

Performance appraisal across organizational life cycles

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Abstract. This paper develops a framework of performance appraisal across organizational life cycles. In building the framework, the theoretical foundations, including competitive status and organizational strategies in organizational life cycles are discussed first. Furthermore, the key processes regarding performance appraisal, including the needed employee behaviors, performance criteria, performance ambiguity, and appraisal methods, are reviewed. In each stage of organizational life cycles, these elements will be gone through so that the appropriate strategy of performance appraisal may be decided.

Keywords: Performance appraisal, organizational life cycles, performance criteria, performance ambiguity, type of appraisal methods



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1. Introduction

In spite of the controversy among researches, performance appraisal (PA) is recognized as an indispensable process for an organization. As all other activities, it has been influenced inevitably by both internal and external factors in an organization [21]. Hence, it is necessary that PA should be conducted on the basis of organizational situations. The contingency theory that emphasizes matching a flexible approach to organizational environment [4] then should be applied. However, even if the concept of applying contingency theory to PA has been proposed [1,12], further research has not been made. This paper, thus, attempts to do so by developing a framework considering the competitive advantage (CA) of an organization. While doing so may take many directions, this paper does the analysis from the perspective of organizational life cycles (OLC). Because the linkage between PA and OLC has not been proposed, study from this perspective provides a glimpse on how PA should be done as an organization's competitive status changes. Along with OLC, the concept of competitive advantage is also discussed to explicate how PA should focus.

The purpose of applying OLC in this paper is to explore a contingency approach of PA, whereby the appropriate strategy may be discovered against the changing environment. By developing different strate-

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gies flexibly, a trade-off-free environment toward CA becomes more possible [33]. As observing an organization's development over OLC, its CA may vary along the changes of its internal and external environments. The logic of applying CA in PA is then straightforward. If CA leads to business success, why not include it in PA? To apply the concept of CA in PA, it must be feasible enough for the employees to implement. The resource-based view, which focuses on possessing and deploying internal resources, thus is emphasized.

This paper is organized as follows: The first two sections describe the underlying foundations, on which our framework is based. The proposed framework of PA then is presented. The discussion and conclusion are presented in the final section.

2. The competitive status and organizational strategies in organizational life cycles

2.1. Organizational life cycles and competitive advantage

The OLC depicts that the process of organizational development goes through a few regular stages [14]. While the numbers vary from three to ten stages across scholarship [9], the typical four-stage model [14] is simply described here for our study. The first stage, inception, occurs when an organization begins its operation from a single product. While just coming into existence, it usually establishes its niche in the marketplace through technology advance and innovation. The second stage, growth, then takes place with rapid expansion. At this time, the organization is able to produce more products. More formalized structure is required to run the operation. Thereafter, the formalization reduces the innovativeness and flexibility in the maturity stage. Strategies for improving flexibility are needed due to the subsequent downfall. Activities in this stage are inertia by just replicating earlier success. Finally, in the decline stage, the organizational climate is characterized by unrealistic optimism, commitment to past strategy, and over-conservation. The increased rivalry makes it difficult to continue its initial success. For the purpose of this paper in understanding an organization's status, as they are competitive, only the first three stages of OLC are discussed in the framework.

CA has been widely regarded as the key to business success. However, not only its definition has not been explicitly addressed, but also the meaning behind var-

ious research areas is quite different [13]. Reviewing from the literature, it may be defined from cause-and-effect-based perspective. Research on the former has focused on the resources and capabilities that an organization must possess to obtain CA. For example, Barney [2] defines it as the value creation that is not imitable by rivals. Definitions of this aspect are future-oriented and assume that the resources and capabilities might lead to future performance. On the other hand, the latter has focused on the realized outcome that an organization has reached. Peteraf [25] defines CA as the "above-normal returns" when an organization meets four conditions: heterogeneity, ex post limits to competition, imperfect factor mobility, and ex ante limits to competition. Hill and Jones [15] also define CA as the higher profitability, such as return on sales, than the average in the industry. Summarizing the discussion above, CA may be defined as an organization's status of excellent performance in the marketplace, while must also be competent of obtaining future performance.

2.2. Competitive advantage and organizational strategies

How does OLC relate to CA? The discussion on the development of CA has often accompanied OLC. Observing CA in OLC helps the organization in understanding where its competitive status is and what strategies it should take. From the effect-based perspective, an organization's competitive status may follow a regular pattern across OLC according to the literature. For example, the organizational development in terms of growth rate is accelerating in the inception stage, faster than average in the growth stage, and equal to or slower than average in the maturity stage [30]. Also, the sales are expected to be low, rapid growth, and lower but stable across the three stages [10,19]. An organization's competitive status in OLC thus may generally follow a pattern of weak-strong-stable.

After the organization is knowledgeable about where it stands in the industry, appropriate strategies may then follow. This cause-based perspective also may be observed from previous research. According to Milliman, et al. [20], an organization would emphasize R&D to develop its products in the inception stage. Thereafter, it experiences rapid growth in the growth stage and will place a greater emphasis on the production and support service. Finally, it turns to maintain its market niches due to much competition faced. The organizational strategies across OLC may be concluded with a pattern of value creation, value accumulation, and value maintenance.

2.3. The needed employee behaviors and human resource strategies

As going through the various stages of OLC, different employee characteristics will be necessary for an organization to implement its strategies [28]. The organization will need their employees to be innovative, risk-taking, and long-term oriented in the inception stage. In the growth stage, employees should be flexible to change, look short-term for survival, and work in close cooperation with others. Finally, quantity, efficiency, and results with low level of risk are needed in the maturity stage.

With the needed employee characteristics, the human resource (HR) strategy may be decided to align with the organizational strategy. The HR strategy, as the competitive status is weak, therefore is to direct employees' exploratory knowledge on which the organization must focus to develop new products and processes [22]. For the organization to be able to accumulate value and adjust the environmental changes in the period of rapid growth, the HR strategy should direct employees' exploitative knowledge which focuses on learning routines to refine existing products and processes [22]. As the organization no more experiences high growth, the HR strategy leans toward harvest to maintain its competitive status through employees.

3. Performance appraisal

3.1. Performance criteria

Performance criteria are the dimensions used to evaluate the performance of employees [16]. One prevalent focus in literature regarding this topic has been the argument among trait, behavior, and outcome. These three dimensions may be viewed as the systematic concept of input-process-output [6]. *Input* represents the required capabilities of the employees to complete their jobs or tasks. *Process* refers to the related working behaviors when employees are performing their jobs or tasks. *Output* then represents the final outcomes employees have achieved. Despite the controversy among the three in literature, we agree with the ones arguing that none of the three should be ignored [17,27]. In particular, the domain of input dimension is clarified here. The employees' input dimension is analogous to competence, including visible and hidden ones [31]. The visible competence relates to

one's knowledge and skills that is easy to develop and assess. By contrast, the hidden competence, such as trait and self-concept, is relatively vague and is more difficult to assess. In practice, organizations do have the inclination to recruit employees based on their personality traits (hidden competence) [3]. On the other hand, having been traditionally regulated in job specification, the visible competence seems to be overlooked in PA. Although employees of having these competences initially come from external market [30], additional competences should be obtained internally after they enter the organization. We therefore argue that the visible competence is better representative of input dimension in PA. The framework in this paper thus suggests that all of the three criteria—visible competence, behavior, and outcome, be considered in PA, but the importance of each varies across different stages of OLC.

3.2. Performance ambiguity

One of the reasons regarding the diverse arguments of each criterion is its characteristic of performance data. The characteristics of different types of performance data may be explicated by performance ambiguity. Performance ambiguity is the difficulty faced as measuring employees' performance [24]. The degree of difficulty depends on whether a task or job can be explicitly defined or an outcome can be easily quantified. When it can, the performance ambiguity is low, and vice versa. Using this norm, all of the three criteria mentioned before can be classified into either low or high degrees of ambiguity. Visible competence criteria, such as certification of skills, and outcome criteria, such as quantity of sales, should belong to the extreme of low ambiguity because of their ease of being quantified. At the other extreme of high ambiguity, employees' behaviors at work may be included due to their difficulty of being measured.

3.3. Classification of appraisal methods

Selecting one appropriate method from many is not easy. The classification of appraisal methods helps make it more straightforward. One type that categorizes appraisal methods into qualitative and quantitative ones may be used to improve the subjectivity of appraisal. Qualitative methods involve identifying the presence or absence of employees' performance characteristics [1]. The Checklist Methods, for example, consists of a list of the employees' required perfor-

mance or behavior and asks the rater to check whether the employees have certain performance or behavior [5]. Quantitative methods, on the other hand, require the rater to identify the degree of the performance characteristics [1]. Rather than dichotomizing performance characteristics, this type classifies them into additional levels, which may lead to better evaluation [7,8]. The typical example of this type is the Behaviorally Anchored Rating Scales, which includes specific behavioral criteria in the numerical scales [21].

Consistent with the observational and evaluative measures, the fundamental distinction between these two types is the difference between the perception and the assessment of what has been observed [7]. Instead of the classification above, this paper uses qualification-oriented and quantification-oriented methods to generally distinguish appraisal methods. By definition, qualification-oriented methods are simply to ask the dichotomous judgment of whether a performance or behavior is exhibited. To the contrary, quantification-oriented methods ask the rater to identify employees' performance or behavior from more scale choices. In comparison with qualification-oriented methods, quantification-oriented methods basically decreasing subjectivity in that the explicit performance criteria and standards provided have removed the need for personal judgment [1].

4. Performance appraisal across organizational life cycles

Being a process in the HR activities, it is suggested that PA should align with organizational strate-

gies [32]. Further, setting organizational strategies requires to understanding its strengths [11]. Before designing the PA system, these two steps thus should be considered beforehand. The proposed CA-based PA system then should include three steps as shown in Fig. 1: Identifying competitive status, setting strategies and aligning performance appraisal. The first step is to analyze the organization's strengths and weaknesses, so that its competitive status against the competitors may be identified. The second step then is followed to set up its corporate strategy and HR strategy. Finally, the appropriate PA strategy can be aligned based on the first two steps. The final step can be broken down into further processes, comprising identifying needed employee behaviors, incorporating these behaviors into performance criteria, distinguishing the characteristics of performance criteria, and selecting the appropriate type of PA method. In each stage of OLC, going through the three steps may help determine the appropriate PA strategy, as shown in Table 1.

4.1. Inception stage

As the name implies, the inception stage represents the period as an organization is just established. Recognizing the competitive status is weak in this stage, the organization should focus on building the foundation of its CA. Milliman, et al. [20] describe that organizations in this stage emphasize R&D and product development. Further, the resource-based view also argues that building CA begins from creating value [2,26]. The organizational strategy at this time thus should focus on value creation. To do so through employees, the HR strategy is responsible to encourage employ-

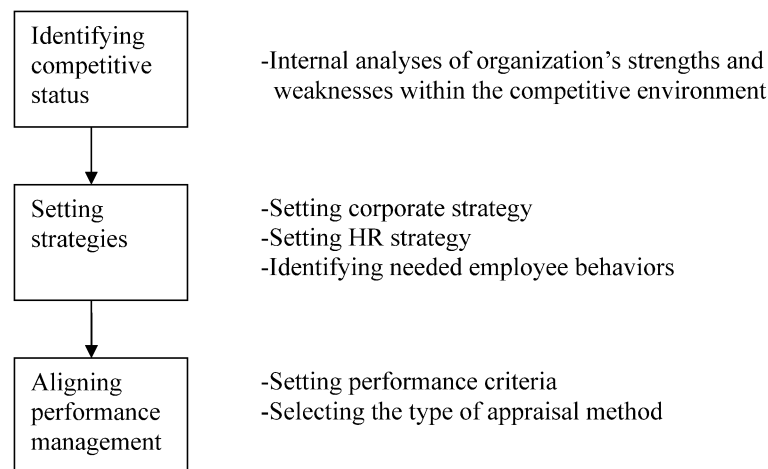


Fig. 1. The process of performance management.

Table 1
Performance appraisal across organizational life cycles

Identifying competitive status	Strengths and weakness	Inception	Growth	Maturity
		weak	strong	stable
• Setting strategies	• Corporate strategy	Value creation	Value accumulation	Value maintenance
	• HR strategy	Exploration	Exploitation	Harvest
	• Employee behaviors	Innovative, risk-taking, long-term oriented	Flexible, cooperation, short-term oriented	Quantity, efficiency, results with low risk
• Aligning performance appraisal	• Performance criteria	Visible competence	Behavior	Outcome
	• Data properties	Low ambiguity	Relatively high ambiguity	Low ambiguity
	• Type of methods emphasized	Qualification-oriented	Quantification-oriented	Qualification-oriented

ees’ exploratory knowledge. Because the employees are expected to be innovative, longer-term oriented, and risk-taking in this period [28], performance criteria ought to incorporate these characteristics. This process would require that employees possess certain visible competence. Employees’ visible competence not only should be included in PA, but also should be measured continually [18]. Finally, the type of appraisal method may be decided according to the characteristics of performance data. Because of low ambiguity of visible competence, it is appropriate to use the qualification-oriented method to measure employees’ visible competences.

To understand how the framework works, consider a product development engineer in a software company. Based on the organizational and HR strategies in this stage, the needed employees’ visible competence can be encouraged by incorporating them into performance criteria. For example, the engineers need to well up in related programming languages to develop excellent products and the number and level of the needed languages must then be appraised. For some professional practices, certification, licensure, and credentials are often used to ensure professional skills. The qualification-oriented methods, such as portfolios/checklist, thus may be used to measure these skills [18].

4.2. Growth stage

When the organization has gradually accumulated advantage, it then goes into the growth stage of OLC.

This stage is characterized by the fastest growth and strongest status of CA. The organizational strategy in this stage is to accumulate this value on which the organization’s competitive advantage is based. The HR strategy in this stage is to encourage employees’ exploitative knowledge. Doing so requires that the organization utilize employees’ competence effectively. Based on the needed employees’ visible competence described earlier, the design of PA in this stage should emphasize and encourage employees’ behavior of utilizing their competence at work. The performance criterion in the growth stage is to measure whether employees’ competence emphasized in the inception stage appears and converts to behavioral performance at work. Due to the high degree of performance ambiguity, the quantification-oriented methods are appropriate to measure working behaviors.

Consider the example in the previous section again. Recognizing that the organization is in the growth stage, it must focus both on how the engineers behave at work and what they have actually produced. Instead of measuring whether they possess required languages, this stage turns to measure how they utilize their skills and whether they are creative at work. The supervisor will need to observe and record the degree of how the engineers utilize the language and whether they present creative behavior as developing new products. In virtue of the high ambiguity that may involve as measuring employees’ working behaviors, the quantification-oriented methods, such as the Behaviorally Anchored Rating Scales (BARS), are suggested.

4.3. *Maturity stage*

After the period of rapid growth, the organization then enters the maturity stage. The status of CA in this stage becomes stable, due to the inactivation of growth. Without high growth, the organizational strategy in this stage needs to maintain its existing value and outputs due to the proposition that the innovative behaviors required in the previous stages are long-term oriented [29]. The recognition of the cause-and-effect relationship between the investment in the previous stages and necessary outcomes must be made. Maintaining the existing value requires that an organization work on the process of preventing imitation from competitors. The HR strategy should focus on harvest, in which the low risk and highly repetitive behavior are encouraged. Compared to the previous stages, the emphasis of output criteria is higher than ever in this stage. The output criterion is to measure the realized outcomes to ensure whether the working behaviors are converted into performance. The needed employee characteristics turn to emphasize quantity, efficiency, and low-risk [28]. Designing PA then should include these characteristics in the criteria for maintenance purpose. Because of the emphasis of quantity rather than quality, performance data to measure in this stage are explicit with low ambiguity. The qualification-oriented methods therefore are appropriate.

Again, we use the same example to illustrate the process of performance management in the maturity stage here. As the organization has to focus on value maintenance and harvest for its organizational and HR strategy respectively, PA should then concentrate on what the engineers actually produce. The supervisor will need to measure the employees' actual outcomes, such as project progress and defects. As a result of the low ambiguity of these outcomes, the qualification-oriented methods, such as Management by Objective (MBO), are suggested.

5. Discussion and conclusion

Applying the contingency concept to PA has been proposed but never accomplished. The main purpose of this paper attempts to do so by using OLC. Due to the fact that no single method is able to measure perfectly employees' performance, appraisal methods have been increasing prolifically. Instead of developing new techniques, research on the improvement of exist-

ing ones is also widespread. In this paper we attempt to do so by matching performance data and appraisal methods in that the appropriate use of appraisal methods may lead to higher effectiveness [23]. Instead of using specific methods, the "type" of appraisal methods is used here for better matching. The rationale lies in the match of the appropriate type of method to performance data. That is, the quantification-oriented method, such as BARS, may be used to reduce the chance of the rater's subjective judgment when the performance data are relatively ambiguous. To the contrary, when the performance data are relatively explicit, qualification-oriented methods, such as MBO, are appropriate to measure needed results.

The criteria to measure employees' performance may be categorized into three dimensions as input, process, and output. The integration of performance criteria into three dimensions gives us a systematic logic on analyzing the sources of performance. Given that the importance of these three criteria should evolve as an organization's competitive status changes, the concept of OLC therefore is applied to explain how PA strategies vary over time. However, the different weight of criteria suggested in each stage only reflects its relative importance, but does not mean that other criteria should be ignored as one is emphasized. The suggestion, therefore, implies that the completion of most jobs may involve each of the three dimensions to some extent.

The two types of appraisal methods, qualification-oriented and quantification-oriented, adopted in this paper basically distinguish their characteristics between relative more and less involvement of personal subjective judgment. It reminds the HR manager to take into account the match of method type with performance data, relative low and high ambiguity. However, the concept only provides a general strategy. Even in the same type, the degree of rater judgment involved varies across different methods [1].

The framework in this paper is mainly to help the HR manager in deciding the appropriate PA strategy toward effective appraisal. Through the analysis starting from recognizing the status of CA in the stages of OLC, the appropriate HR strategy, needed employee behaviors, performance criteria, and type of appraisal methods may be deduced. Toward the improvement of effectiveness, this paper attempts to link PA and OLC. It now opens the door to the possibility of further investigation.

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