

Series: Human Capital Management

Session 3: Introduction to Human Capital Management: Quantitative Gap Analysis

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1. Introduction

This series of articles presents the basic concept of human capital management and systematically proposes the critical points that companies should address for implementation. This series is based on the 3P-5F model outlined in the "Report of the Study Group on Improvement of Sustainable Corporate Value and Human Capital" (also called the ITO Report for Human Capital Management) published by the Ministry of Economy, Trade, and Industry in September 2020. This model is the basis of an ideal human resource strategy for human capital management.

This article explains "Quantitative Gap Analysis."

2. What is "Quantitative Gap Analysis?"

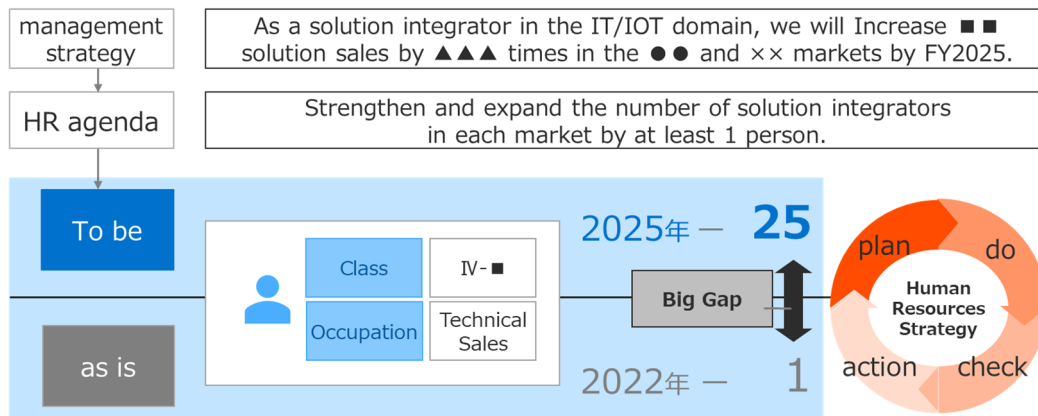
The ITO Report states that the significance of the quantitative analysis of the gap between "As is" and "To be" is to set Key Performance Indicators (KPIs) for each human resource agenda important for the company's management strategy. Moreover, this analysis quantitatively grasps the gap between the current state (As is) and the ideal form (To be), for using the PDCA cycle (Plan, Do, Check, and Action) to review the human resource strategy constantly. It is essential to establish and monitor KPIs to verify the effectiveness of human resource strategies.

To advance our understanding, we present a specific example. Figure 1 shows the sequence of steps from management strategy to quantification of the "As is - To be" gap at an IT vendor. In the new medium-term management plan, the management strategy calls for addressing the challenges of new domains and markets using unique solutions. Based on this management strategy, the human resource agenda defines the human resources and number of personnel needed to address the challenges of new markets and solutions, considering the future organization and division of duties.

In the quantitative gap analysis, KPIs that can be quantitatively grasped are set to measure the current status and set targets in response to this human resource agenda. Thus, the quality of human resources is expressed in terms of job and

role definitions based on the personnel system grades and job classifications. This quantity is defined by the number of employees, thereby creating KPIs.

Figure 1: Quantitative gap analysis image



Source: The Japan Research Institute, Limited.

In the example in Chart 1, the gap is quantitatively analyzed by applying the quality and quantity of personnel to the personnel system. Moreover, setting KPIs focused on specific management issues and quantitatively analyzing this gap is possible. Such KPIs include employee engagement, training hours, turnover and retention rates, and the proportion of female managers.

In any case, the quantitative analysis of this gap is “to express by KPI what human capital should be and what it is now, which is necessary for the management strategy” to define and monitor the human resource strategy.

3. Points of practice for quantitative gap analysis

In the following sections, we will explain the practical bottlenecks often asked and how to deal with them in advancing the quantitative gap analysis.

The first bottleneck is the problem of needing more information to set KPIs when trying to select KPIs that can quantitatively analyze the “As is - To be gap” based on the management strategy.

Although the accumulation of human capital information has progressed in recent years with the rise of human resource (HR) technology, companies commonly retain essential employee and compensation information in their databases. Only the information required for salary, bonuses, social insurance,

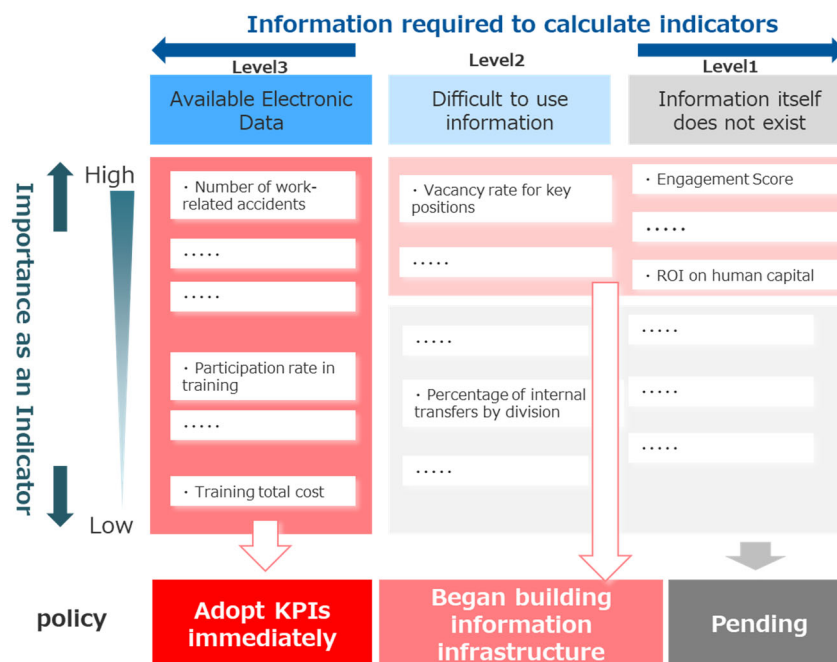
and other measures is maintained in the payroll system. In contrast, additional information could be more cohesive on paper or spreadsheets. In such a situation, it is crucial to consider a case with a set KPI, for example, the percentage of employees in the high-risk group for harassment who receive compliance training. If one attempts to calculate this KPI using information about employees maintained in the human capital information database, one is immediately confronted with the following difficulties:

- Data for identifying high-risk groups for harassment do not exist or require considerable time to locate.
- We do not have training attendance history data based on the identified attributes; hence, we are unaware of the current status (As is).
- Even if various data exist, they exist on paper and need to be entered into the system.

Developing a comprehensive HR information system from the outset to enable a variety of analyses is time-consuming and likely to fail. To address this difficulty, a company should start small when attempting to develop a human capital information database, limiting the scope of the KPIs it focuses on and the human resources it targets. Specifically, it is necessary to assess whether the KPIs that should be set in line with the management strategy are measurable. KPIs important in management strategy but currently difficult to measure should be targeted and prioritized after weighing their importance with that of investing in developing a human capital information database, that is an HR system.

At first glance, KPIs are often considered easy to calculate; however, they require considerable effort in many cases. One reason for this difficulty may be the recognition gap between the management team that sets the KPIs and the HR department that calculates them. Therefore, it is essential to proceed gradually through a steady process of assessing the feasibility of KPIs that should align with the management strategy (Figure 2), make investment decisions on HR systems, and set priorities for KPIs.

Figure 2: Feasibility assessment of KPIs (example framework for discussion)



Source: The Japan Research Institute, Limited.

The second bottleneck is that the KPIs are set, which may be skeletonized. A quantitative gap analysis is conducted in human capital management based on KPIs aligned with the human resource agenda. A PDCA cycle is required to formulate a wide range of human resource strategies, including human resource development, procurement, allocation, maintenance, and the operation of various systems in a hypothesis-testing manner. The process begins by identifying the critical factor indicators considered essential for the company and formulating effective measures to improve them. If a company sets the KPI to reduce the turnover rate of women in their 30s from 15% to 10%, the first step in planning a human resource strategy would be to clarify the factor indicators related to the turnover rate of women. Their academic background would be considered while identifying the factor indicators necessary in the company using actual surveys and developing effective measures to improve these factors.

After implementing the HR measures formulated in this way, the KPI of the turnover rate for women in their 30s and the factor indicators of the analysis of turnover factors will be checked for improvement based on the questionnaires. Improvement measures will be discussed by verifying the progress status of the

KPI of the turnover rate and the factor indicators, as well as the effectiveness of the steps. In other words, the PDCA cycle includes a series of “hypothetical measures.” Moreover, the PDCA cycle requires “hypothesis testing” and a “scientific attitude.” Intuitive planning of measures does not improve KPIs in many cases, and the measurements will not be reproducible if it does.

However, implementing the PDCA cycle required for human capital management requires a considerable time to formulate and verify a hypothesis; it is necessary to collect information from various sources, not limited to human and human resource management information systems. Thus, the HR department is constantly under a burden that has never been experienced before. If this problem needs to be solved and the project is initially undertaken without difficulty, it will be challenging to implement the project sustainably because of insufficient personnel. The KPIs fell into a limbo state. KPIs initially set based on idealism will become KPIs that can only be taken; after they are taken, the responses will be limited to what can be done, which will not lead to essential solutions.

As mentioned in this study, a change to strategic HR is fraught with difficulties. The best way to address this issue is through HR transformation, which refers to transforming the HR function from operational professionals to strategic HR. Implementing the HR mentioned above systems provides an opportunity to advance this. Since 2019, HR and talent management systems have evolved rapidly, incorporating advanced technologies like big data, cloud computing, IoT, and AI. This has become a key point of significant support for the shift to strategic HR from two perspectives: thorough streamlining of existing operations and retention of necessary human capital information. Another significant change that should be noticed is the expansion of the range of options for HR management systems from those that can be used simply to those that require additional in-house development.

Thus, the following three points are essential for appropriately promoting the quantitative gap analysis.

- Limit the scope to important KPIs and proceed with a small start.
- Use HR systems to collect, input, and process (and analyze, if possible) human capital information.
- Consider investment strategies for HR systems, including operational efficiency improvement.

At the very least, when implementing strategic HR, it is unrealistic and unsustainable to devote much effort to collecting, inputting, and processing (and preferably analyzing) human capital information.