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ORGANIZATIONAL LIFE CYCLE: A FIVE-STAGE EMPIRICAL SCALE

Donald L. Lester
Arkansas State University

John A. Parnell
University of North Carolina-Pembroke

Shawn Carraher
Texas A&M University-Commerce

Adapting a concept from the biological sciences, organizational researchers have proposed a life cycle of organizational development from birth to death. Several distinct models have been postulated, ranging from three to ten stages. This paper proposes a five-stage model and tests it empirically to assess the specific stage of the life cycle of any organization. Results of a twenty-item scale that captures managers' perceptions of their firms' position in the life cycle are discussed. Knowledge of an organization's present position or stage of development can aid top managers in understanding the relationships between organizational life cycle, competitive strategy, and performance.

A number of researchers have proposed that organizations progress through various stages in a life cycle as they grow and develop (Dodge, Fullerton & Robbins, 1994; Hanks, Watson, Jensen, & Chandler, 1993; Miller & Friesen, 1984; Mintzberg, 1984; Torbert, 1974). Not all agree on the activities associated with each stage, however. Although there are differences in the existing models with regard to number of stages and activities within each stage (Hanks, 1990), there are commonalities as well. The present study adopts a five-stage approach consistent with the predominant research in the field, develops a scale to classify organizations, and examines relationships between organizational life cycle, competitive strategy, and performance.

Following a literature review, the scale development process is presented. A discussion of key findings, as well as conclusions and opportunities for future research, are also elaborated.

• **Direct all correspondence to:** Donald L. Lester, Associate Professor & Chair, Center for Entrepreneurial and Family Business Studies, College of Business, Arkansas State University, P.O. Box 59, State University, AR 72467-0059. E-mail: dlester@.astate.edu

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REVIEW OF THE LITERATURE

The adaptation of the biological concept of a life cycle by organizational researchers dates back several decades (Downs, 1967; Greiner, 1972; Penrose, 1952; Quinn & Cameron, 1983). The appeal of the life cycle is obvious, as organizations are born (Tichy, 1980), attempt to grow in different forms (Mintzberg, 1989), and eventually die (Kimberly & Miles, 1980). The theoretical notion of the life cycle is distinctly deterministic, an evolutionary perspective that has organizations passing inexorably from one stage to the next over time.

Several researchers have questioned this deterministic perspective through the study of ongoing organizations (Kimberly & Miles, 1980; Lester & Parnell, 1999; Lohdal & Mitchell, 1980; Miller & Friesen, 1984; Tichy, 1980). The results have revealed an opposite, or non-deterministic, life cycle of organizations (Miller & Friesen, 1984). The life cycle is more of a collective interpretation of the organization's environment based on an assessment by top management. Most firms do not pass inexorably from one stage of development to another in the traditional biological sense (Lester & Parnell, 2002; Miller & Friesen, 1984).

The life cycle stage is a loosely comprised set of organizational activities and structures (Dodge, et al., 1994; Hanks, et al., 1993; Quinn & Cameron, 1983). According to Van de Ven (1992), the key is to understand how these activities and structures change over time. Research demonstrates that top managers tend to focus more attention on external problems in early life cycle stages and internal problems as organizations grow and mature (Dodge & Robbins, 1992). As noted in the literature (Drazin & Kazanjian, 1990; Miller & Friesen, 1984) through proactive strategic choice (Child, 1972) organizations can revert back to earlier stages, remain in one particular stage of development for a very long time (Miller & Friesen, 1984), or fail to progress past an early stage, sometimes regressing quickly to decline or death (Churchill & Lewis, 1983).

The value of understanding the organizational life cycle to managers is the identification of changes that take place as organizations grow and develop (Beverland & Lockshin, 2001; Hanks, et al., 1993). Specifically, Hanks (1990, p. 1) noted the value of an "accurate life cycle model" to managers of growing firms:

> It could provide a road map, identifying critical organizational transitions, as well as pitfalls the organization should seek to avoid as it grows in size and complexity. An accurate life cycle model could provide a timetable for adding levels of management, formalizing organizational procedures and systems, and revising organization priorities. It could help management know when to "let go" of cherished past strategies or practices that will only hinder future growth.

The life cycle concept has been employed to study several other topics of organizational research. Miller and Shamsie (2001) described Hollywood studio executives' development and performance as an executive learning life cycle, with peak performance occurring during the middle stage of a three-stage cycle. The changing priorities from one life cycle stage to another, particularly for top managers, has been chronicled by several researchers (Churchill & Lewis, 1983; Dodge, et al., 1994; Kazanjian, 1988; Smith, Mitchell, & Summer, 1985). The life cycle of industries has been a research focus for several decades (Grimm & Smith, 1997; Miles, Snow, & Sharfman, 1993), although there is a lack of consensus as to its validity (Porter, 1980).

Numerous life cycle models have been proposed by organizational researchers (Adizes, 1979; Churchill & Lewis, 1983; Greiner, 1972; Lyden, 1975; Miller & Friesen, 1984; Mintzberg, 1984; Scott, 1972; Torbert, 1974). Most models are multi-stage in nature, varying from three to ten

stages, and describe a similar pattern of development of organizations. Models with more stages seem to break down general stages to rather specific developmental periods, while models with fewer, broader stages integrate two or more developmental periods for the sake of parsimony. In addition, some have distinguished between small organizations (Churchill & Lewis, 1983; Steinmetz, 1963; Scott & Bruce, 1987) and organizations in general (Kimberly & Miles, 1980; Quinn & Cameron, 1983). The five-stage model proposed in this paper supports the work of Miller & Friesen (1984), is applicable to all organizations, and is generally consistent with the body of literature on the topic.

WHY A FIVE-STAGE MODEL

Hanks (1990) presented an excellent summary of existing life cycle models, noting how some later researchers (e.g., Baird & Meshoulam, 1988; Miller & Friesen, 1984; Quinn & Cameron, 1983; Smith, et al., 1985) had synthesized earlier models (e.g., Adizes, 1979; Chandler, 1962; Churchill & Lewis, 1983; Downs, 1967; Greiner, 1972; Lyden, 1975; Mintzberg, 1979; Scott, 1972) into their work. The synthesis of life cycle models presented by Hanks (1990) concluded that organizations are theorized to evolve through five general stages: Start-up, expansion, consolidation, diversification, and decline. Strong theoretical support for a five-stage model was presented by Greiner (1972) and Baird and Meshoulam (1988). What little empirical support there is to be found for life cycle models (Hanks, 1990; Hanks, et al., 1993; Kazanjian, 1988; Miller & Friesen, 1984; Shani, Domicone, & Perner, 1988; Smith, et al., 1985) tends to support either four- or five-stage models.

The five-stage model proposed in this paper, in keeping with other five-stage approaches (Galbraith, 1982; Greiner, 1972; Lester & Parnell, 1999; Miller & Friesen, 1984; Scott & Bruce, 1987), is comprehensive yet parsimonious. The model is different from existing five-stage models in a couple of ways. First, it is not designed only for small businesses (Churchill & Lewis, 1983; Scott & Bruce, 1987), nor is it designed only for larger corporate entities (Hanks, et al., 1993; Miller & Friesen, 1984; Smith, et al., 1985). This model is relevant for all organizations. It accomplishes this relevance by incorporating the best features from several leading models. A description of each stage follows this section. The second stage, Survival (Churchill & Lewis, 1983), for example, is defined in such a way as to accommodate all small but older organizations, as well as growing corporations that have not yet reached maturity.

A second reason for this five-stage model is the importance of recognizing decline as a separate, identifiable set of organizational activities and structures. Previously presented four-stage models (Chandler, 1962; Kanzanjian, 1988; Quinn & Cameron, 1983) omit the decline stage, a stage for which other researchers have found support (Hanks, 1990; Miller & Friesen, 1984; Jawahar & McLaughlin, 2001; Lester & Parnell, 1999). These authors have noted a specific condition among some firms at certain points in time that easily lends support for the decline stage. Adding decline to four-stage models is supported in the literature by Adizes (1989), Flamholtz (1986), and Miller and Friesen (1984). One possible explanation for some researchers omitting decline is that it somewhat resembles the start-up stage as organizations are centrally managed, not as large as their competitors, and lack some needed controls.

Miller & Friesen (1984) found clearly identifiable differences in situation, strategy, and structural characteristics between the five stages of their model. During the twenty-year time span of

their longitudinal study, several firms experienced periods of decline without going out of business, such as Ford, Macy's, Volkswagenwerk, and Yellow freight.

Firms mired in politics and power struggles (Mintzberg, 1984) while facing year-over-year reductions in revenues and profits, can be renewed and returned to leaner, more profitable forms. An early 1990's example would be IBM. In 1993, IBM was described by *Fortune*, along with Sears and General Motors, as a dinosaur. This description was not because it was extinct, but because it was "painfully and wheezingly gasping for breath" (Loomis, 1993, p. 37). 1991 had brought IBM's first ever deficit of $2.8 billion (Kirkpatrick, 1992), and in 1992 that number grew to $5 billion (Loomis, 1993). Revenues declined, while competitors like Apple Computer, Hewlett-Packard, Sun Microsystems, and Digital Equipment saw revenues grow between 7% and 31% (Kirkpatrick, 1992). In January of 1993 IBM replaced its CEO, John Akers, with an outsider, Lou Gerstner. Less than a decade later, IBM was profitable, revenues were steadily growing, and the stock had recovered nicely from its earlier doldrums (Kirkpatrick, 2002).

Almost all life cycle models have relied on some measure of organizational context or situation, strategic orientation, decision-making responsibility, and structural characteristics to describe each stage of development. The ultimate determination of how many stages a model proposes is how the researcher defines a life cycle stage (Hanks, 1990). The testing of the model presented in this cross-sectional study suggests support for the five-stage approach.

One weakness of this model is that it fails to capture the various sub-stages that small businesses move in and out of due to the goal of providing a life cycle framework for all organizations. Several researchers have provided excellent models that detail these sub-stages (Churchill & Lewis, 1983; Scott & Bruce, 1987). Instead, this model places small businesses in one of the first two stages, Existence and Survival. The proposed five-stage model utilized in the study, including the decline stage, is presented below.

Stage One: Existence

Known as the entrepreneurial (Quinn & Cameron, 1983) or birth stage (Lippitt & Schmidt, 1967), Existence (Churchill & Lewis, 1983) marks the beginning of organizational development. The focus is on viability, or simply identifying a sufficient number of customers to support the existence of the organization. Decision-making and ownership are in the hands of one, or a few, and the environment is considered to be unanalyzable (Daft & Weick, 1984). Organizations in this stage tend to enact or create (Bedeian, 1990) their own environments.

Stage Two: Survival

As firms move into the Survival stage they seek to grow (Adizes, 1979; Downs, 1967), develop some formalization of structure (Quinn & Cameron, 1983), and establish their own distinctive competencies (Miller & Friesen, 1984). Goals are formulated routinely in this stage, with the primary goal being the generation of enough revenue to continue operations and finance sufficient growth to stay competitive (Churchill & Lewis, 1983). The Survival stage provides several interesting alternatives: Some organizations grow large and prosper well enough to enter stage three, some "hit and miss," earning marginal returns in some fiscal cycles, and others fail to generate sufficient revenue to survive. Most organizations in this stage view the environment as analyzable (Daft & Weick, 1984).

Stage Three: Success

Commonly called maturity (Adizes, 1979), the Success stage represents an organizational form where formalization and control through bureaucracy are the norm (Quinn & Cameron, 1983). A common problem in this stage is what American businesses have long referred to as "red tape" (Miller & Friesen, 1984), a condition of wading through layers of organizational structure to get anything accomplished. Job descriptions, policies and procedures, and hierarchical reporting relationships have become much more formal. Such organizations have passed the survival test, growing to a point that they may seek to protect what they have gained instead of targeting new territory. The top management team focuses on planning and strategy, leaving daily operations to middle managers. The environment is viewed as analyzable (Daft & Weick, 1984).

Stage Four: Renewal

The renewing organization displays a desire to return to a leaner time (Miller & Friesen, 1984) where collaboration and teamwork foster innovation and creativity. This creativity is sometimes facilitated through the use of a matrix structure, and decision-making is very much decentralized. The organization is still large and bureaucratic, but organizational members are encouraged to work within the bureaucracy without adding to it. The needs of customers are placed above those of organizational members.

Stage Five: Decline

Although firms may exit the life cycle at any stage, the Decline stage can trigger the demise. The Decline stage is characterized by politics and power (Mintzberg, 1984), as organizational members become more concerned with personal goals than they are with organizational goals. For some organizations, the inability to meet the external demands of a former stage has led them to a period of decline where they experience a lack of profit and a loss of market share (Miller & Friesen, 1984). Control and decision-making tend to return to a handful of people, as the desire for power and influence in earlier stages has eroded the viability of the organization.

MEASURING ORGANIZATIONAL LIFE CYCLE

Hanks (1990, p. 27), defined life cycle stages as a "unique configuration of variables related to organization context, strategy, and structure." Miller and Friesen's (1984) work on the development of variables for use in categorizing organizations into individual life cycle stages served as the starting point for the scale tested in this paper. Four major gestalts (Drazin & Kazanjian, 1990) were employed by Miller & Friesen (1984) in their longitudinal study, including strategy, structure, decision-making style, and organizational situation.

Miller and Friesen's (1984) gestalt definitions are adopted in the present study. Organizational situation refers to the overall make-up of the firm, including its size, number of owners or shareholders, how customers influence decisions, the heterogeneity of its markets, and so forth. Age and size can play a role in life cycle development, even one based on strategic choice. However, age and stage of development were posited by Lippitt and Schmidt (1967) to be poorly correlated, and some large organizations are so centrally managed that they may appear as if they are much smaller. In addition, stages of development have no prescribed lengths of time, as some are passed through rap-

idly and some are prolonged for an extended period of time (Cameron & Whetton, 1981; Miles & Randolph, 1980).

Decision-making style usually differs depending upon degrees of participation, and tends to become more participative as organizations develop (McNamara & Baden-Fuller, 1999). Other factors include whether decisions are future-oriented, innovative, or defensive. Organizational structure will vary from simple to complex, departmental to divisional, and informal to formal. Of particular importance in considering structural issues is information processing procedures, decentralization of authority, and departmental differentiation. Each of these three issues was noted by Miller and Friesen (1984) to become more complex through the first four phases of the life cycle.

The present study assesses six competitive strategy components consistent with the work of Miles and Snow (1978) and Porter (1980) via a six-factor scale previously validated by Parnell and Carraher (2002). These factors included emphases on first or second mover advantages, degree of market segmentation, breadth of product or service lines, uniqueness, and efficiency. In addition, a three-item scale measuring satisfaction with firm performance—also validated by the same authors—was also included as a surrogate of performance. Because the sample includes managers from a variety of industries who will not have convenient and accurate access to financial measures of performance, satisfaction with performance was utilized in the study as a surrogate measure.

Much of the strategy literature is based on the assumption that competitive environments are objective entities waiting to be discovered through formal analysis (Hodgkinson, 1997). However, there is a growing body of literature suggesting that top management perceptions of competitive position, *not objective criteria*, form the basis of strategy development (Porac, Thomas, & Emme, 1987; Porac & Thomas, 1984; Porac, Thomas, Wilson, Paton, & Kanfer, 1995; Reger, 1990; Stubbart, 1989). This process is based on Weick's (1979) observation that organizational environments are often created through collective sense-making processes of its top managers, who then act as if their perceptions are accurate. Hence, the consideration of perceptions was deemed to be appropriate in the present study.

SCALE DEVELOPMENT

The procedure used to develop a measure of organizational life cycle (OLC) largely follows guidelines recommended by Hinkin (1995), Nunnally (1978) and Churchill (1979). Following the development of a definition of the organizational life cycle construct, an exhaustive set of 53 items believed to reflect dimensions of OLC was proposed and developed by the researchers. The resulting instrument utilized a five-point Likert-like scale. A response of 1 denotes strong agreement (i.e., "strongly agree") with a given statement, while a response of 5 denotes strong disagreement (i.e., "strongly disagree"); responses of 2, 3, and 4 were included to allow the participant to express moderate levels of agreement or disagreement with each item. Due to the exploratory nature of the study and the fact that the research is focused on scale development, no formal hypotheses were developed.

The approach employed in the development of the items was primarily deductive. The goal was to develop an exhaustive list of items that *appeared* to reflect the OLC construct as it had been conceptualized. A sample of 187 practicing managers completed the 53-item survey. Multiple factor analytic models were developed to analyze the data and a second look was taken at the wording of each of the items in order to more fully examine the content related validity of the scale. As a result

of this analysis, 21 items were deemed to be less than precise or conceptually inadequate in wording by the researchers and were removed at this stage.

Although the number of items had been reduced to 32 at this point, a critical balance between adequate domain sampling and parsimony was sought. Specifically, a fairly short measure was sought so that response and fatigue bias could be minimized, while maintaining a sufficient number of items to foster high levels of content and construct validity, internal consistency, and test-retest reliability (Kenny, 1979; Parnell & Singer, 2001; Schmitt & Stults, 1985; Schriesheim & Eisenbach, 1991). Hence, the surviving 32 items were further scrutinized by an author and two additional management researchers to identify those items whose value added to the scale did not appear to justify their inclusion. Twelve items were eliminated after an examination of cross loadings and further discussion among the researchers revealed some questions concerning possible inappropriate wording or redundancy. The remaining twenty items reflected one of the five life cycle stages (see Appendix A), with four items for each stage.

MEASUREMENT PROPERTIES OF THE SCALE

The scale was administered to 242 practicing managers at a training program in the Southeastern United States. Most of the respondents were middle managers, although a small number of upper level managers were also included. Fifty-four percent of the respondents were male and a variety of functional areas were represented. Both company experience and industry experience ranged from zero to 28 years, suggesting that the respondents comprised a broad, cross section of managers. Hence, it was concluded that the sample was sufficient for scale development pertaining to the constructs in question.

The principal components (Harman & Jones, 1966) factor extraction technique supported the existence of five dimensions of the OLC construct. Table 1 provides factor loadings for each of the five single-factor models.

Reliability and validity were assessed to ensure the integrity of the OLC-5 scale. Coefficient alphas (Cronbach, 1951) for the scales ranges from .57 to .85, (see Table 1), indicating that the scale has a high level of internal consistency, an important indication of reliability (Kuratko, Montagno, & Hornsby, 1990; Peter, 1979).

Convergent and discriminant validity were assessed in three ways. First, convergence and discrimination were assessed by correlation matrix (Bagozzi, 1981). The matrix developed represents mean correlations among items from each scale separately and mean correlations between items from different scales. Intra-correlations within the OLC-5 scale (items within the same subscales) were moderately high and consistent (.71), suggesting convergent validity (Campbell & Fiske, 1959). The inter-correlations within the OLC-5 scale (items within different subscales) were substantially lower and consistent (.31), suggesting discriminant validity (Campbell & Fiske, 1959; Churchill, 1979).

Second, the convergence of the items on the two factors demonstrated convergent validity of the scale. The "clean" loading of each item on only one factor suggests discriminant validity of the scale.

Finally, Fornell and Larcker (1981) proposed the use of variance extracted and shared variance statistics in the assessment of convergent and discriminant validity. Variance extracted is the amount of the joint variance captured by the construct and not by measurement error. Fornell and

Larcker recommended .50 as a benchmark for the establishment of convergent validity. Variance extracted was .669, suggesting a moderately strong degree of convergence on the factors.

LIFE CYCLE AND STRATEGY

Having supported the validity of the OLC-5 scale, a broader examination of the relationship between OLC and strategy was considered. Table 2 contains information from cluster analyses utilizing Ward's method and ANOVA's comparing variables across the clusters. The cluster algorithm was applied for three to eight clusters. Based upon the distance between initial cluster means, the best support was found for a six-cluster solution.

Cluster 1 consisted mostly of organizations in the early stages, particularly Existence. Organizations in the Existence stage were small, simple, and dependent on the founder. This group of firms showed no preference for any particular strategy. The common prediction found in the life cycle literature of new, entrepreneurial organizations as prospectors, or first-movers (Flamholtz, 1986; Miller & Friesen, 1984; Quinn & Cameron, 1983), was not supported. Satisfaction with performance was substantially below the mean.

Table 1
Results of Factor Analyses

Item	Summary	Factor Loading
EXIST Scale (Alpha=.7481)		
EXIST1	Organization is small	.808
EXIST2	Power rests with founder	.732
EXIST3	Simple structure	.780
EXIST4	Simple information processing	.700
SURV Scale (Alpha=.6247)		
SURV1	Power spread among several owners/investors	.740
SURV2	Some specialization	.556
SURV3	Information processing consists of monitoring performance	.726
SURV4	Decision making includes some analysis	.707
SUCCESS Scale (Alpha=.5704)		
SUCCESS1	Larger than most competitors	.740
SUCCESS2	Power distributed among numerous shareholders	.758
SUCCESS3	Structure is functional and becoming much more formal	.592
SUCCESS4	Information processing is sophisticated	.535
RENEWAL Scale (Alpha=.8085)		
RENEWAL1	Widely dispersed organization	.634
RENEWAL2	Structure is divisional or matrix	.896
RENEWAL3	Information processing is complex	.740
RENEWAL4	Decisions emphasize growth and participation	.922
DECLINE Scale (Alpha=.8459)		
DECLINE1	Centralized structure with few control systems	.896
DECLINE2	Information processing not sophisticated, but badly needed	.695
DECLINE3	Centralized decision making, not complex	.875
DECLINE4	Decisions by a few conservative managers	.834

Table 2
Comparison of Clusters

	Total	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	ANOVA	
	(n=242)	(n=32)	(n=72)	(n=24)	(n=54)	(n=40)	(n=20)	F-Stat.	Sign.
Strategy									
First Mover	3.22	2.67	3.76	2.56	3.01	3.27	3.47	8.78	.001
Second Mover	3.41	3.08	3.31	3.11	3.34	3.67	4.33	6.36	.001
Segment Controller	3.09	2.92	2.61	2.00	3.53	3.73	3.87	21.77	.001
Breadth	3.56	3.33	3.51	3.33	3.86	3.20	4.27	7.53	.001
Uniqueness	3.47	3.42	3.71	3.33	3.72	2.93	3.27	4.86	.001
Efficiency	3.04	3.08	3.02	2.75	2.78	3.17	3.83	5.71	.001
Organizational Life Cycle									
Existence	2.70	4.06	2.19	1.48	1.96	3.46	4.25	192.65	.001
Survival	3.42	3.00	3.96	2.02	3.42	3.19	4.28	57.17	.001
Success	3.21	3.19	3.23	2.96	3.45	2.66	4.03	14.53	.001
Renewal	3.53	2.34	3.74	4.08	3.75	3.13	4.20	26.41	.001
Decline	2.95	2.30	1.99	1.92	4.08	4.02	3.43	130.89	.001
Performance									
Satisfaction with Perform.	3.23	3.08	3.32	3.11	3.22	2.93	3.87	3.98	.002

Cluster 2 consisted mostly of organizations in the middle stages, mostly Survival and Renewal. Survival organizations had multiple owners, some specialization (accounting or possibly engineering, for example), information systems for performance monitoring, and some analytical decision-making. Interestingly, these organizations were most likely to pursue a first mover, or prospector strategy. The need for growth, common to both Survival and Renewal organizations, could explain the predilection toward prospecting for new customers. Satisfaction with performance was above the mean.

Organizations in cluster 3 tended to be in the Renewal stage. Renewal organizations were widely dispersed with founders no longer involved, structures were divisional or of a matrix design, information processing was complex, and participative decision-making emphasized growth. Satisfaction with performance was below the mean, and such organizations were noted for a "non-segmentation" strategic approach. One explanation for the pursuit of breadth, second mover, or unique strategies for this cluster of organizations is that they were transitioning to Renewal from Success where those strategies had been very effective. As such, Success firms were larger than most of their competitors, had numerous shareholders, formal and functional structures, and sophisticated information processing systems. This group seems to have learned to maintain a strong position by virtue of their core competencies, while pursuing new markets through innovation.

Cluster 4 consisted predominantly of organizations in the renewal and decline stages. Breadth of product line was a key strategic consideration for these organizations. This cluster represents organizations that are failing in their attempts to renew themselves. Performance satisfaction has not declined to the point of being totally negative, but problems are obvious. The breadth of product line or lack of focus strategy is an indication of a large organization that has lost efficiencies.

Cluster 5 consisted mostly of organizations in the Decline stage, lending support to the model proposed in this study. Decline organizations had centralized structures, unsophisticated informa-

tion processing, and conservative decision-making by a few managers. As would be expected, satisfaction with performance was the lowest among the clusters. Organizations in Decline, which can occur at any stage of the life cycle (Hanks, 1990; Miller & Friesen, 1984), are inclined to focus on customers that are loyal and long-term, rather than prospecting for new ones. Therefore, organizations in this cluster tended to prefer a segmentation strategy. A key concern of defender or segmentation organizations is the ability of the innovators to render their strategy useless.

Organizations in cluster 6 scored high in all of the stages except Decline. Satisfaction with performance was by far the highest for firms in this cluster. These firms indicated pursuit of all strategies in the typology. This finding supports the view that organizations in each stage of the life cycle before Decline can be successful through the pursuit of a variety of generic strategies.

In summary, firms in this study that reported being satisfied with performance pursued first mover, second mover, or breadth strategies. New organizations in the Existence stage were not focused on the first mover or prospector strategy, a somewhat surprising finding. And, the strongest group of organizations with respect to satisfaction with performance, Cluster 6, demonstrated no strategy preference.

Other findings from the study supported commonly accepted notions regarding organizational life cycle theory and research. For example, larger organizations reported much more sophisticated information processing capabilities than newer, smaller ones. Small, new organizations relied heavily on the founder as the seat of power, while larger and older organizations had dispersed power bases. Firms predominantly in Decline, regardless of which strategy was being pursued, indicated dissatisfaction with performance and conservative decision making. Firms in growth stages, particularly Survival and Renewal, reported high levels of satisfaction with performance. An emerging concept from this research worth noting is that managerial perception of firm resources and capabilities dictated strategy selection rather than objective criteria, as firms in each stage of the life cycle pursued strategies across the typology.

DISCUSSION

The original 53-item scale was designed to measure the following: Size, from very small to large; ownership, from a few to many; the heterogeneity of markets, from niche to varied; power, from the hands of the founder to a wide distribution; structure, from simple to complex; specialization and differentiation, from none to a high level; information processing, from word-of-mouth to sophisticated and complex systems; decision making, from centralized and simple to decentralized and complex; participation in decision making, from none to a high level; environmental interpretation, from unanalyzable to analyzable, enacted to discovered; and environmental scanning sources, from external and personal to internal and impersonal.

The pre-test results forced the elimination of several of the above-mentioned factors that were originally believed to be relevant. Neither environmental interpretation systems nor environmental scanning sources were found to be valuable indicators of any life cycle stage. One possible explanation is that organizations in the same life cycle stage commonly pursue different strategies, each with their own environmental perspectives.

Likewise, heterogeneity of markets failed to be a reliable indicator. Managers surveyed indicated that markets were hostile and competitive, regardless of the size of their markets. Interestingly, only one item from ownership, one item from decision-making (centralized/decentralized), and one item from specialization/differentiation were included in the final 20-item scale.

Table 3
Life Cycle Stage Characteristics

Life Cycle Stage	Situation	Structure	Decision Making Style	Strategy
Existence < 10 yrs.old	Small Young Homogenous	Informal Simple Owner-Dominated	Centralized Trial and Error	Prospector/ First Mover
Survival > 15% Growth	Medium-sized Environment More Competitive	Functional Some formality	Some delegation Begin formal Information processing	Analyzer/ Second Mover/ Differentiation
Success < 15% Growth	Heterogeneous Environment Larger size	Formal Bureaucratic Functional	Reliance on internal Information processing	Defender/ Segment Control
Renewal > 15% Growth	Very Heterogeneous Environment Very Large	Divisional Some Matrix	Sophisticated controls Formal analysis in Decision Making	Analyzer/ Combination Differentiation Low Cost
Decline No growth	Homogeneous And competitive Environment	Formal Bureaucratic Mostly functional	Moderate Centralization Less sophisticated Information processing	Reactor/ Product/service Breadth Low Cost

The factor that appeared to be the strongest indicator of life cycle stage was information processing. As Table 1 demonstrates, each information-processing statement was critical to the identification of a particular life cycle stage. This finding mirrors the need for continuous improvement and sophistication in information processing as firms grow larger and become more complex.

CONCLUSIONS AND FUTURE RESEARCH

The present study reported on the development of a twenty-item scale to categorize organizations into one of five life cycles based on manager perceptions. Strategic choice advocates (e.g., Child, 1972) propose that knowledge of an organization's stage of development can assist top managers in choosing appropriately competitive courses of action. The OLC-5 scale allows managers to identify their organization's life cycle stage, enabling them to make changes that either move the firm forward or return it to a leaner, more innovative form.

The present study also supported the existence of organizational life cycles as conceptualized by Miller and Friesen (1984) and others, and an association between life cycle and competitive strategy. Specifically, each stage was associated with certain strategies and a specific level of satisfaction with performance.

Several potential research questions remain. First, it is necessary to replicate, validate, and refine a newly developed scale to ensure both the validity of the construct and the reliability of the measure. The scale developed in the present study is no exception. Continued scrutinization of the

item wordings, as well as validation via additional samples, will enhance the quality of the instrument and improve its generalizability.

Second, the present study assumes that life cycle stage influences strategy selection, whereas it is possible that the successful businesses in the present study *perceived* themselves to be in certain life cycle stages *because* of the strategies they are implementing. If so, then present strategy and performance can be viewed as key components of the life cycle interpretational process.

Third, the present study suggests—to some extent—that an alignment between life cycle stage and strategy is desirable. If so, there is little conclusive empirical research that identifies specific life cycle-strategy combinations. This study provides only limited support for this association.

Fourth, industry was not a variable considered in the present study. Although the extent to which industry influences the strategy-life cycle relationship is not known, it is possible that in stable, mature industries, one specific strategy—the defender or low cost strategy, for example—may yield the highest performance levels, regardless of life cycle. In a similar vein, combination strategies may serve as a more effective means of adapting to unpredictable environmental changes in volatile, dynamic industries. Such possibilities are not addressed in the current study.

Fifth, the present study classified organizations based on the assessment of a single manager. Additional research could consider the role played by managerial consensus—the degree to which managers (especially members of the top management team) agree on strategy (Thomas & Ramaswamy, 1996). For example, Golden (1992) found that 58 percent of CEO's he surveyed did not agree with the previously validated accounts of their organizations' past strategies. If consensus is linked to performance—an argument advanced by Bowman and Ambrosini (1997) and others—then one may argue that some competitive strategies lend themselves to greater agreement among managers. For example, consensus may be high among segment controllers where most managers appear to understand the niche being targeted by the business, but be low among first movers where the essence of the strategy is not always well understood (Wooldridge & Floyd, 1990). Strategy coherence—the consistency of strategic choices across business and functional levels—has also been linked to performance (Nath & Sudharshan, 1994). There is also even evidence that strategy formulation is linked to the top executive's personal philosophy and personality (Kotey & Meredith, 1997).

Finally, the measurement of performance has also plagued strategy researchers for more than two decades (Venkatraman & Ramanujam, 1986). While strategy researchers struggle with various performance measures such as return-on-assets, stock price and revenue growth, many companies are beginning to use a mixture of financial and non-financial measures for performance (Kaplan & Norton, 1997; Wiliford, 1997). Although financial measures remain the most popular and widely accepted approach in strategy-performance studies, recent concerns over discrepancies in financial accounting practice highlight a shortcoming of reliance on financial data as financial measures often do not result in the valid valuation of intangible assets and outcomes (Huselid, 1995; Kaplan & Norton, 2001a; 2001b). The present study examined satisfaction with performance, a more qualitative means of measurement.

Hybrid approaches such as the "balanced scorecard" consider both financial and non-financial measures (Kaplan & Norton, 1997). While most researchers agree that multiple measures offer a rich perspective that cannot be seen by a single approach, a consensus on which combination is most appropriate has not yet emerged (Wiliford, 1997).

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APPENDIX A: ORGANIZATIONAL LIFE CYCLE SCALE

Respondents were asked to rate the following statements based on the scale of 1 to 5. (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree.

1. Our organization is small, both in size and relative to our competitors.
2. As a firm, we are larger than most of our competitors, but not as large as we could be.
3. We are a widely dispersed organization, with a board of directors and shareholders.
4. The seat of power in our firm is primarily in the hands of the founder.
5. Power in our firm is spread among a group of several owner/investors.
6. Power in our firm is concentrated in our vast number of shareholders.
7. Our firm's organizational structure could best be described as simple.
8. Our structure is department-based and functional, becoming much more formal.
9. Structure in our firm is divisional or matrix in nature, with highly sophisticated control systems.
10. Our structure is centralized with few control systems.
11. In our organization, we have some specialization (accountants and possibly engineers, e.g.) and we are becoming somewhat differentiated.
12. Information processing could best be described as simple, mostly word-of-mouth.
13. Information processing is best described as monitoring performance and facilitating communication between departments.
14. Information processing is sophisticated and necessary for efficient production and earning adequate profits.
15. Information processing is very complex, used for coordination of diverse activities to better serve markets.
16. Information processing is not very sophisticated, but badly needed.
17. Decision-making is centralized at the top of the organization and considered to be not very complex.
18. Most decisions in our firm are made by a group of managers who utilize some systematic analyses, but who are still fairly bold.
19. Most decisions in our firm are made by managers, task forces, and project teams who are trying to facilitate growth through participation.
20. Most decisions in our firm are made by a few managers who take a conservative, internally political approach.