

Organizational Success and Failure: An Empirical Test of a Holistic Model

ERIC G. FLAMHOLTZ, *University of California at Los Angeles*
ZEYNEP AKSEHIRLI, *University of California at Los Angeles*

This paper provides an empirical test of a holistic model of organizational success. It builds upon previous work by Flamholtz (Flamholz, 1995) *Managing organizational transitions: implications for corporate and human resource management, European Management Journal* 13(1), 39–51.] to develop a model of organizational success and failure. The initial model proposes that there are six key factors or 'strategic building blocks' of successful organizations, and the six key variables must be designed as a holistic system, which has been termed 'The Pyramid of Organizational Development'.

The current paper proposes a link between the organizational development model and the financial success of organizations. To test this hypothesized relationship, we have analyzed financial and non-financial information relevant to the hypothesized model for eight pairs of companies in different industries. Each company was evaluated in terms of the six key strategic building blocks, and scores were assigned to indicate the degree of the organization's development. This organizational development score and measures of financial performance were used in a Friedman two-way analysis of variance as well as in a regression analysis to test the predictive validity of the framework.

The results of both the Friedman and regression analysis suggest that there is a statistically significant relationship between the development of the six critical success factors and overall financial success of organizations. This has significant implications for both management theory and practice.
© 2000 Elsevier Science Ltd. All rights reserved

Keywords: Organizational Success, Financial Performance, Management Theory

In a previous paper, Flamholtz (1995) proposed a six-factor framework to understand and plan the successful growth of firms at different stages of growth as well as to explain organizational success and failure. The framework has subsequently been elaborated further and used to discuss case histories of success and failure of a wide variety of organizations.

The current paper aims to build upon the previous theoretical work and provide empirical evidence on the predictive validity of the proposed holistic framework in the analysis of firms' success and failure. Although there is, as discussed in Flamholtz (1995), ample evidence of the relevance and validity of the individual variables included in the framework, previous empirical research on the framework has a whole has been limited (see Randle, 1990).

Background

In recent years, many industries throughout the world have seen successes and failures of seemingly similar companies. Organizations such as Microsoft, Southwest Airlines, Nike and Wal-Mart became dominant forces in their industries while other comparable organizations such as Apple Computer, People Express, L.A.-Gear, and K-Mart have experienced difficulties and decline after a period of promising initial growth (Flamholtz and Randle, 1998).

The result is an increased need for a better understanding of the management of organizational growth and the determinants of success and failure over the long-term. More specifically, why do some organizations continue to be successful over the long-term while others, with equally promising starts, experience difficulties and even failure? To help answer this question, Flamholtz (1995) presented a framework entitled the 'Pyramid of Organizational Development' that identified six key 'strategic building blocks' of successful organizations.

This article draws upon the Pyramid of Organizational Development framework (Flamholtz, 1995; Flamholtz and Randle, 1998) and reports the results of a paired comparison analysis of 16 companies (eight matched pairs) regarding financial success and the degree of development of six key variables (or 'strategic building blocks') included in the Pyramid of Organizational Development.

The next section provides a review of the key aspects of the framework relevant to this research. The third section will explain the research hypothesis and research design used in the empirical assessment of the framework. That section also includes the profiles of companies used to test the framework. The fourth section presents the results of paired comparisons, with extensive discussion of both qualitative and quantitative comparisons. Finally, the conclusions of the analysis and the implications of these conclusions for management and researchers will be considered in the final section.

The Theoretical Framework

The theoretical framework underlying this article that was previously presented (Flamholtz, 1995) is reviewed briefly below. A more extensive discussion can be found in Flamholtz (1995) or Flamholtz and Randle (1998).

The initial premise or hypothesis underlying this framework is that organizations must perform certain tasks to be successful at each stage of their growth. The six key tasks or dimensions, all of which have been supported by previous research are:

- ❖ Identification and definition of a viable market niche (Aldrich, 1979; Brittain and Freeman, 1980; Freeman and Hannan, 1983)
- ❖ Development of products or services for the chosen market niche (Burns and Stalker, 1961; Midgley, 1981)
- ❖ Acquisition and development of resources required to operate the firm (Pfeffer and Salancik, 1978; Brittain and Freeman, 1980; Carroll and Yangchung, 1986)
- ❖ Development of day-to-day operational systems (Starbuck, 1965)

- ❖ Development of the management systems necessary for the long-term functioning of the organization (Child and Keiser, 1981; Tushman *et al.*, 1985)
- ❖ Development of the organizational culture that management feels necessary to guide the firm (Peters and Waterman, 1982; Walton, 1986)

A second premise or hypothesis is that each of these tasks must be performed in a stepwise fashion in order to build a successful organization. Each of these key tasks will be discussed in detail below.

Identification of Market Segment and Niche

The first challenge for a new venture in organizational survival or success is to identify a market need for a marketable service or product. The chances of organizational success are enhanced to the extent that the firm is successful in this step (Flamholtz, 1995).

The challenge is not merely to identify the market but also, if possible, to capture a 'market niche,' a relatively protected place that would give the company sustainable competitive advantages (Flamholtz, 1995; Kumar *et al.*, 2000). Failing to define a niche or mistakenly abandoning the historical niche can cause an organization to experience difficulties and even failure. The process of identifying the market involves the development of a strategic market plan to identify potential customers and their needs and the creation of a competitive strategy (Flamholtz, 1995).

Development of Products and Services

The second challenge or strategic building block involves the development of products and/or services. This process can also be called 'productization,' which refers to the process of analyzing the needs of customers in the target market, designing the product and developing the ability to produce it (Flamholtz and Randle, 2000). For a production firm this stage involves the design and manufacturing phases, whereas for a service firm, this stage involves forming a system for providing services to customers (Flamholtz and Randle, 2000).

Success during this stage is highly related to the previous critical task, proper definition of a market niche (Flamholtz, 1995). Unless a firm fully understands the needs of the market, it can not satisfy those needs in productization.

Acquiring Resources

Success in identifying a market niche and productization will create increased demand for a firm's products or services. Consequently, the resources of the

firm will be spread very thin (Flamholtz, 1995). The organization will require additional physical, financial and human resources. This is the point at which the entrepreneur/s should start thinking about the long-term vitality of the firm and procure all the necessary resources to survive the pressure of current and future increase in demands (Flamholtz and Randle, 2000).

Development of Operational Systems

The fourth critical task is the development of basic day-to-day operational systems, which include accounting, billing, collection, advertising, personnel recruiting and training, sales, production, delivery and related systems (Flamholtz, 1995). Entrepreneurial companies tend to quickly outgrow the administrative systems available to operate them. Therefore, it is necessary to develop sufficient operational systems, on time, to build a successful organization. In contrast, large established companies might have developed overly complicated operational systems. In this case, the success of the organization depends on the reengineering of operational systems (Flamholtz, 1995).

Development of Management Systems

The fifth step is to develop the management systems, which is essential for the long-term viability of the firm (Flamholtz and Randle, 2000). Management systems include systems for planning, organization, management development and control. Planning systems involve planning for the overall development of the organization and the development of scheduling and budgeting operations. It includes strategic planning, operational planning and contingency planning (Flamholtz, 1995). The mere existence of planning activities does not indicate that the firm has a planning system. A planning system ensures that planning activities are strategic and ongoing.

Organizational structure involves the ways in which people are organized and activities are coordinated. As was true for planning activities, success depends not on the mere existence of a structure but on the match between the structure and business strategy (Flamholtz, 1995).

Management Development Systems refers to '...the process of planned development of the people needed to run an organization as it grows (Flamholtz, 1995, p. 43)'. The Control system is the set of processes (budgeting, goal setting) and mechanisms (performance appraisal) that encourages behaviors that would help achieve organizational objectives (Flamholtz, 1995).

Developing Corporate Culture

Just as people have personalities, organizations have cultures, which are composed of shared values, beliefs and norms. Shared values refer to the importance the organization attaches to the aspects of product quality, customer service, and treatment of employees. Beliefs are the ideas that the people in the organization hold about themselves and the firm. Lastly, the norms are the unwritten rules that guide interactions and behavior (Flamholtz, 1995).

The Model as a Whole

Taken together, these six activities lead to a hierarchical model of organizational development (Figure 1). Similar hierarchical views are present in the previous literature. For example, Woodward (1985) discussed a similar relation between market niche and product, and structure and culture. In addition, Chandler's book, 'Strategy and Structure' (Chandler, 1962), suggests that a firm's structure follows from its long-term strategy.

It should be noted that the pyramid shape does not imply that the key tasks are carried out independently. All six tasks are vital for the health of the firm, and must occur simultaneously. However, the relative emphasis on each task or level of the Pyramid will vary according to the organization's stage of growth (Flamholtz, 1995). The top four levels of the pyramid, which form the 'infrastructure' of the firm, are less susceptible to imitation (Flamholtz, 1995), and, accordingly, provide the basis for long-term sustainable competitive advantage. Thus, although competition between firms takes place at all levels, long-term sustainable advantage is primarily found at the top three levels.

The emphasis that should be given to each task differs depending on the size of the firm. Organizations experience developmental problems if their infrastructure is not consistent with their size. The parallel relationship between size and organizational structure leads to an organizational life cycle model that complements the Pyramid of Organizational Development (Flamholtz, 1995). In the following section, the method used to evaluate the predictive ability of Pyramid of Organizational Development framework will be described.

Research Design

This section describes the overall research design, outlines the research hypothesis, explains the data collection procedure, and discusses the measurement or operationalization of the variables. Brief company descriptions and evaluations, and discussions of statistical methods are also included in this section.

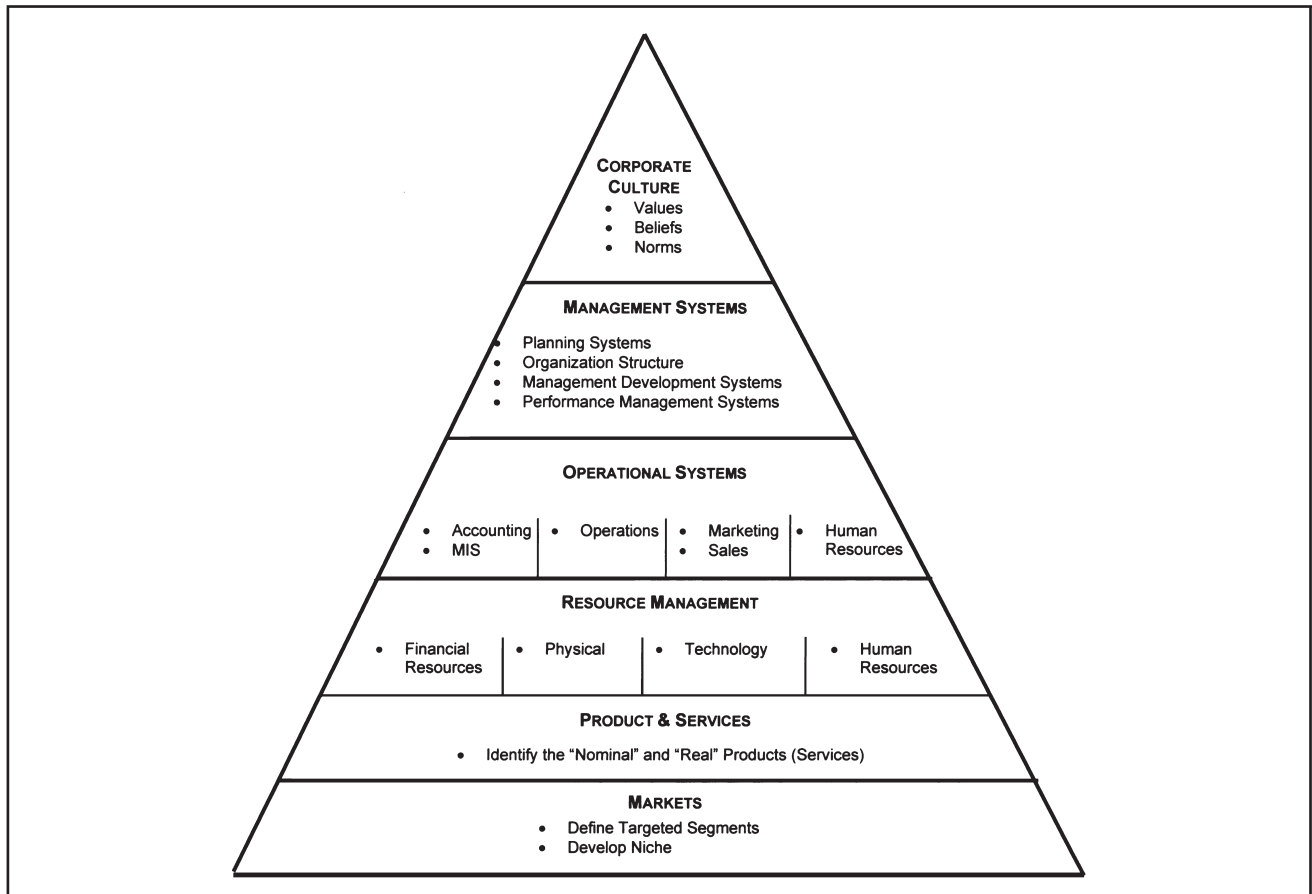


Figure 1 Pyramid of Organizational Development: The Six Key Building Blocks of Successful Organizations

Research Hypothesis

Drawing on the framework described in the previous section, the present study involves an empirical examination of the relation between success in six critical tasks of the Pyramid of Organizational Development and the financial success of the organizations.

We formulate the following hypothesis to assess this:

H1: The success of a company in managing the six key tasks of the Pyramid of Organizational Development framework positively affects the financial performance of the firm.

Overall Design for Testing the Hypothesis

It is not feasible to set up a formal experiment with organizations with controlled manipulation of the experimental variables. Since this was not feasible, we utilized quasi-experimental analysis (Cook and Campbell, 1979). In order to test the hypothesis stated above, we used a *paired comparison of a 'natural experiment.'* Naturally occurring experiments are the occurrences in the environment where the variables of interest change and other conditions remain approximately the same. Sixteen companies from eight industries were selected as matched pairs. The pairs

were chosen by the senior author in order to maximize the initial similarity of the firms. Firms within each pair have roughly similar products and/or services and operated at approximately the same time periods. The list of companies selected is shown in Table 1.

Due to the necessity of measuring financial performance, the firms selected were chosen from publicly traded companies. In order to maximize the potential variance in the sample, each pair of companies included one company that was successful and another that was, *a priori*, believed to be less successful. The rationale was that if there was not sufficient variance between the pairs when there was differences in success, then the hypothesized relationship was unlikely to exist.

Data Collection and Operationalization of Variables

To provide an independent source of information about the sample companies degree of organizational development, information about these companies was collected from published material. This included articles from academic and professional management journals, and relevant books. For each company, the junior author (for reasons discussed below) prepared a concise summary of the information regarding the

Table 1 List of Organizations

Industry	Firm I	Firm II
IBM compatible PC	Compaq	AST Research
Airline	Southwest Airlines	People Express
Sports shoes and apparel	Nike	L.A. Gear
Discount retailers	Wal-Mart	K-Mart
Health care	PacificCare	Maxicare
PC hardware and software	Microsoft	Apple Computers
Software development (database)	Oracle	Sybase
Fast food retailers	Starbucks	Boston Markets

key tasks outlined in the Pyramid of Organizational Development. In doing this, the original content of the information was left intact. Additionally, financial information was gathered from COMPUSTAT financial database. Average Return on Equity was used as an indicator of financial performance.

Measurement of Key Variables

The summaries of information about the companies were used to compare the two companies in each pair concerning every variable included in the Pyramid of Organizational Development. Drawing upon the information in the company profiles, the authors compared the pairs at each level of the Pyramid of Organizational Development framework. Because of the difficulties in measuring each variable (i.e. the possibility of measurement error), the method used was to assign scores by a binary system. The company that was more developed on the variable received a score of '1' and the company that was less developed received a score of '0' on that variable. Using this method of paired comparison with a '1/0' scoring system is preferable to trying to use a scaling method, such as a Likert scale, to measure the degree of organizational development. It results in a relatively easy way to replicate measurement.

The individual scores were totalled in order to have a total score measuring the success of the company in managing the various levels of the Pyramid of Organizational Development. By this procedure, every company could receive a maximum score of six and a minimum score of zero (from the process of assessing their performance on market definition, product development and production, resource acquisition, operational and managerial systems and organizational culture).

It should also be noted that to minimize potential measurement bias in the assessment of the development of each company in terms of the pyramid variables, the junior author was solely responsible for the collection and analysis of relevant data as well as assessment of each company's degree of development. It should be noted that the use of a totally 'blind coder' was rejected as infeasible, although this might be an avenue for future research.

Return on equity (ROE) figures, which are recognized in the literature (Teitelbaum, 1996; Eiseman, 1997) as a good measure for assessing the overall performance of a firm and, specifically, the performance of the firm's management, were used in determining the financial success of the firms. Shareholder's equity and total assets values from the COMPUSTAT database were used in calculating this ratio. Table 2 shows the Average ROEs for the companies in our sample.¹

Company Profiles and Evaluation of Pyramid of Organizational Development

In this section, we present descriptions of the firms studied, comparison of the firms regarding Pyramid of Organizational Development elements in terms of data collected from independent sources, and total scores for their organizational development in terms of the Pyramid. This will provide the reader with the rationale underlying the assessment of the degree of development of each company in terms of the Pyramid's variables as well as the basis to assess the face validity of the measures (1 or 0) assigned to indicate the relative degree of success of each company in developing each key strategic building block. A summary of scores for all companies can be seen in Table 2.

Compaq vs AST Research: In the personal computer industry, Compaq and AST Research were both successful companies during the 1980's. Both companies operated with the same market definition: producing IBM compatible, easily upgradable PCs. However, in pursuing this market segment, AST was relatively 'quiet and obscure' (Reese, 1993), whereas Compaq was better in reaching its target markets (Kirkpatrick, 1992; Gwin, 1995). AST and Compaq both had a reputation of low cost, high quality computers (Dubin, 1983; Webber, 1990; Savitz, 1990) and they did not have difficulties in securing the resources they needed (Rapaport, 1994; Kraar, 1996). AST experienced serious problems with its operational systems and management systems such as backed up orders, inventory issues, and planning and control systems weaknesses (Reese, 1993; Rapaport, 1994; Armstrong and Nakarmi, 1995). Compaq, on the other hand, had well developed operational and

Table 2 The Pyramid of Organizational Development Scores and Average ROEs for 16 Companies

	Compaq	AST	Southwest	People Express	Nike	L.A. Gear	Wal-Mart	K-Mart
Markets	1	0	1	1	1	0	1	0
Products and services	1	1	1	0	1	0	1	0
Resources	1	1	1	0	1	0	1	0
Operational systems	1	0	1	0	1	0	1	0
Management systems	1	0	1	0	1	0	1	0
Culture	1	0	1	0	1	0	1	0
Total score	6	2	6	1	6	0	6	0
Average ROE	0.174	0.131	0.145	-0.208	0.429	0.099	0.231	0.087

	Pacificare	Maxicare	Microsoft	Apple Comp.	Oracle	Sybase	Starbucks	Boston Markets
Markets	1	1	1	0	1	1	1	1
Products and services	1	1	1	1	0	1	1	0
Resources	1	0	1	0	1	0	1	0
Operational systems	1	0	1	0	1	0	1	0
Management systems	1	0	1	0	1	0	1	0
Culture	0	0	1	1	1	0	1	0
Total score	5	2	6	2	5	2	6	1
Average ROE	0.167	0.087	0.311	0.136	0.252	0.024	0.091	-0.412

management systems (Davis and Lewis, 1987). AST also had several culture integration problems because of acquisitions and partnerships with other firms (Armstrong and Burrows, 1993), whereas Compaq created and managed a 'can-do,' teamwork oriented culture (Webber, 1990; Currid, 1992).

Drawing upon this information, both companies were given a score of 1 in regard to their products and resource acquisition. For the rest of the elements of the organizational development pyramid, Compaq was given a score of 1 and AST Research was given a score of 0.

Southwest Airlines vs People Express: The market definition for these two airline companies are similar: low cost 'no frills' airfare (Nulty, 1993; Chakravarty, 1991a, b). Southwest airlines, however, was much more successful in managing its financial and physical resources (Godsey, 1996) than People Express, which pursued growth at the expense of financial health (Dubin, 1983). The operational systems of People Express lacked strength in key areas such as scheduling and maintenance (Byrne, 1989), whereas Southwest Airlines institutionalized operational systems and cost cutting strategies (Labich, 1994). Southwest airlines had some strength in management systems: a strong mentoring program, coupled with a career planning systems, and a solid strategic planning mechanism (Fisher, 1998; Godsey, 1996). On the other hand, there are not many accounts of management systems in People Express, suggesting that there was limited focus on this area. Regarding organizational culture, Southwest Airlines reflected a strong culture of humor and family feeling (Chakravarty, 1991a, b). However, People Express

suffered from a mismatch between its stated culture of empowerment and the actual culture of lack of autonomy (Nulty, 1993).

In assessing the data on their market strategies, both companies were given a score of one in regard to their markets. For the rest of the building blocks, Southwest Airlines was given a score of one and People Express was assigned a score of zero.

Nike vs L.A. Gear: The differences between Nike and L.A. Gear are clear at every level of the Pyramid of Organizational Development. Nike has a strong market definition, a solid image, and strong world wide brand equity (Meeks, 1990). L.A. Gear, on the other hand, has had an inconsistent marketing strategy that varies between fashion and performance sneakers (Kerwin, 1989; Russell, 1994). Nike invested heavily in R&D and produced a wide array of high quality products (Calonius, 1991). L.A. Gear's products suffered from low quality and low R&D investment (Savona, 1994). As for financial and human resources, L.A. Gear used more than a few aggressive accounting strategies, all of which, in time, backfired (Kerwin, 1990) and resulted in massive layoffs. Nike, however, used its resources more efficiently by outsourcing most of its activities. Nike conscientiously established healthy operational systems and management systems (Willigan, 1992; Harari, 1998). In contrast, L.A. Gear experienced severe inventory control problems, coupled with control systems problems (Darlin, 1993). Management systems also suffered from disagreements at the strategic level (Savona, 1994). In contrast to Nike's strong culture (Labich, 1995), L.A. Gear's corporate culture lacked focus (Tedeschi, 1998).

Drawing upon this data to evaluate both companies at all levels of the Pyramid of Organizational Development, Nike was given a score of 1, whereas, L.A. Gear received a score of 0 on all variables.

Wal-Mart vs K-Mart: These two discount retailers differ tremendously at all levels of the Pyramid of Organizational Development. Wal-Mart has a clear idea about its business identity and its customers (Ballard and Langrehr, 1993) and they utilize the existing technology to see the marketplace in a different light (Kumar *et al.*, 2000). K-Mart, on the other hand, is relatively disconnected from its customer profile (Sellers, 1996). Although the two companies have similar products, they have very different service levels. K-Mart is far from giving the same level of customer service as Wal-Mart (Swain, 1994). Poor pricing strategies and decreasing profits caused problems in relation to resources for K-Mart (Antonini, 1994). Wal-Mart, on the other hand, has a great base of resources and infrastructure (Rudnitsky, 1987; Swain, 1994). The operational systems of K-Mart are less than adequate. Industry experts find the efforts of the company to renew itself too slow (Treece, 1994). On the contrary, operational systems is one of the strongest sides of Wal-Mart (Zellner, 1992). K-Mart lacks management systems, and follows a trial and error approach to management (Treece, 1994). Wal-Mart, on the other hand, has a very clear management philosophy: flat organization, empowerment, and extensive systematic information sharing (Swain, 1994; Lorge, 1997). K-Mart has conflicting and different cultures in different parts of the firm (Saporito, 1995). In contrast, Wal-Mart enjoys high motivation, high value given to action and flexibility, high participation and high commitment (Sirkin and Stalk, 1995; DeMott, 1996). They are also able transfer this culture to new employees with proper training systems (Success, 1992).

Drawing on this information, Wal-Mart was given a score of 1, and K-Mart was given a score of 0, for all levels of the Pyramid of Organizational Development.

PacifiCare vs Maxicare: Maxicare targeted profitable markets and contracted with top quality hospitals (Haggerty, 1987). Similarly, PacifiCare employed a very systematic market analysis regarding both health delivery systems, and employers and purchasers (Appleby, 1995). Both health care companies are known for their high quality hospitals and timely service (Wampler *et al.*, 1996; Lumsdon, 1996; Teitelman, 1985). In regards to resources, Maxicare suffered due to high investments made in acquisitions (DiBlase, 1988). PacifiCare only experienced small changes (caused by industry regulations) in its financial health (PacifiCare, 1999). There is not much published descriptive material on the operational systems of Maxicare (Teitelman, 1985), whereas PacifiCare is known for its administrative simplicity and consistency, quality control systems, successful

information systems (Way, 1998) and active political influence systems (Wampler *et al.*, 1996; Lumsdon, 1996; Birnbaum, 1998). Maxicare emphasizes growth and entrepreneurialism (Dowd *et al.*, 1987). On the other hand, PacifiCare has a professional management style and managers with the appropriate sets of different skills (Lumsdon, 1996; Birnbaum, 1998).

Unfortunately, neither of the firms have systems for actively managing their culture. Considering these data, PacifiCare received a score of 1 for all levels of the framework except culture. Maxicare, received a score of 1 for the markets and products levels, and a score of 0 for the rest of the Pyramid of Organizational Development.

Microsoft vs Apple Computer: These two companies from the PC industry have vastly different approaches to marketing. Microsoft has an extremely complex and very loose market definition but a strong overall market position (Lavery, 1996). Apple Computer lacks a market definition all together (Burrows, 1996). In regard to products and services, both companies are very successful due to high emphasis on R&D and innovative style (Kupfer, 1992; Stross, 1997). Microsoft is very successful in getting financial resources (Stewart, 1997), whereas, Apple's financial health suffers from low margins and lack of new product lines (Sager *et al.*, 1998). Microsoft has a modular operational system with efficient coordination tools (Lavery, 1996). Apple, on the other hand, always had a gap between product development, manufacturing and distribution (Champy, 1998). Bill Gates was successful in professionalizing, while preserving the entrepreneurial spirit and a sense of teamwork (Schlender, 1995). In contrast, Apple has had very little control and a great deal of chaos in its management systems (Business Week, 1982). Despite all these differences, both companies have very strong cultures and systems to pass their culture on to new employees (Alsop, 1997; Schlender, 1998). To reflect this information, Microsoft was assigned a score of 1 for all levels of the Pyramid of Organizational Development. Apple Computer, however, received a score of 1 for products and culture, and a score of 0 for all other levels of the framework.

Oracle vs Sybase. These companies were selected from the software development industry. Both companies were very successful in penetrating the database market with successful product concepts (Deutschman, 1993; Shaffer, 1993). Unfortunately, the aggressive sales focus at Oracle caused the programs to be released too soon with too many problems (Nulty, 1993). Oracle is known to have clear roles and reporting relationships, effective control systems (Martin, 1996), an experienced team of executives (Nulty, 1993), and a sensible culture (Kaarlaard, 1993). Unfortunately, there are no reports about the operational systems, management systems and culture management of Sybase. This may suggest that Sybase did not pay much attention to these factors.

Based on this data, Oracle was given a score of 1 for all levels of the framework except 'products'. Sybase, on the other hand, was given a score of 1 for markets and products, and a score of 0 for the other levels.

Starbucks vs Boston Markets. Both of these companies in the so-called 'fast food' market transformed an existing product into a market niche successfully (Kumar *et al.*, 2000; Browder, 1996; Saporito, 1995). Starbucks provides high quality products with friendly service (Kramer, 1996). Boston Markets, on the other hand, was unable to come up with new product lines (Walkup, 1998). Starbucks has strong financial resources (Yang, 1994), whereas, Boston Markets never had a sound business model, made the mistake of reporting earnings at the expense of their franchisees and ended up filing for bankruptcy. Due to a stable and experienced management team (Henkoff, 1996), Starbucks is one of the rare companies that gave high importance to the development of good operational systems before they were needed (Reese, 1996). In contrast, Boston Markets has had a lack of focus on both store level operational systems (Kramer, 1996) and management systems (Fox Business News, 1998). Whereas Starbucks demonstrates a well established culture with principles of treating everyone with respect and purchasing the best coffee available (Filipczak, 1992), Boston Markets does not have any clear set of cultural values. Based on this information, Starbucks received a score of 1 for all levels of the pyramid. Boston Markets, however, received a score of 1 for markets and score of 0 for the rest of the levels of the Pyramid of Organizational Development.

Statistical Methods

Two different statistical methods were used to analyze the hypothesized relationship between the variables included in the Pyramid of Organizational Development and financial performance: (1) the Friedman two-way analysis of variance by ranks and (2) regression analysis. SPSS statistical software was used for both analyses.

The Friedman two-way analysis of variance was appropriate because the data consisted of two matched samples (Siegel, 1956). The Friedman test determines whether the pairs come from the same set of companies or they differ significantly regarding their scores in the Pyramid of Organizational Development.

Regression analysis was also used to evaluate the relationship between Pyramid of Organizational Development success and financial performance. To assess the ability of the Pyramid of Organizational Development framework in predicting financial performance of a firm, total Pyramid of Organizational Development score and Average ROE were used in

a regression analysis as independent and dependent variables, respectively.

Findings

As mentioned above, Pyramid of Organizational Development scores and average ROE figures for each company were calculated using available financial information. This section reports the results when these data were used to statistically analyze the ability of the Pyramid of Organizational Development to predict the financial situation of a company. The results of the empirical analysis of the link between the Pyramid of Organizational Development and financial success and interpretation of these results are presented below.

The analysis was done in two steps: (1) the non-parametric Friedman test was used to compare the distributions of total Pyramid of Organizational Development score and average ROE and (2) regression analysis was used to evaluate the connection between the six key tasks of the Pyramid of Organizational Development and the financial performance of the companies.

Results of the Friedman test indicate that ROE scores are significantly associated with total Pyramid of Organizational Development scores. At the significance level of 0.005, higher values of total scores are connected with higher ROE values and lower total scores are linked with lower ROEs (Siegel, 1956). This is an unusually strong level of association.

In order to quantify the relation between Total Pyramid Score and ROE, Return on Equity values were regressed on Total Pyramid of Organizational Development scores. In this regression analysis, Total Pyramid Score was found to be significant in predicting financial performance at the level of $P < 0.01$. The regression equation is

$$\text{Estimated ROE} = -0.067 + 0.05 * \text{Total Score} \\ (t = -0.940) (t = 2.984)$$

* indicates significance at level 0.01.

R^2 for this model was found to be 0.389.

Both the Friedman test and the regression analysis suggest a significant relationship between the success in six critical tasks proposed in the Pyramid of Organizational Development framework and financial performance of the companies.

In brief, these results suggest that the Pyramid of Organizational Development can be useful as a 'lens' or tool to assess and manage a company and, in turn, that will contribute to the organization's financial success.

Conclusions and Implications

The empirical analysis above shows a clear relationship between the Pyramid of Organizational Development pyramid framework and financial performance. This has several significant implications for practicing managers and researchers.

Implications for Managers

We believe that managers should be using the Pyramid of Organizational Development framework as the 'lens' for planning the strategic development of the firm. This means that it can and should be used in strategic planning as a focus for organizational development.

Managers can also use the framework to assess the success of their companies on a prospective basis. Since there is a link between development and financial success, it can be expected that the degree of development of the pyramid variables are a leading indicator of future financial success. The Pyramid of Organizational Development framework can be a promising tool for predicting the future performance of companies. In combination with the stages of growth, the Pyramid of Organizational Development can be used to assess a company's success in fulfilling critical tasks at each stage of growth (Flamholtz and Randle, 2000).

Another implication for management is the fact that organizations are competing at each level of the pyramid. Because markets can be easily entered and products can be easily copied, the real competition goes on at the top four levels of the pyramid. This phenomenon can be observed in several pairs used in this paper. Perhaps the clearest example is Wal-Mart versus K-Mart. Companies such as Microsoft, Oracle, can have products based upon proprietary technologies. Companies such as Roche or Pharmacia have patents. Unlike those companies, there is no product that Wal-Mart can offer that can not be offered by K-Mart. Accordingly, the difference in financial performance between Wal-Mart and K-Mart is ultimately derived from differences at the top of the pyramid. This is counter to the conventional view that companies typically compete in product and markets, and it provides empirical evidence that management actually matters.

Implications for Researchers

This research represents one of the first attempts to empirically assess the Pyramid of Organizational Development framework. These results should be supplemented with further studies. Other possible approaches to assess the same hypothesis are feasible and ought to be investigated. For example, it may be

feasible to assess the predictive validity of the Pyramid in relation to financial performance in a single firm with multiple divisions. Also using as many other measurement approaches as possible.

The paper also opens up other avenues for future research. Specifically, this paper suggests that the level of success found in such an analysis can be used to estimate the future financial success of the firm. At present, this is a hypothesis, and it remains for future research to examine this phenomenon with a longitudinal study using time series analysis.

Concluding Comment

The issues of organizational success and failure are critical to both managers and theorists. This paper has demonstrated that there is empirical support for the Pyramid of Organizational Development. For managers, it can be meaningfully used as a lens to plan future organizational development. For researchers, it opens the way to new questions and issues. Although it does not fully resolve all issues in this area, we believe however, that this article provides the foundation for a new direction in management research and practice that can ultimately be of considerable significance.

Note

1. Average ROEs were calculated using the data from the financial figures for the time frames that were available at COMPUSTAT database. Time periods for each company are as follows: Compaq/1983-97, AST Research/ 1984-96, Southwest Airlines/1978-97, People Express/ 1982-8, Nike/1979-96, L.A. Gear/1985-96, Wal-Mart/ 1978-97, K-Mart/1978-97, Pacificare/1985-97, Maxicare/ 1982-97, Microsoft/1985-97, Apple Computer/ 1980-97, Oracle/1984-97, Sybase/1990-7, Starbucks/ 1991-7, Boston Chicken/1992-7. The years with unusual financial activity (e.g. bankruptcy) were excluded.

References

- Aldrich, I. (1979) Organizational passages: diagnosing and treating life cycle problems in organizations. *Organizational Dynamics* **Summer**, 3-24.
- Alsop, S. (1997) A letter to Apple's next owner. *Fortune* **135**(10), 171-172.
- Antonini, J.E. (1994) Focus on renewal. *Journal of Business Strategy* **15**(1), 12.
- Appleby, C. (1995) HMOs on the move. *Hospital and Health Networks* **69**(22), 28-32.
- Armstrong, L. and Burrows, P. (1993) AST steps out of the shadows. *Business Week* **3333**, 64-65.
- Armstrong, L. and Nakarmi, L. (1995) Can Samsung usher AST to a front-row seat? *Business Week* **3420**, 92.
- Ballard, M. and Langrehr, F.W. (1993) What CPAs can learn from Wal-Mart. *Journal of Accountancy* **176**(5), 101-104.
- Birnbaum, J.H. (1998) Capitol clout: a buyer's guide. *Fortune* **138**(8), 177-184.
- Brittain, J.W. and Freeman, J. (1980) Organizational proliferation and density-dependent selection. In *The Organizational Life Cycle Issues in the Creation, Transformation, and*

- Decline of Organizations*, eds J.R. Kimberly, R.H. Miles and Associates, pp. 291–338. Jossey-Bass, San Francisco.
- Browder, S. (1996) Starbucks does not live by coffee alone. *Business Week* **3487**, 76.
- Burns, T. and Stalker, G.M. (1961) *The Management of Innovation*. Tavistock, London.
- Burrows, P. (1996) Luring them back to the Mac aisle. *Business Week* **3503**, 156–158.
- Byrne, J.A. (1989) Donald Burr may be ready to take to the skies again. *Business Week* **3087**, 74–75.
- Calonius, E. (1991) Smart moves by quality champs. *Fortune* **123**(12), 24–28.
- Caroll, G.R. and Yangchung, P.H. (1986) Organizational task and institutional environments in ecological perspective: findings from the local newspaper industry. *American Journal of Sociology* **91**, 838–873.
- Chakravarty, S.N. (1991a) Hit 'em hardest with the mostest. *Forbes* **148**(6), 48–54.
- Chakravarty, S.N. (1991b) A tale of two companies. *Forbes* **147**(11), 86–96.
- Champy, J. (1998) *Apple's arrested development*. *Forbes* **161**(8), 132.
- Chandler, A.D. (1962) *Strategy and Structure: Chapters in the History of the Industrial Enterprise*. MIT Press, Cambridge.
- Child, J. and Keiser, A. (1981) Development of organizations over time. In *Handbook of Organizations: Adapting Organizations to Their Environments*, eds P.C. Nystrom and W.H. Starbuck, pp. 28–64. Oxford University Press, New York.
- Cook, T.D. and Campbell, D.T. (1979) *Quasi-experimentation: Design and Analysis Issues for Field Settings*. Houghton Mifflin Company, Boston.
- Currid, C. (1992) The man who built Compaq applies his skills to IS management. *InfoWorld* **14**(48), 55.
- Darlin, D. (1993) Getting beyond a market niche. *Forbes* **152**(12), 106–107.
- Davis, J.E. and Lewis, G. (1987) Who's afraid of IBM? Not Compaq. *Business Week* **3005**, 68–74.
- DeMott, J.S. (1996) The key issue: managing bigness. *Worldbusiness* **2**(5), 30–33.
- Deutschman, A. (1993) The next big info tech battle. *Fortune* **128**(14), 38–50.
- DiBlase, D. (1988) Maxicare slims down to regain health. *Business Insurance* **22**(36), 29–30.
- Dowd, A.R., Knowlton, C., Hutton, C. and O'Reily, B. (1987) The year's fifty most fascinating business people. *Fortune* **115**(1), 40–47.
- Dubin, R.A. (1983) Continental's feisty chairman defends deregulation — and himself. *Business Week* **2815**, 111–115.
- Eiseman, C.J. (1997) Value added: donor advised funds at community foundations. *Trusts and Estates* **136**(4), 16–20.
- Filipczak, B. (1992) Beyond the Gates at Microsoft. *Training* **29**(9), 37–44.
- Fisher, L. (1998) Success in a nutshell. *Accountancy* **122**(1259), 28–29.
- Flamholtz, E. (1995) Managing organizational transitions: implications for corporate and human resource management. *European Management Journal* **13**(1), 39–51.
- Flamholtz, E. and Randle, Y. (1998) *Changing the Game: Organizational Transformations of the First, Second, and Third Kinds*. Oxford University Press, New York.
- Flamholtz, E. and Randle, Y. (2000) *Growing Pains: Transitioning from an Entrepreneurship to a Professionally Managed Firm*, new rev. ed. Jossey-Bass, San Francisco.
- Fox Business News (1998) Boston Chicken files for bankruptcy protection.
- Freeman, J. and Hannan, M.T. (1983) Niche width and the dynamics of organizational populations. *American Journal of Sociology* **88**, 1116–1145.
- Godsey, K.D. (1996) Flying lessons: 10 southwest strategies to apply to your business. *Success* **43**(8), 24–25.
- Gwin, P. (1995) King Compaq. *Europe* **345**, 16–18.
- Haggerty, A.G. (1987) Maxicare focuses on absorbing big acquisitions. *National Underwriter* **91**(12), 32–34.
- Harari, O. (1998) Lessons from the swoosh. *Management Review* **87**(7), 39–42.
- Henkoff, R. (1996) Growing your company: five ways to do it right!. *Fortune* **134**(10), 78–88.
- Kaarlgaard, R. (1993) ASAP Interview: Larry Ellison. *Forbes ASAP Supplement*, 71–74.
- Kerwin, K. (1989) L.A. Gear is going where the boys are. *Business Week* **3111**, 54.
- Kerwin, K. (1990) L.A. Gear is tripping over its shoelaces. *Business Week* **3174**, 39.
- Kirkpatrick, D. (1992) The revolution at Compaq Computer. *Fortune* **126**(13), 80–88.
- Kraar, L. (1996) Guess who is betting on America's high-tech losers. *Fortune* **134**(8), 151–158.
- Kramer, L. (1996) Boston Market refocuses on store-level operations. *Nation's Restaurant News* **30**(47), 82.
- Kumar, N., Scheer, L. and Kotler, P. (2000) From market driven to market driving. *European Management Journal* **18**(2), 129–141.
- Kupfer, A. (1992) Apple's plan to survive and grow. *Fortune* **125**(9), 68–72.
- Labich, K. (1994) Is Herb Kelleher America's best CEO? *Fortune* **129**(9), 44–52.
- Labich, K. (1995) Nike vs. Reebok: a battle for hearts, minds and feet. *Fortune* **132**(6), 90–106.
- Laverty, K.J. (1996) Lessons from Microsoft: a model for strategy and leadership. *Strategy and Leadership* **24**(2), 44–48.
- Lorge, S. (1997) Wal-Mart. *Sales and Marketing Management* **149**(11), 67–68.
- Lumsdon, K. (1996) A winning market strategy for HMOs. *Hospitals and Health Networks* **70**(19), 69–70.
- Martin, J. (1996) Tomorrow's CEOs. *Fortune* **133**(12), 76–90.
- Meeks, F. (1990) The sneaker game. *Forbes* **146**(9), 114–115.
- Midgley, D.F. (1981) Toward a theory of the product life cycle: explaining diversity. *Journal of Marketing* **45**, 109–115.
- Nulty, P. (1993) The virtues of eating humble pie. *Fortune* **128**(5), 44–46.
- PacificCare (1999) *Health Care Strategic Management* **17**(5), 4.
- Peters, T.J. and Waterman, R.H. (1982) *In Search of Excellence*. Harper and Row, New York.
- Pfeffer, J. and Salancik, G.R. (1978) *The External Control of Organizations: A Resource Dependence Perspective*. Harper and Row, New York.
- Randle, Y. (1990) Towards an ecological life cycle model of organizational success and failure. Unpublished Ph.D. dissertation, UCLA.
- Rapaport, R. (1994) Mission imperative. *Fortune ASAP Supplement*, 76–82.
- Reese, J. (1993) AST research: the payoff from a good name. *Fortune* **128**(15), 163–166.
- Reese, J. (1996) Starbucks: inside the coffee cult. *Fortune* **134**(11), 190–200.
- Rudnitsky, H. (1987) Play it again, Sam. *Forbes* **140**(3), 48.
- Sager, I., Burrows, P. and Reinhardt, A. (1998) Back to the future at Apple. *Business Week* **3579**, 56–61.
- Saporito, B. (1995) What's for dinner? The battle for stomach share. *Fortune* **131**(9), 50–64.
- Savitz, E.J. (1990) Cloning profits: AST scores smartly at home and abroad. *Barron's* **70**(21), 60–61.
- Savona, D. (1994) Can foreigners save L.A. Gear? *International Business* **December**, 18–21.
- Schlender, B. (1995) Bill Gates and Paul Allen talk. *Fortune* **132**(7), 68–86.
- Schlender, B. (1998) War of just, or just plain war? Gates' crusade. *Fortune* **137**(12), 30–32.
- Shaffer, R.A. (1993) Do your files relate? *Forbes* **152**(8), 152.
- Sellers, P. (1996) K-Mart is down for the count. *Fortune* **133**(1), 102–103.
- Siegel, S. (1956) *Nonparametric Statistics for the Behavioral Sciences*. McGraw-Hill Book Company, New York.
- Sirkin, H.L. and Stalk, G. (1995) Accept no compromises. *Journal of Business Strategy* **16**(4), 25–26.
- Starbuck, W. (1965) Organizational growth and development. In *Handbook of Organizations*, ed. J.G. March, pp. 451–533. Rand McNally, Chicago.
- Stewart, T.A. (1997) Brain power: who owns it. *Fortune* **135**(5), 104–110.

- Stross, R.E. (1997) Mr Gates builds his brain trust. *Fortune* 136(11), 84–87.
- Swain, P.G. (1994) Making room for Uncle Sam. *Business Quarterly* 59(1), 46–53.
- Success (1992) How he did it: billion-dollar management secrets of Sam Walton. 39(9), 84.
- Tedeschi, M. (1998) L.A. Gear coming out of the fog. *Sporting Goods Business* 31(12), 23.
- Teitelbaum, R.S. (1996) What's driving return on equity? *Fortune* 133(8), 271–276.
- Teitelman, R. (1985) Maxicare, maxiprofits. *Forbes* 136(13), 48–50.
- Treece, J.B. (1994) K-Mart: slick moves — or running in place? *Business Week* 3354, 28.
- Tushman, M.L., Virany, B. and Romanelli, E. (1985) Executive succession, strategic reorientation, and organization evolution: the minicomputer industry as a case in point. *Technology in Society* 7, 297–313.
- Walkup, C. (1998) Roost rulers exploit chicken's firm popularity, notch growth as Boston Market stumbles. *Nation's Restaurant News* 32(25), 122–126.
- Walton, R.E. (1986) A vision-led approach to management restructuring. *Organizational Dynamics* Spring, 9–16.
- Wampler, J., Frank, D. and Fogel, K. (1996) Strategic alliances: an integrated health system alternative. *Frontiers of Health Service Management* 13(1), 53–56.
- Way, P. (1998) Pacificare discovers the big bang theory. *Insurance and Technology* 23(10), 21.
- Webber, A.M. (1990) Consensus, continuity, and common sense: an interview with Compaq's Rod Canon. *Harvard Business Review* 68(4), 114–123.
- Willigan, G.E. (1992) High-performance marketing: an interview with Nike's Phil Knight. *Harvard Business Review* 70(4), 90–101.
- Woodward, J. (1985) *Technology and Organization*. Oxford University Press, New York.
- Yang, D.J. (1994) The Starbucks enterprise shifts into warp speed. *Business Week* 3395, 76–79.
- Zellner, W. (1992) O.K., So he's not Sam Walton. *Business Week* 3256, 56–58.



ERIC FLAMHOLTZ, John E. Anderson Graduate School of Management, University of California at Los Angeles, 405 Hilgard Avenue, Los Angeles, CA 90024-1481, USA. E-mail: ef@mgtsystems.com

Dr Flamholtz is Professor of Management at the Anderson Graduate School of Management at the University of California, Los Angeles. He is also President of the Management Systems Consulting Corporation, which he founded in 1978. His most recent books are *Growing Pains: How to Make the Transition from an Entrepreneurship to a Professionally Managed Firm*, co-authored with Yvonne Randle (Jossey Bass, 2000), *Human Resource Accounting* (Kluwer Academic Publishers, 1999), *Changing the Game: Organizational Transformations of the First, Second, and Third Kinds*, co-authored with Yvonne Randle (Oxford University Press, 1998). Dr Flamholtz is currently working on another book dealing with strategy and executive leadership.



ZEYNEP AKSEHIRLI, UCLA, 110 Westwood Plaza, A416, Los Angeles, CA 90095, USA. E-mail: zaksehir@anderson.ucla.edu

Zeynep Aksehirli is a Doctoral Candidate at UCLA, Anderson Graduate School of Management in the Human Resources and Organizational Department. Her research interests include the effect of key organizational tasks on firm performance, and the impact of cultural differences and individual time perceptions on organizational effectiveness. Zeynep received her B.S. and M.S. degrees in Industrial Engineering from Middle East Technical University, Turkey.