant crises if they are not resolved within a reasonable time. According to Greiner's model, as time flows new and different organizational problems emerge: the combination of age and size exacerbates the problem, activating a revolution period. Adizes suggests that at each lifecycle stage a typical pattern of behavior emerges, for example in the first stage (courtship) the entrepreneur is in love with his idea and the excitement is accompanied by frantic activity.

Whereas previous models considered the flow of time as the most relevant factor to explain the structure of the OLC model, Galbraith (1982) and Churchill and Lewis (1983) focus on the size of the organizations. As a consequence, it is not the age but the size that indicates the stage of the life cycle that a company is living. Galbraith, in particular, affirms that the growth of the firms is driven by the growth of the market and then each phase depends on external resources. When managers find the right way to govern and exploit external resources, the firm moves to the next stage. Churchill and Lewis, instead, relate the growth of the firm to its profitability: when the latter is satisfactory, the firm moves from one stage to the next.

Table 2: organizational design characteristics of the models

Author(s)	Numbers of Stages	Why	When	Who	What	How	Note(s)
Lippitt and Schmidt (1967)	*Three*: birth, youth and maturity	Both External and endogenous	Flow of time (one of the issue will acquire exceptional importance)	Management	-Share and communicate the know-how within the firm, -Help the community	Solve the crisis and create the base for the future crises	
Greiner (1972)	*Five*: creativity, direction, delegation, coordination and collaboration	Endogenous problem	Both age and time have to increase	Top managers	Organization practices: organizational structure, top management reward	Solving the revolution	Each phase is both an effect of the previous phase and a cause for the next phase.
Adizes (1979)	*Ten*: courtship, infant, go go, adolescent, prime, mature, aristocratic, early bureaucracy, bureaucracy and death	External	In the long run, organization must adapt to its external environment	Management	-Delegation -Management reward	Change role combination and organizational behavior	The Bureaucracy is the death of the firms
Galbraith (1982)	*Five*: proof of principle prototype, model shop, start up volume production, natural growth and strategic manoeuvring	External (market-product life cycle)	Increase in size	Management	Organization development model: Task, people, reward, processes, structure	Implement the right organization that fits with the size	The stages and the organization for each stage are predictable
Churchill and Lewis (1983)	*Five*: conception, survival, profitability, take off and maturity	Both external and endogenous	Increase in size	-Business owner -Management	Characteristics of stage of development: management style	Firms have to increase in size and profitability	A company must grow and pass through all stages of development or die in the attempt

Who: the actors leading the organizational development

Concerning the actors who lead the development of the organization along its life cycle, all the five models generically indicate that the management (the authors identifies as the executives and/or the founders) is the main responsible. In particular, the role of the managers is to: recognize the organizational issues when they emerge, solve the problems and determine the appropriate configuration of the organizational design elements to move from one stage to the following.

What: the organizational design characteristics

The *what* column concerns the organizational design characteristics of the firms in the different stages of their life cycle.

In order to analyze them, we refer to the framework recently proposed by Puranam, Alexy and Reitzig (2014), who, drawing on the seminal contributions of the organizational design literature, suggest that any organization should solve two fundamental and interlinked problems: *division of labor* and *integration of effort*. The division of labor concerns: task division (i.e. the problem of dividing the goals of the organization into tasks and subtasks) and task allocation (i.e. the allocation of tasks to individual agents and groups of agents). The integration of effort, instead, concerns: reward provision (i.e. the definition of a set of monetary and nonmonetary rewards aimed at motivating the agents) and information provision (i.e. the allocation of information to the agents in order to have them executing their tasks and coordinating with others).

The OLC models answer differently to such fundamental organizational problems.

Concerning the division labor, all the Authors recommend to improve the delegation of the tasks as the firm moves from a simple organizational structure to a formal and then matrix structure. For example Greiner (1972) explains that where in the first stage there is an informal structure, in the second and third stage centralization of power lead to the creation of a functional structure and then delegation of responsibilities leads to a divisional and then matrix structure.

Concerning the problem of the integration of effort, Greiner (1972) and Galbraith (1982) propose to define an appropriate reward system in each stage: in particular, the former suggests to move from individual to group rewards over time, while the latter suggests to start with monetary benefits and then add career bonuses and incentives. In order to manage the information provision issue, Lippitt and Schmidt (1967), Adizes (1979) and Galbraith (1982) describe a gradual formalization of the information system as the organization grows.

How: the process of development

The process that sustains the development of the organization along its life cycle varies significantly in the five models.

OLC models by Lippitt and Schmidt (1967) and Greiner (1972) identify the "crises" as the trigger that activates the process of organizational development. According to Lippitt and Schmidt managers have to monitor constantly the market in order to identify "potential problems" (crises). The "revolution periods" described by Greiner are phases of considerable organizational turmoil: the nature of the solutions that managers implement determines whether the firms will move forward to the next stage.

According to Adizes (1979), the firm development along its life cycle is largely predictable: different problems, which require different organizational solutions, are going to emerge in each life cycle stage. As a consequence, a long-range planning is necessary in order to anticipate and manage the future problems.

OLC models by Galbraith (1982) and Churchill and Lewis (1984) consider the organizational growth (in size) as the driving mechanism for the development. In particular, Galbraith suggests designing an appropriate organizational structure for each stage of the organizational life cycle: since in each phase the firm increases it size, managers should define the right combination of all the resources (such as people, reward, structure). Churchill and Lewis affirm that the growth of the firms is related to growth of the market: therefore, when firms increase their market penetration, economic success and profitability they have all the resources to move to the following stage.

Conclusion

The paper reviews the articles on OLC models and discuss the *why*, *when*, *who*, *what*, and *how* of different OLC models. Also the paper considers the organizational design characteristics that identify each stage. Results show that some elements such as the reward provision are analyzed by all the models but, for other issues, a consensus has not been achieved yet, nor has any particular model become dominant in the field.

So we suggest empirical research to test and prove that one "universal" model is not useful and that the organization structure is a crucial element for the surviving of the firms.

References

Adizes, I. (1979). Organizational Passages: Diagnosing and Treating Life Cycle Problems in Organizations. *Organizational Dynamics*, 8(1), 3-24.

Churchill, N.C., Lewis, V.L. (1983). The five stages of small business growth. *Harvard Business Review*, 61(3), 30–50.

Eggers, J.H., Leahy, K.T., Churchill, N.C. (1994). Stages of small business growth revisited: Insights into growth path and leadership management skills in low- and high-growth companies. In W.D. Bygrave, S. Birley, N. Churchill, E. Gatewood, F. Hoy, R. Keeley, W. Wetzel. Frontiers of entrepreneurship research. (1994). *Babson Park MA*: Babson College.

Furlan, A. and Grandinetti, R. (2011). Size, relationships and capabilities: a new approach to the growth of the firm. *Human Systems Management*, 30(4), 195-213.

Galbraith, J. (1982). The stage of growth. *Journal of Business Strategy*, 3(1), 70-79.

Gardner, J.W. (1965). How to prevent organizational dry rot. *Harper's Magazine*, 20–26.

Greiner, L. (1972). Evolution and Revolution as Organization Grow. *Harvard Business Review*, 50, 37– 46.

Kallunki, J.-P. & Silvola, H. (2008). The Effect of Organizational Life Cycle Stage on the Use of Activity-Based Costing. *Management Accounting Research*, 19(1), 62-79.

Kazanjian, R.K. & Drazin, R. (1989). An empirical test of stage of growth progression model. *Management Science*, 35(12), 1489-1503.

Koberg, C.S., Uhlenbruck, N. and Sarason, Y. (1996), Facilitators of organizational innovation: The role of life-cycle stage, *Journal of Business Venturing*, 11, 133-149.

Larson, A. (1992). Network dyads in entrepreneurial settings-a study of the governance of exchange relationship. *Administrative Science Quarterly*, 44(2), 315-349.

Levie J., Lichtenstein B.B. (2010). A Terminal Assessment of Stages Theory: Introducing a Dynamic States Approach to Entrepreneurship. *Entrepreneurship Theory and Practice*, 34(2), 317-350.

Lippitt, G. L., Schmidt, W. H. (1967). Crises in a Developing Organization. *Harvard Business Review*, 45, 102-112.

Miller, D., Friesen, P.H. (1984). A longitudinal study of the corporate life cycle. *Management Science*, 30, 1161–1183.

Puranam, P., Alexy, O., Reitzig, M. (2014) What's "New" about New Forms of Organizing? Academy of Management Review, 39(2), 162-180.

Raffa, M., Zollo, G., Caponi, R. (1996). The development process of small firms. *Entrepreneurship and Regional Development*, 8, 359–371.

Tushman, M.L., Newman,W.H., Romanelli, E. (1986). Convergence and upheaval: Managing the unsteady pace of organizational evolution. *California Management Review*, 19, 29–44.