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THE PYRAMID OF ORGANIZATIONAL DEVELOPMENT AS A PERFORMANCE MEASUREMENT MODEL

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In recent times, performance measurement has moved from lists of key performance indicators to more comprehensive business models that reflect the firm as a system. Consistent with this more comprehensive approach, Flamholtz (2005) presents a holistic performance measurement model termed the Pyramid of Organizational Development. The Pyramid presents six key building blocks of successful organizations: (1) markets, (2) products, (3) resources, (4) operational systems, (5) management systems, and (6) corporate culture. Flamholtz suggests that different levels of the Pyramid are relatively more important at different stages of company growth. He argues that if fit between the Pyramid and growth stage is not achieved, then the organization will experience growing pains that negatively impact financial performance. Our task is to comment on how to improve and build upon this model, as presented in Flamholtz (2005), with an eye to the more general question of what we should expect of performance measurement

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models. We proceed with a discussion of model characteristics, followed by model testing, and then implications for such models.

MODEL CHARACTERISTICS

Capturing Complex Interrelationships

If a comprehensive performance model for business is to be useful in an analytic and predictive sense, the model must capture the interrelationships of factors that influence organizational performance such as organizational maturity, size, products and services, management systems, industry characteristics, and environmental influences. Flamholtz includes a number of key factors in his model. However, Flamholtz's explication of the factors does call into question some aspects of the model. For instance, Flamholtz explicitly equates level of sales revenue with specific growth stages of the organization and implicitly equates level of sales revenue with the maturity of the organization. Although these factors may be correlated in many organizations, care must be taken so that the comprehensive performance model does not confound key factors.

A manufacturing organization, such as a shipyard, could be a relatively new venture with only one order and be in the highest sales revenue category of the Flamholtz model. On the other hand, a firm could be very mature with a small sales volume. It appears that the model as presented by Flamholtz (2005) is meant specifically to apply to organizations where dollar sales volume categories as shown in Exhibit 3 (Flamholtz, 2005) correlate with both the chronological age of the organization and the maturity of its products and processes. Greiner (1998) clearly distinguishes between size and age in his model of organizational evolution. Interestingly, his definition of size is vague but he does discuss both number of employees and sales volume as indicators of growth. Growth and organizational maturity are complex concepts that a rich holistic performance measurement model needs to fully capture. In Flamholtz and Randle (2005), the authors do discuss the complexity of the relationships and the difficulty of operationalizing these concepts.

Assessing Issues of Use Versus Design

The applicability of a performance measurement model will also depend on its ability to identify and relate issues to the design versus the use of the performance factors. It is possible to have proper processes and systems in place and not use them well, just as it is possible to have well utilized but weak processes and systems. In the Flamholtz model, a consequence of misfit between the Pyramid and firm growth stage is labeled growing pains. It is unclear whether fit, or lack thereof, is based on the design of the building blocks, how employees use the building blocks, or both. The logic behind the model appears to be that it is designed for relatively large growing organizations that render the infrastructure of the organization framework obsolete at regular intervals. An implicit assumption in the model seems to be that the issues are those of design not in use. A generalizable holistic performance model would address not only the growing organization, but also those that achieve a steady state before reaching the categories containing the larger-sized organizations listed in Exhibit 3 (Flamholtz, 2005). Such a model would more readily support the analysis of issues of both design and use.

Reconciling Divergent Views

A generalizable holistic performance measurement model will need to address the seemingly divergent views regarding factors that are most likely to be important to an organization at various stages of its growth. For instance, several parallels can be made between the Pyramid and Simons' (1995) Levers of Control model. As an example, Simons' beliefs and boundary systems mirror the corporate culture level of the Pyramid, while Simons' interactive and diagnostic control systems are similar to the Pyramid's management systems level. Simons addresses the concept of fit between his levers of control and life cycle stages. Simons suggests that beliefs and boundary systems should be implemented as a firm begins to expand. New locations, new product offerings, and an increase in the number of employees necessitate top management formally document and communicate the values, beliefs, and norms of the organization. However, Flamholtz (2005) suggests that this is optimally performed later at the consolidation phase. The implications for the analysis of poor or even well-performing systems differ depending on the model adopted.

Specifying Causal Relationships

Few would argue with the observation that past experience conditions our reactions to the future. We are likely to use or adapt past successful

intervention strategies to address new experiences. Eventually, as Greiner (1998) argues, the very practices that were successful in the smaller and younger organization become a problem as the organization grows and matures. If we could successfully judge when the old practices and structures are a problem, we could replace them with practices and structures that appear to be appropriate. However, if we misjudge what needs to be replaced, the fix could in effect become the problem.

The issue of inappropriate adjustments must be incorporated in any holistic performance measurement model. Otherwise, the direction of causality in the performance measurement model along with its usefulness as a tool to enhance performance will be open to question. For instance, in Flamholtz's model, the assumption that the misfit between sales revenue and organizational infrastructure causes growing pains is tenuous. In order to mitigate the growing pains, Flamholtz suggests that organizations put their larger, improved infrastructures in place prior to anticipated growth. However, putting the larger, improved infrastructure in place may result in the growing pain described as growth in sales but not in profits. This growing pain could result from changing the infrastructure too soon, not too late. Perhaps, so much money was invested in improving infrastructure that current profits suffered. There may be circularity in the causal cycle of growing pains and infrastructure.

Defining the Degree of Generalizability

It is an open question whether performance measurement models are unique to each organization or are generalizable across companies. To help ensure appropriate application, performance measurement models should be defined in terms of their generalizability. For example, a balanced scorecard (Kaplan & Norton, 1996, 2001) is virtually unique to each organization since it is tailored to each company's specific strategy. Cross-sectional assessment of performance using balanced scorecards is nearly impossible. The Pyramid, however, has potential to assess performance across companies. Scales used to assess the level of organizational development in early growth stages appear to be rather generic. For example, Flamholtz and Hua (2002a) assess the level of organizational development based solely on six questions, one for each building block. However, once a company moves past the early growth stages, Flamholtz suggests that competitive advantage becomes rooted in the company's unique culture. At that point, cross-sectional assessment of performance becomes less plausible. Idiosyncrasies of

firm-level definitions of organizational culture are likely to emerge making cross-sectional comparisons difficult. For example, Flamholtz (2001) assesses the level of cultural development, just one of the six building blocks, based on more than 25 questions developed specifically to map to that particular organization's strategy. The Pyramid has potential for cross-sectional performance evaluation in early growth stages, but that power wanes as the model shifts its focus to the unique cultures. This does not necessarily diminish the potential usefulness of the model. However, the degree of generalizability does affect how the model should be used.

Delineating Granularity and Frequency

Usefulness of a model is also contingent on knowing when and where to apply the model based on the inherent temporal characteristics of the model and the accompanying data. The Pyramid as presented in Flamholtz (2005) could be considered a broad, episodic performance measurement model. In a growing firm, the framework is designed to detect the need for three significant changes, one each time a company exceeds the limits of a growth stage.² From the information presented (Flamholtz, 2005), the model does not appear to be designed to detect small changes over time affecting performance within a growth stage. Other performance measurement models, such as the balanced scorecard (Kaplan & Norton, 1996, 2001) and the performance pyramid (Lynch & Cross, 1991), have a greater potential to detect small changes that affect performance throughout a company's life. These two models can be characterized as more detailed, continuous use models. In an other work, Flamholtz (2003) suggests that the Pyramid can also be used in a continuous fashion by using the six building blocks as performance measurement model categories instead of the balanced scorecard's four perspectives. However, Flamholtz and his co-authors have not recommended or tested specific qualitative or quantitative measures within each of the six building blocks which would facilitate its use as a continuous model.

MODEL TESTING

Our interpretation of the overall Pyramid of Organizational Development framework is given in Fig. 1.

Any proposed holistic performance measurement model needs to be supported by well-designed and executed research. To be sure, the process of



Fig. 1. Pyramid of Organizational Development Framework.

model testing and validation is lengthy and tedious. Flamholtz refers to six published studies, all published in the *European Management Journal*, to demonstrate what he identifies as at least preliminary results to support the model. Four are based on multiple divisions of the same company (Flamholtz, 2001; Flamholtz & Hua, 2002a, b; Flamholtz & Kannan-Narasimhan, 2005) and two are based on the same set of companies (Flamholtz & Aksehirli, 2000; Flamholtz & Hua, 2003). Although Flamholtz (2005) does not indicate so, the samples drawn seem to be theoretical samples (Glaser & Strauss, 1970) chosen to help build the model, which is an appropriate research strategy during model development. Model testing requires additional sampling strategies.

A major implication from the framework is that there must be fit between the degree of organizational development (i.e., the six building blocks) and stage of company growth (Fig. 1, Box A). If fit is not achieved, then growing pains will result (Fig. 1, Box B), leading to poor financial performance (Fig. 1, Box C). None of the six empirical studies outlined in Flamholtz (2005) investigate the first link in the model. One published study, Flamholtz and Hua (2002b), tested the relation between growing pains and financial performance. Since growing pains and financial performance are measured contemporaneously, it is difficult to determine if the growing pains actually preceded the poor financial performance. Neither human resource researchers nor empirical results are in agreement about whether employee attitudes, which Flamholtz's growing pains appear to reflect, influence business outcomes or whether business outcomes influence employee attitudes (Koys, 2001). Once again, circularity comes into question.

Another, more basic implication from the model is that the six building blocks are drivers of financial performance (see Fig. 2). The majority of the empirical tests (Flamholtz & Aksehirli, 2000; Flamholtz, 2001; Flamholtz & Hua, 2002a, 2003; Flamholtz & Kannan-Narasimhan, 2005) examine this link between the degree of organizational development and financial performance, regardless of fit with growth stage. The results of the Pyramid studies are encouraging, in that the Pyramid appears to capture relevant determinants of financial performance. Flamholtz is making some initial



Fig. 2. Building Blocks as Performance Drivers.

efforts at providing evidence to support the model. However, at this point the results are, as Flamholtz (2005) clearly states, preliminary.

IMPLICATIONS OF EMPIRICAL RESULTS

As argued previously, a well-developed holistic performance measurement model should be useful for both analytic and predictive purposes. The research necessary to support such use of a model will of necessity involve, as discussed by Flamholtz (2005), longitudinal studies. The promising findings of correlations among some pieces of the model are a first step toward establishing causality. Temporal precedence needs to be established (e.g., growing pains occurring before financial performance suffers) before a claim of predictive ability can be made. Given the research cited in Flamholtz (2005), it would seem more appropriate to limit any use of the model to classification rather than prediction. At this stage of model development, empirical testing to date is useful for generalizing to theory, rather than generalizing to a population (Yin, 1994). In the future, other researchers can test this framework with randomly selected companies in order to generalize their results to populations of firms.

CONCLUDING COMMENTS

As the trite old expression goes, "behold the turtle, he only makes progress by sticking his neck out." This is not to imply our colleague is a turtle or turtle like but he has and does stick his neck out. In doing so, he delivers a foundation that can help other researchers develop better models. For instance, today it is very popular to be a researcher studying intangibles. Flamholtz was attempting to deal with intangibles long before it was popular. His work in human resources accounting in the 1970s (e.g., Flamholtz, 1971) was one of the early serious attempts at the analysis of intangibles.

We are able to criticize his model from various perspectives primarily because he has held it up to be critiqued. More important than our comments is that he is developing a model for us to critique.

NOTES

- 1. We have attempted to limit our discussion to the model as presented in Flamholtz (2005). To help make this paper coherent, we did at times find it necessary to refer to other published formulations of the Pyramid. We have used the published articles referenced in Flamholtz (2005) to discuss the development and testing of the Pyramid.
- 2. Flamholtz (2005) and Flamholtz and Hua (2002a) present four stages of growth while Flamholtz and Randle (2005) presents seven stages.

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