

# A Systems Perspective on Performance Engineering in HRD<sup>†</sup>

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## 〈요 약〉

HRD professionals should be able to contribute to performance improvement by focusing on strategic business partner activities such as planning, organizational development, and organizational design. Taking a systems view is important in the development of strategy because simply offering specific interventions neither changes nor improves the fundamental systems of an organization. In order to guide the management of organizations as systems, HRD professionals need to not only deal with resistance to change in solution implementation but also identify quantifiable measures to judge the effectiveness of implemented solutions with partnerships with relevant stakeholders. HRD professionals are particularly required to play a critical role in aligning process goals, process design, and process management to improve performance. Adjusting human performance policies and practices to local cultural differences is also among the urgent tasks for HRD professionals.

Key Words: Strategic business partner activities, Aligning process goals, Process design, Process management

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## **I. A Systems Perspective on Performance Engineering in HRD**

Today's HRD professionals are required to adjust to ever-changing conditions and circumstances. The challenges facing HRD professionals are to improve organizational performance, enhance competitive readiness, and facilitate innovation. In order to overcome these challenges, HRD professionals need to become a strategic instrument which can help an organization improve its effectiveness. HRD's primary purpose is generally believed to enhance individual development. HRD professionals, however, should understand an organizational system and its effects on the individual because the individual is embedded in the system.

A systems perspective suggests that enhancing human performance means working on the system as well as developing individuals. HRD professionals, therefore, should be able to work to improve all aspects of the performance system rather than focusing on implementing

specific interventions especially by improving the capability of performance engineers; they are able to more effectively contribute to improve performance when they strengthen relationships with relevant stakeholders, start with small process, establish realistic benchmarks against which the process must be measured, and adjust performance practices to international contexts. This paper will first explore the reasons why HRD should involve in performance engineering. Secondly, this paper will further investigate how a systems perspective contributes to performance engineering and how HRD professionals are able to lead changes in performance systems. In addition, current problems and expected improvements in performance-oriented HRD will be discussed.

## **II. Why HRD Should Involve in Performance Engineering?**

HRD function has mainly focused

on the administrative aspects of human resource management for most of its history (Lawler & Mohrman, 2003). However, rapid deployment of information technology released HRD professionals from much administration (Lawler & Mohrman, 2003). Besides, today's organizations should be even more interested in improving knowledge workers' productivity than the organizations of a decade ago. It is important to focus on knowledge workers' productivity to survive and succeed in a knowledge-based market (Drucker, 2002). Due to these changes, HRD professionals are required to make more significant contributions in managing human capital than a decade ago.

Although HRD professionals continue to play a critical role in human capital management, they should think about what the most important value-adding role is. According to Gilley and Gilley (2003), HRD professionals engage in one of two roles: transactional role focuses on activities for training whereas transformational role aims to maximize organizational perfor-

mance and effectiveness. Although these two roles seem to be related to human capital management, HRD professionals should ask a question about which role is closer to value-adding contribution. Also the most important question is what today's business environment expects HRD professionals to do.

Those who traditionally emphasize training in HRD function might raise a protest that training is a powerful method to improve human performance. Although this assertion makes sense, it is necessary to recognize limitations of transactional HRD. First of all, transactional practitioners do not provide services linked to the strategic business goals of the organization (Brinkerhoff & Gill, 1994). Many HRD programs focusing on training are viewed as merely internal training houses for employees outside the mainstream of the organization, which leads to the perception that neither training nor HRD professionals is not critical to the success of the organization (Brinkerhoff & Apking, 2001). Thus, HRD professionals often fail to make a solution for

facing problems or to satisfy the urgent business needs through training.

Transactional professionals also tend to participate in relatively short-term engagements that result in little strategic value (Gilley & Gilley, 2003). In this case, HRD professionals are responsible for only spontaneous training outcomes without strategic discussions and engagements. Although it is important to measure how training outcomes can contribute to organizational needs or objectives, HRD professionals are not able to free themselves from the boundary as trainers. Besides, when training programs are not needed or the organization faces a difficult economic period, HRD activities are often outsourced or eliminated (Gilley & Gilley, 2003). In this respect, focusing on short-term training will potentially degrade the value of HRD function.

On the other hand, transformational HRD can play a value-adding role in the development and implementation of corporate strategy (Gilley & Gilley, 2003). Transformational professionals are more

interested in improving organizational effectiveness, competitive advantages, and renewal capacity than transactional ones. Transformational HRD, also, can be an important part of strategy development, because of the importance of human capital in the ability of firm to carry out its strategy (Lawler & Mohrman, 2003). Implementation failures usually involve the failure to recognize and build the needed skills and organizational capabilities, to gain support of workforce, and to support the organizational changes and learning required to behave in new ways (Tenkasi, Mohrman, & Mohrman, 1998). In this respect, success of strategy implementation is often the result of excellent human capital management, which implies the importance of transformational HRD (Lawler & Mohrman, 2003).

In addition, today's business environment requires HRD professionals to function as strategic partners. Organizations tend to search for the keys to sustainable business success in today's chaotic and unpredictable market (Holbeche, 2005). For example, a high

performance organization sustained growth, which is better than the financial results of its peer group (Brush & Ghoshal, 2004). A high performance organization also had a long-term orientation (Light, 2005). Regarding the keys to sustainable success, Holbeche (2005) suggested that sustainable high performance is linked to the way people are managed, developed, and led. In other words, a sustainable high performance organization can proactively deploy their talents to the organization's advantages through transformational HRD.

Lawler and Mohrman (2003) asserted that the more time the HRD function spent on business partner activities, the more effective it was based on their empirical survey. This implies that being a strategic business partner is associated with the effectiveness of the HRD function. By focusing on business partner activities such as planning, organizational development, and organizational design, HRD professionals also can play a value-adding role in the development of strategy and strategic capabilities (Lawler & Mohrman,

2003).

### **III. A Systems Perspective on Performance Engineering in HRD**

#### **1. How a Systems Perspective Contributes to Performance Engineering**

Taking a systems view is important because organizations are systems in which the performance of the whole is affected by every one of the parts and any part affects the whole (Ruona, 1998). The effectiveness of each part, therefore, depends on how it fits into the whole and the effectiveness of the whole depends on the way each part functions. Systems have emerging properties that are created when the system's elements interact in a specific way (Wittkuhn, 2004). According to Wittkuhn (2004), performance is an emerging property of a system which represents the degree to which the system uses its capacity.

If the system works properly, performance could be engineered given suitable input, processes, outputs, feedback, and environment. Performance depends on a number of elements and that those elements are inter-related and influence each other, working together to form a system. The systems thinking states that it is impossible to improve performance without considering the relationship between the whole and each part. For instance, simply offering training neither changes nor improves the fundamental systems of management. Instead, organizations should align systems elements such as organizational environment, work environment, work, and workers for the purpose of improving performance. In this respect, organizations need to take a comprehensive systems view of performance rather than defining themselves by the intervention that they develop or use (Addison, 2003).

Generally, a large number of performance improvement models contain the vital elements of problem definition, root cause analysis, solution implementation,

and solution evaluation (Gilley & Gilley, 2003). By taking a systems view, organizations can fully identify barriers and tradeoffs, take control, and set appropriate measure in that a systems approach considers the larger environment and the inter-related relationship that impacts processes or outputs. In other words, systems thinking can effectively help an organization design systems that enable workers to do their best work to produce results that are valuable to the organization. Organizations, therefore, can apply a systems thinking by determining the need or opportunity; defining the requirements; determining the cause, opportunities, and solutions; designing and developing solutions; and implementing them and evaluating results for continuous development (Addison, 2003).

Based on a holistic view of the organization, it is necessary for organizations to have an integrated framework for achieving competitive advantage by learning how to manage organizations, processes, and individuals effectively (Rummler & Brache, 1995). For example,

Rummler and Brache (1995) attempted to reduce the complexity of organizational systems to a more manageable form by creating taxonomic models of key performance variables. This model hypothesized that organizational failure is due not to lack of desire or effort, but lack of understanding of the variables that affect organizational, process, and individual performance.

To guide the management of organizations as systems, Rummler and Brache (1995) suggested multiple levels of performance and multiple dimensions of performance within levels. According to Rummler and Brache (1995), there are three levels of performance: Organizational level, Process, and Job/performer. Within each of these levels are three performance variables: Goals, Design, and Management (Rummler & Brache, 1995). Out of multiple levels of performance, it is important to focus on process level in performance systems because enhancing organizational and individual effectiveness will only improve performance as much as

the processes allow (Rummler & Brache, 1995). Organizational processes describe the actual work of an organization and are responsible for producing goods and services for customers. The Rummler and Brache model describes the cells of the process level to include process goals, process design, and process management. At the process level, performance engineers must ensure that processes are installed to meet customer needs, that those processes work effectively and efficiently, and that the process goals and measures are driven by the customers' and the organizations' requirements (Rummler & Brache, 1995). In this respect, this model, based on a systems perspective, enables organizations to reconsider the importance of process level in performance engineering.

## **2. How HRD can Function in Performance Systems**

Performance improvement model suggested the essential elements of problem definition, root cause analysis, solution implementation,

and solution evaluation (Gilley & Gilley, 2003). HRD professionals are able to manage performance improvement strategies based on the performance improvement model. The most important principle is that they should systematically approach to identification and removal of barriers to individual and organizational performance. HRD professionals, however, need to design performance systems properly to make sure that performers can leverage all their capabilities, which implies that it is not an intelligent strategy to train people to overcome system deficiencies (Wittkuhn, 2004).

First of all, problem definition is known as the first phase of the performance improvement model. Needs or opportunity analysis is about examining the current situation of society, organization, process, or work group to identify the external and internal pressures affecting it. HRD professionals are required to identify the organization's business needs with relevant stakeholders, which includes defining the organization's strategic goals and purposes

Collaborative efforts sharing opinions to determine the deficiencies or performance gaps that are to be remedies. The output is a statement describing the current state, the projected future state, and the rationale or business case for action or non-action (Wittkuhn, 2004). In addition, job task analysis identifies the important tasks that employees must perform and the knowledge, skills, and abilities to perform them. The output is performance objectives that describe the desired performance, delineate the conditions under which the performance is done, and identify the criteria for successful performance (Wittkuhn, 2004).

In this phase, HRD professionals are responsible for establishing partnerships with stakeholders to correctly determine current problems. It is important for HRD practitioners to take a systems perspective because they are required to prioritize the problems. They should decide what results are strongly desired at present for a whole organization. In other words, HRD practitioners should be



able to synthesize the analyses of relevant stakeholders so as to identify the critical problems hindering performance improvement.

After identifying present problems, HRD professionals take part in root cause analysis. Root cause analysis is about determining why a gap in performance or expectations exists (Gilley & Gilley, 2003). According to Rummler and Brache (1995), the step in the systematic process will determine what should be addressed to improve performance. The output is a statement why performance is not happening or will not happen without some intervention (Rummler & Brache, 1995).

In this phase, HRD professionals should contribute to find crucial reasons why some processes cannot be aligned to business goals. The example of GE Capital showed the importance of root cause analysis based on a systems perspective. D'Antonio (2006) introduced the example to explain GE's process improvement:

After one of GE Capital Solution's banking clients expressed frustration with the cycle time for

credit approval, managers and HRD professionals scrutinized every step in the approval process. The review identified a systems-related issue as the culprit for the delay. By retraining employees to use a single system to process credit application, GE Capital streamlined the entire approval process. As a result, GE Capital slashed the cycle time to process an application from nearly one hour to just four minutes. Clients responded by submitting nearly twice as many credit applications and subsequent surveys revealed significant improvement in the division's customer service ratings. (p. 33)

The next step is to design solutions or to specify the requirements of the solution. In order to effectively implement solutions, the designed solution should be the most efficient and effective process for accomplishing goals. HRD professionals can communicate with stakeholders about the features, attributes, and elements of a solution and the resources required to actualize it. In the implementation of the solution, HRD professionals are responsible

for deploying the solution and managing the change required to sustain it. The changes are believed to produce the anticipated results or benefit, which can be expected to help clients adopt new behaviors or use new or different tools. Generally, HRD focuses on training, career development, individual feedback, incentives, and reward to improve employee performance (Gilley & Gilley, 2003).

The last stage is to evaluate solutions as suggested by performance improvement model. Evaluation is about measuring the efficiency and effectiveness of what was done, how it was done, and the degree to which the solution produced the desired results so that the cost incurred and the benefits gained can be compared (Wittkuhn, 2004). In this stage, it is important for HRD professionals to consider how to improve the quality of the organizational performance improvement process. HRD professionals, therefore, are required to identify measures and to capture data that make an organization judge the effectiveness of its implemented solutions throughout the systematic

process.

Evaluation assesses the performance analysis, cause analysis, intervention selection and design, and intervention and change phases (Wittkuhn, 2004). Measurement of results can serve to both communicate the importance of what is being done and assess the amount of performance improvement. At first, HRD professionals tend to focus on the immediate response of employees and their ability and willingness to do the desired behaviors (Wittkuhn, 2004). The final evaluations, however, should be centered on improvement of business outcomes such as quality, productivity, and market share as well as determining on return on investment for the intervention.

#### **IV. Current Problems and Expected Improvements for Performance-oriented HRD**

A systems Perspective often creates confusion in developing strategies for performance improvement. For example, declaring cause

analysis as a major step in the performance improvement process does not mirror systems thinking (Wittkuhn, 2004). According to Wittkuhn (2004), cause analysis reflects linear cause-and-effect thinking. Since a systems perspective usually shows dense interaction between their elements, there will be circular causality that does not allow cause identification (Wittkuhn, 2004).

In linear thinking, people often conceptualize performance as the dependent variable and the elements influencing performance as independent variables. This makes organizations deal with each variable separately as though it were an independent variable. According to Gharajedaghi (1999), after the perceived set of independent variables changes to a formidable set of interdependent variable, improvement in one variable would come only at the expense of others. Consequently, although organizations are aware of importance of a systems perspective, they do not have alternative framework or tools to understand systems without using causing analysis.

To overcome this obstacle, HRD professionals are required to strengthen partnerships with clients and other specialists. A collaborative effort can add value in that organizations are able to more sophisticatedly understand organizational performance as a system. Especially, strengthened partnership can give insights to an organization about the alignment of individual performance to intermediate and business outcomes because examining problems from all angles can help understand the relationship between the whole and each part. In order to recognize pressures, expectations, constraints, and consequences in performance improvement, HRD professionals should actively involve in collaborative decision-making process with relevant stakeholders.

In addition, while implementing tasks related to performance improvement, HRD professionals often face resistance within an organization (Esque, 2001). For instance, managers do not wish to change existing structures because they reached their positions within the current system. The labor force

also might resist performance improvement because of fears of critical evaluations. In order to overcome these obstacles, it is necessary to implement performance improvement on a smaller scale and report success. HRD professionals, therefore, can start with small process that can be completed in a short time frame. Also they have to set clear timelines, which prevents from spreading resources thinly and focuses on the short term payoff. Through these kinds of means, HRD professionals can encourage organization members to continuously make efforts for performance improvement.

In addition, HRD professionals are responsible for anticipating and preparing the workforce of the future in an environment where mergers and acquisitions are commonplace; at the same time, this function cannot lose sight of the fact that it must maintain the competencies of the existing staff (Weatherly, 2003). Thus, it is necessary to develop continuing education and training programs designed to maintain core competencies and to focus on career

planning (Weatherly, 2003). Partnering with universities, colleges, and other learning institutions to supplement in-house training efforts can encourage organization members to develop core competencies, which leads to increase the likelihood of program success.

Regarding solution evaluation, HRD professionals should continually and frequently determine if the costs of performing a business process outweigh the benefits. Especially they must establish benchmarks, or a set of standards, against which the process must be measured (Esque, 2002). The benchmarks also should be quantifiable, attainable, and realistic. With benchmarks, HRD professionals need to contribute to standardize similar processes. Many organizations often rely on ad hoc approach to business processes (Weatherly, 2003). In other words, they make them up as they go along and change them without deliberate planning. HRD professionals can play a role in establishing a standardized system of preparing processes, which can save time, effort, staff hours, and

money.

Finally, adjusting human performance policies and practices to international situations is among the most challenging tasks facing organizations. As organizations attempt to apply performance improvement systems in their international operations, they would be wise to examine the assumptions of the systems before they do so (Sanchez, 2000). For example, in the North American context, HRD approaches focus on analysis of individual employee needs, reward systems, and job enrichment as means of improving individual weaker performance (Fisher, 1989). In Europe, however, organizations tend to focus on social system, the economic and political context, and the nature of the relationships among government, unions, and management (Sanchez, 2000). Therefore, the adaption of performance improvement delivery methods to local cultural differences will be easiest and most appropriate for firms in today's business environment (Sanchez, 2000).

## V. Summary and Conclusions

Organizations have been looking for the elements that make up high performance in order to satisfy the demands of the external environment and stakeholders. With the growth of information technology and the increasing amount of knowledge work, modern organizations face a daunting task of redefining how human performance is managed. In other words, HRD professionals are required to make new contributions for effective human capital management in today's rapidly changing business environment.

A systems perspective enlightened organizations that interventions that focus on only a subset of organizational performance variables are usually failed unless they are embedded in the context of whole-system performance improvement. Taking a systems perspective can make organizations fully identify barriers and tradeoffs, and set appropriate measures to determine the effectiveness of

solutions, which finally leads to workers' better performance. In order to improve performance, HRD professionals are particularly required to contribute to aligning process goals, process design, and process management. For instance, the Rummler and Brache model suggested that it is important to focus on performance process level in performance system. This position is consistent with the view that systems thinking lies in seeing processes of change rather than snapshots (Senge, 2006).

Based on performance improvement model, this paper investigated how HRD can function in performance systems. HRD professionals need to design appropriate performance systems to ensure that performance can leverage all their capabilities not for the purpose of overcoming system deficiencies. When HRD professionals prioritize organizational problems, partnerships with relevant stakeholders can make them deeply understand the relationship between each part and the whole which leads to effective decisions in the organization's long-term prospects.

Especially in root cause analysis, performance-oriented HRD needs to find critical reasons why some processes cannot be aligned to business goals.

Regarding solution implementation, HRD professionals should help organizations adopt new behaviors or use new or different tools, which includes change management to sustain it. In order to deal with resistance to change, it is necessary to implement performance improvement on smaller scale. At the evaluation stage, HRD professionals must identify measures and capture data to judge the effectiveness of its implemented solutions. The measurement benchmarks should be quantifiable, attainable, and realistic. Finally, today's globalized context requires organizations to adjust performance policies and practices to local cultural differences.

A systems perspective on performance engineering can give insights to cope with current problems of HRD. A systems perspective tells us that every part shares responsibility for problems generated by a system (Senge,

2006). Based on a systems perspective, future research is needed to discuss following topics; how HRD can lead changes in performance systems to improve performance in today's chaotic and unpredictable business environment; how HRD can contribute to sustainable high performance.

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## Abstract

### 성과 촉진자로서의 HRD 시스템적 관점

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HRD 프로페셔널은 계획, 조직 개발, 조직 디자인 등과 같은 전략적인 경영 협력 활동을 통해 생산성의 향상을 도모한다. 특정한 개입 방안만을 제시하는 것은 조직의 기본적인 시스템을 변화시키거나 향상시킬 수 없으므로 시스템적 관점을 지향하는 것은 전략 개발에 중요하다. 조직을 시스템적으로 운영하기 위해 HRD 프로페셔널은 문제해결에 있어서의 조직 내 저항을 잘 다룰 뿐만 아니라 변화관련당사자와의 협업을 통해 제시된 문제해결의 효과를 양적으로 측정할 수 있는 방법을 밝힐 수 있어야 한다. 또한 HRD 프로페셔널은 경영 목표들 간의 일치 혹은 통일성, 프로세스 디자인, 프로세스 운영에서 핵심적인 역할을 할 필요가 있다. 성과에 대한 정책과 실행을 지역의 문화적 특성을 고려하여 기획하는 것 역시 중요한 과제 중의 하나이다.

핵심주제어: 전략적인 경영 협력 활동, 경영 목표들 간의 통일성, 프로세스 디자인, 프로세스 운영

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