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White Paper

Designing and Measuring Human Capital Key Performance Indicators: The Balanced Scorecard Approach

Most organizations today are struggling to cope with effectively measuring their workforce and calculating the human capital Return on Investments (ROI). The need of the hour is to align the human capital goals to the organization's strategic objectives and then identify, track and measure the key human capital performance drivers till the operational level, following a top-down approach. The approach should be to link the top line with the bottom line and then calculate the overall human capital return on investment. This paper explains the ten important and easy-to-measure human capital key performance indicators (KPIs) that should be measured and tracked by organizations on a regular basis, describes why these should be measured and lists out the information and insights business leaders can use to make future decisions. The KPIs presented here are represented as per the balanced scorecard and are classified as either predictive (leading) or reactive (lagging).

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Introduction

While the field of human capital analytics has been gaining ground over the past 20 years, it still remains largely disconnected from the overall business strategy.

Since human capital plays a fundamental role in the creation of value, the use of relevant KPIs for measuring the organizational workforce effectively can contribute greatly to achieving the company's strategic goals. Managers can use these measures to pay attention to key performance differentiators, which can be used as a competitive advantage and can also improve the evaluation of strategy execution. Instead of using lagging indicators that measure performance after the fact, practitioners have developed approaches that aim at using leading indicators, in conjunction with lagging indicators, to measure drivers of human capital performance. An indicator that predicts future events and tends to change ahead of that event is a leading indicator whereas an indicator that follows an event is a lagging one. [4] A good example can be found in popular culture. In the biographical sports film 'Moneyball', Billy Beane, the general manager of the Oakland Athletics' baseball team, recruits Yale graduate Peter Brand to help him select players using a statistical theory known as sabermetrics. By relying on quantitative metrics shown to have predictive reliability in determining the number of wins, Beane, with the help of others, changed human capital analytics and talent-recruiting strategy for the sport. A strategic model like the Balanced Scorecard with its leading and lagging indicators across different quadrants like learning & growth, internal business process, customer and financial, is a key example of how human capital measures can contribute to achieving strategic objectives.

In this paper, we explore ten human capital KPIs that can be used across industries and companies to align human capital measures to the organizational strategy. These KPIs would also enhance the human capital strategy through greater accountability and communication.

Balanced Scorecard Approach: Measuring Human Capital

The balanced scorecard (BSC) is a strategy performance management tool that gives managers a fast but comprehensive view of business. [6] Organizations can use a system that identifies a number of financial and non-financial measures, and attach targets to them, which are reviewed to determine whether current performance 'meets expectations', which is the main characteristic of the BSC. [7] The BSC identifies the links between leading inputs (human and physical), processes, and lagging outcomes, and focuses on the importance of managing these components to achieve the organization's strategic priorities. [8] Measuring and reporting the KPIs listed below on the lines of the BSC will help business leaders get real-time insights on the performance of their workforce. This will enable them to make fact-based decisions to improve workforce performance and overall organizational effectiveness.

Table 1 lists the KPIs that are critical for any organization to track and measure. These need to be balanced across leading/lagging, qualitative/quantitative, and financial/non-financial dimensions of customer, business process, and learning and growth. [2]

BSC Area	KPI	Leading/Lagging	Strategic/Tactical/ Operational
Financial	Human Capital ROI	Lagging	Strategic
Internal/Business Process	Employee satisfaction index	Lagging	Strategic
Customer	Compliance score	Lagging	Tactical
Internal/Business Process	Span of control	Leading	Operational
Internal	Attrition rate	Leading	Operational
Financial	Pay for performance	Leading	Operational
Learning & Growth	Resource competency index/gap	Leading	Operational
Learning & Growth	Employee capability score	Leading	Tactical
Internal/Business process	Employee engagement score	Leading	Tactical
Internal	Absenteeism rate	Leading	Operational

Table 1: HCM KPIs as per BSC area

The Ten KPIs for Organization, Workforce and People Performance Measurement Human Capital ROI

Simply put, Human Capital ROI calculates the returns in dollar terms for every dollar invested in human capital for an organization and helps them to objectively calculate the net profitability. This metric is an indicator of value derived out of investing in human assets or the organization's workforce. This is a lagging KPI as it is the final outcome or output for gauging organizational workforce performance. Each employee requires pay, benefits, training and human resource administration, which is the human capital expense. However, unlike physical assets, the value of human capital increases over time, with greater expertise due to more experience. People-driven processes will improve in quality and become more efficient if training and management efforts are successful. In the end, employees will add greater value to the organization while the predetermined investment in salary, benefits, administration and training will remain relatively constant. Human capital ROI maps to the financial area of the BSC and is measured and reported as a strategic KPI. This KPI needs to be tracked and measured for dimensions like HR cost heads, geographical areas and revenue centers as shown in Figure 1.



Figure 1: Graph of Human Capital ROI by Geography

The ROI can be measured and tracked across dimensions and organizational targets, and displayed in a 'Red-Amber-Green' format at periodic refresh cycle. For example, if the metric value dips beyond a fixed tolerance value for the month of May '13 as compared to April '13 then the trend would be reported in red. Trending the ROI figures over a period of time would help organizations identify improvement areas and adopt the necessary course of action to ensure that stipulated targets are achieved.

Employee Satisfaction Index

This KPI is an index to measure satisfaction of employees and helps to objectively identify the top satisfiers and dissatisfiers of an organization's workforce. This is a lagging KPI as this is the final indicator to identify overall employee satisfaction based upon different employee satisfier attributes. The attributes can be related to organizational development, compensation, career development, work, supervisor, working conditions, and competency. This KPI maps to the 'internal' area of the BSC; it is non-financial in nature and is measured and reported as a strategic KPI.

The measurement of employee satisfaction is based on the various scales and levels of importance that employees value. The rated responses for these attributes are cumulatively added to give the final satisfaction index score. Figure 2 represents a sample trend chart (by year), based on the overall index score for all employees who respond to the survey.



Figure 2: Employee Satisfaction Index Trend Chart by Year

The overall score received can further be drilled down at an attribute level to:



Figure 3: Employee Satisfaction Index by Attribute

The total of the attribute scores listed in Figure 3 will add up to the Employee Satisfaction Index. With this data, practitioners will be able to identify the key areas on which to focus and drive necessary improvement actions.

Trending the scores every year as in Figure 2 will help the organization and leadership to identify improvement areas and take corrective and preventive action to address employee dissatisfiers.

Compliance Score

Compliance Score is a metric to check compliance of the HR organization with internal policies, and local and national regulations in areas like health and safety and training. This is a lagging KPI as it is the score derived from individual statutory and compliance rules which cumulatively determine the final score. It maps to the 'internal' area of BSC, is non-financial in nature, and is measured and reported as a tactical KPI. The compliance score is determined based on HR components like the Employee Information report and its different country-specific subtypes like Hire, Job group, Promotion, Termination etc. This metric should be reported quarterly or semi-annually or annually.

Actively measuring the compliance scores over a predetermined time interval will help organizations to identify potential areas of non-compliance and take course corrections to ensure statutory and regulatory requirements are met.

Span of Control

This refers to the number of subordinates that a manager or supervisor can directly control. This is a leading KPI, as tracking, monitoring and taking corrective steps for out of target levels on a regular basis will help keep the overall workforce costs within check. It maps to the 'internal' area of the BSC and is measured and reported as an operational metric. This KPI varies across industries and types of work. For complex work, the industry average is six and for repetitive type of work it is around 20. [4] It should be reported across different business units, geographic locations and time dimensions based upon the manager, supervisor and overall headcounts.

In Figure 4, the average span of control is three and a green status shows that this is within the target set by the organization which means that the actual headcount figures are as per the planned headcount numbers. A red status warns leaders to take action to ensure that the span of control is not higher than the target as this will make the organization top-heavy, leading to higher employee costs than required.



Figure 4: Span of Control

The use of these KPIs is necessary to ensure that the right balance is maintained in terms of work co-ordination. A healthy span of control has a positive effect on staff morale, stress levels, and organizational productivity.

Attrition Rate

Attrition Rate is the degree of losses of personnel due to various causes within a specified period of time. This is a leading KPI as measuring and tracking this in fixed periods will keep the overall human capital costs under check. The cost aspects contributing to this include hiring expenses, training labor, lost sales and productivity. Unwanted attrition spawns a loss of time and money invested in training and mentoring. This KPI maps to the 'internal' area of the BSC and is measured and reported as an operational metric. This metric should be reported for dimensions like business unit, geographic locations, employee grades, and employee performance levels year on year.



Figure 5: Attrition Rate Trend Graph

Figure 5 shows the trend graph indicating the attrition percentages for four years for a company. In 2010-11, the attrition rate climbed to 14.4%, for which corrective steps were taken within the company after identifying the top root causes, thus leading to a dip in the rate to 12.2% in the following year. Using historical data, future rates can be forecasted well in advance. Attrition data can be segregated into two as controllable and uncontrollable, and the reasoning can also be listed down. This data can help you go back to reassess the effectiveness of the engagement and retention processes.

For example, what is the data indicating about the hiring and induction methods, development opportunities, compensation, interpersonal relations or supervisory leadership? Attrition is an outcome that can be the result of interactions between these and other variables. Therefore, measuring and trending this on a regular basis across these dimensions will help in retaining top talent within an organization.

Pay for Performance

Paying for performance is a financial reward system for employees where some or all of their monetary compensation is linked to performance assessment against stated targets. Performance-related pay can be used in a business context for how an individual, a team or the entire company performs during a given time frame. This is a leading KPI as measuring and tracking this regularly will help to keep the human capital costs within acceptable levels.

Performance review data allows managers to set pay according to employee performance. The value of an integrated system with analytics and comparisons gives insights on how the pay is spread, how it compares to that of others in the organization, and what a global view in the company looks like. Having a global stack ranking of performers can help in determining appropriate compensation levels with the added benefit of highlighting the high performers. [1] This KPI maps to the financial area of the BSC, and is measured and reported as an operational metric. Performance linked compensation should be measured across grades and business units at predetermined time periods for individuals as indicated in Figure 6.



Figure 6: Performance-linked Compensation Dashboard

Having a performance-linked compensation structure in an organization (Figure 6) is an effective way to link bottom-line with the top-line. This means that a substantial variable component of an employee's total compensation is tagged to employee performance, which keeps the overall human capital cost factor within permissible levels by rewarding the high performers and reducing this component for non-performers. Having such a structure ensures that the workforce constantly tries to meet both personal as well as organizational goals. Once these are achieved, the organization is positively impacted. The value of performance-linked variables also increases with optimum performance. On the other hand, if the employee falters in meeting the goals, the organization is negatively impacted but the effect is not felt strongly as the particular employee's compensation is linked to the performance, and a low rating will ensure that the payout is relatively less in comparison to a top performer. This keeps organizational compensation costs in check and tagged to merit alone.

Resource Competency Index/Gap

This is the difference between the current competency level (CCL) and the required competency level (RCL) of employees. It is a leading KPI as measuring it regularly will calculate the overall employee competency score and help training managers to plan designer trainings to plug any existing gaps. This KPI maps to the financial area of the BSC and is measured and reported as an operational metric. By mapping roles to the competency gap exercise should be done at regular intervals for all employees at a functional level across business units and geographical locations, to track and align the workforce as per the competency requirements. For example, Figure 7 shows the dashboard representing the competency gap measurement and tracking in an objective way.



Figure 7: Competency Gap Report

The competency gap report (Figure 7) will highlight the actual existing gaps to a manager. As per the role of each team member, a 'Red-Amber-Green' criterion will display any deviations that can then be used to take necessary steps to fill the gaps identified and achieve success.

Many organizations underestimate the importance of a properly trained, flexible work force. They have a tendency to lose good people to competitors because they don't have a good handle on the value of their employees. To

avoid this situation, every organization should develop a system that tracks and records the technical and professional skills of their people. By measuring and tracking this KPI, organizations will be able to plug the workforce competency gaps.

Employee Engagement Score

Employee Engagement is a measurable degree of an employee's positive or negative emotional attachment to their job, colleagues and organization that profoundly influences their willingness to learn and perform at work. The engagement is heavily influenced by employee experiences with employers, leadership interactions, policies and procedures, company image, aspects surrounding the job, work, rewards, social camaraderie and work environment.[3] Employee attitudes towards these drivers heavily influence their behavioral predisposition to economically contribute, add value, or not contribute. [10] In other words, employee engagement can be measured by surveying employee attitudes about these drivers using a series of validated questions. Scored responses to these questions assess the emotional attachment level, judge the intensity of effort, and predict future behavior. For example, a high grievance rate will negatively impact the overall employee engagement score. Figure 8 shows the list of attributes and parameters.



Figure 8: Employee Engagement Score Report by Attributes

This is a leading KPI since it is one of the important attributes contributing to the overall employee morale and Employee Satisfaction Index. It maps to the 'internal' area of the BSC and is measured and reported as a tactical metric. Tracking employee engagement scores has become an area of focus within organizations for the purpose of retention as a means of avoiding expensive employee replacement costs resulting from staff who voluntarily quit their jobs. According to the Society of Human Resource Management (SHRM), the cost of replacing one \$8-per-hour employee can exceed \$3,500; this gives companies a strong financial incentive to maintain their existing staff members through strong employee engagement practices. [5]

Absenteeism Rate

The total number of unplanned days of absence for employees for a particular time period is the Absenteeism Rate. This is a leading KPI as 'unplanned absence' is an indicator of poor employee engagement, one of the main contributors to the overall Employee Satisfaction Index. It negatively impacts productivity and employee cost. Results from a recent survey done by Kronos, titled 'Workforce Productivity- India 2012, show that 80% of respondents claim that the efficiency of a replacement worker is as low as 75% in comparison to the original worker, and 45% of respondents revealed that employee absenteeism affects employee productivity negatively. [9] This KPI maps to the 'internal' area of BSC and is measured and reported as an operational metric. Measurements can be designed for dimensions like grade, position, location, and business unit at predetermined time intervals. Figure 9 represents the absenteeism rates as a dashboard.



Figure 9: Absenteeism Rate Report by Organization Name



Figure 10: Absenteeism Rate Monthly Trend by Organization

Few organizations track the cost of absenteeism in their BSC. Despite having systems that track work activity, mature leave policies, databases with the requisite cost values and totalizers, and applying a scientific methodology to manage the impact of attendance, it is still difficult to measure it on a regular basis. By trending days lost due to absenteeism (Figure 10), one can take corrective and preventive steps. Over time, the findings are built into better planning and faster reactions to ensure that a business meets the demands of the customer better and at a lower cost. Therefore, by measuring, tracking and taking actions for their root causes, organizations can reduce absenteeism rates and improve the overall employee productivity.

Employee Capability Score

Engagement Capability is the organization's ability and readiness to deliver in the specific areas that contribute to engagement. The capability score is a cumulative weighted average of 'engagement drivers' like idea conversion rates, posts filled internally, and so on. Engagement Capability can be used as a leading indicator for organizations to decide on the areas to invest time, effort and money in, to deliver the greatest employee engagement score. It maps to the 'internal' area of BSC and is measured and reported as a tactical metric.

The capability attributes can include employees with the highest Resource Competency Index, idea conversion rate, posts filled internally, and so on, which are given a weightage in terms of importance. The current performance for each is measured with respect to a pre-defined target for each of these attributes. A cumulative summation of the weighted averages of these attributes would then give the current Employee Capability Score. Figure 11 shows a brief snapshot of the employee capability attributes.



Figure 11: Employee Capability Score by Attribute

This KPI should be regularly tracked in a specific time frame and further analysis completed using a trend graph (as shown in Figure 13) to identify potential problem areas amongst the capability attributes. On identification of resultant gaps, corrective actions should be taken to ensure better scores in future. These steps are important as this KPI is also a leading indicator for the overall employee satisfaction score.

Attribute-level Drill Down Examples

Once the KPIs have been designed, the next step is to report these over the most important and relevant dimensions corresponding to each, taking the BSC approach into account. It is very important for the design of the KPIs listed above to be linked to the granular level by various dimensions and to be mapped to any of the four BSC quadrants.



For example, refer to the employee capability chart in Figure 12.

Figure 12: Employee Capability Score:

Figure 12 displays the overall employee capability score versus the pre-determined fixed target of the capability measures for employees as a whole. This capability score is a cumulative sum of the weighted average of the top capability measures of employees for an organization and focuses on the 'learning and growth' quadrant of the BSC. This KPI can be drilled down further to level 1 to showcase the different contributors to the employee capability score (as shown in Figure 14).

Figure 14 lists the contributors that add up to give the overall employee capability score like employees with highest Resource Capability Index (RCI), employees who received recognition, and so on. Each attribute is given a relative importance rating depending upon their importance level. For example, for the 'employees with highest RCI' attribute, the weightage is four, actual performance % is 60 in comparison to the organizational target of 95%. Choosing this attribute, you can further drill down at a granular level and trend the Resource Competency Index KPI from this list as per time dimension, and produce a graph as shown in Figure 13.



Figure 13: Competency Score Attribute: Resource Competency Index

Figure 13 displays the RCI actual figures as per the target set for each month. This will help the Learning and Development (L&D) team to identify the critical competencies with the proficiency level required against each. It will also enable them to map the organizational training plan and organize future training sessions to plug the gaps identified from Figure 13. This can also be further displayed at a granular level by other dimensions like cost head, business units, organization levels, and so on.

Consider an example of Employee Satisfaction Index, which is a weighted average performance measure across various components as highlighted in Figure 2.

A further drill down for dimensional analysis of the chart in Figure 13, say for different attributes, will give a visual as represented in Figure 3.

On choosing one attribute from Figure 3, say capability score, the weighted component scores of this attribute will be shown individually as in Figure 14.



Figure 14: Employee Satisfaction Index Attribute: Employee Capability Score

This drill down focuses on the main attributes that form a part of the employee capability score calculations. The same exercise can be repeated and drilled up to the business unit, function and location level.

Conclusion

Organizations face a number of challenges in successfully deploying and maintaining Human Capital Management (HCM) analytics capabilities, such as lack of HR measurement-driven leadership or culture, low HR process maturity, limited knowledge of relevant good practices, disparate or incompatible data sources and poor data quality. Such challenges, which are barriers for achieving organizational success, can be removed if business leaders take effective decision-based insights derived from the key human capital performance measures aligned to their company's vision and mission, some of which have been discussed here.

The ten HCM KPIs discussed in this paper are a mixed bag of leading and lagging indicators that can be aligned to any organization's business strategy, implemented to manage HR performance, and can lead to a business-aligned successful HR outcome.

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