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## Human resource management — Skills and capabilities metrics cluster

*Management des ressources humaines — Indicateurs de mesure pour  
les compétences et aptitudes*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 260, *Human resource management*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

ISO 30414 highlights guidelines on the following core human capital reporting (HCR) clusters or areas:

- compliance and ethics;
- costs;
- diversity;
- leadership;
- organizational culture;
- organizational health, safety and well-being;
- productivity;
- recruitment, mobility and turnover;
- skills and capabilities;
- succession planning;
- workforce availability.

This document deals specifically with the cluster of metrics in the skills and capabilities area of ISO 30414. Future documents will address other learning and development metrics, including measures for informal or unstructured learning.

Organizations invest significant sums to increase the skills and capabilities of their employees. The expectation is that this investment will help the organization accomplish its mission, achieve its goals and address its critical needs at lower cost or in less time. Research has shown that organizations which invest more in their employees tend to perform better. Furthermore, investing in employee skills and capabilities is often critical to attracting and retaining the most desirable employees. Finally, in many organizations, investing in the skills and capabilities of employees leads to higher employee engagement, which is associated with higher motivation and productivity in addition to higher retention.

For all these reasons, investors, analysts and employees will benefit from greater transparency about the investment in skills and capabilities. Investors and analysts can value an organization more highly if it invests in its employees. Existing employees can find greater opportunities to grow and develop if the organization invests more heavily in their skills and capabilities. And job seekers can be more attracted to an organization that invests in its people.

Given the significant investment organizations make in their human capital, it is important to be able to accurately and consistently measure the cost of this investment. It is also important to understand how many employees participate in formal training, how much training they receive and what type of training is provided. Senior leaders, as well as learning and development professionals, will also be interested in the competency levels of the workforce, both as a guide to the need for training and as a reflection of the impact of the investment in skills and capabilities. In other words, investment in human capital should produce a more competent workforce which in turn will help the organization succeed.

The metrics within the skills and capabilities cluster as documented in ISO 30414 are as follows:

- a) Total development and training cost: this metric is defined as the sum of all spending on training and development within an organization.
- b) Percentage of employees who participate in training compared with total number of employees per year: this metric is defined as the number of employees who participate in at least one formal training experience divided by the total number of employees.

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- c) Average formalized training hours per employee: this metric is defined as total formal training hours for all employees divided by the number of full-time equivalent (FTE) employees.
- d) Percentage of employees who participate in formalized training in different categories: this metric is defined as the number of employees who participate in at least one formal training experience divided by the total number of employees shown by category (e.g. leadership).
- e) Workforce competency rate: this metric is defined as the average competency ratings assigned to employees.

This document describes the following components for each of the above metrics:

- general;
- description;
- purpose;
- formula;
- how to use.

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# Human resource management — Skills and capabilities metrics cluster

## 1 Scope

This document describes and defines the five metrics of skills and capabilities. This document also provides the formula for each metric and describes the common metrics which employ the five metrics.

This document also highlights issues that need to be considered when interpreting the skills and capabilities data, especially when deciding on the appropriate intervention internally and when reporting these to external stakeholders (e.g. regulators, investors).

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 30400, *Human resource management — Vocabulary*

ISO 30414, *Human resource management — Guidelines for internal and external human capital reporting*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 30400 and ISO 30414 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1 learning

<learning and development> broad, multifaceted set of activities focused on improving the performance of individuals and organizations through the knowledge, skills and abilities of people

Note 1 to entry: Learning is the act of obtaining or acquiring new knowledge, skills and abilities and occurs through the impact of education, training and instruction, practice or study on the individual.

Note 2 to entry: Formal learning is when the learner outcomes are defined and structured by the curriculum, learning and instructional design and by the organizing body or individual.

Note 3 to entry: Can include reflective learning, which is a formal or informal process that deliberately draws on experience to thinking about events, relationships and learning activities to identify what has been learned and to generate and consider ideas.

Note 4 to entry: Can include team learning, which is a social and relational process that occurs from collaboration between individuals leading to coordination of knowledge and behaviours as a feature of their work processes.

Note 5 to entry: Workplace learning is the acquisition of work-related knowledge and skills that is the result of training that takes place at work.

Note 6 to entry: Can include learning through the means of communication technology, sometimes referred to as e-learning.

Note 7 to entry: People also learn from others, which can raise awareness of the organization's diversity and inclusion principles and strategic objectives.

Note 8 to entry: Blended learning involves combining different modes of learning to achieve desired learner outcomes.

### 3.2 development

<learning and development> set of learning activities to raise the threshold of performance of a person, group of people or organisation

Note 1 to entry: This development often includes both formal and informal methods or processes.

### 3.3 training

process by which an individual or a group of people obtain knowledge, skills and abilities

## 4 Total development and training cost

### 4.1 General

Development and training are used to increase the skills and capabilities of the workforce to help an organization accomplish its mission, achieve its goals and meet its needs. Many organizations make significant investments in development and training, and the total development and training cost is an important measure of an organization's investment in human capital. While cost is an input metric, it is nonetheless an indicator of the organization's commitment to invest in its workforce, and some research has shown a correlation to better financial performance. ISO 30414 recommends this metric be reported internally and externally by all organizations.

### 4.2 Description

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Total development and training cost is the sum of all spending on training and development within an organization. Total cost includes items such as salaries and benefits for the staff, overhead costs (such as supplies), direct costs of conducting the training (such as room rental, materials and travel cost for staff), costs for external suppliers [developers, facilitators, learning management system (LMS) providers] and tuition assistance.

NOTE 1 This list is just meant to provide examples of costs to be included. This document calls for all reported training costs to be included.

In practice this is measured as the sum of all spending by the internal training departments and the amount spent on tuition assistance for employees to obtain certificates or degrees. If data are available on training expenditures by other departments (not captured by the training departments), this should be added for a more complete picture. It does not include spending on training-related conferences hosted by other organizations or the travel expenditures for non-training department employees to attend training. It also does not include the opportunity cost (value of the time spent in training) of the participants in the training.

NOTE 2 Others have defined total cost to include opportunity cost, so it is important to know which definition is being used when benchmarking or comparing to another organization. The addition of opportunity costs produces a more accurate measure of total cost.

### 4.3 Purpose

The purpose of measuring total development and training cost is first to know how much is being spent to develop skills and capabilities so that a judgment can be made about whether more or less should be spent. This is often expressed as an average expenditure per employee or per learner, or as a percentage of payroll or revenue, and varies by organization, depending on the difficulty of the goals and needs as well as the competency rate of the workforce. Challenging goals can require a higher level of investment



to achieve for any given workforce competency level. Likewise, a less proficient workforce (lower competency rating) can require a higher level of investment for any given level of challenge. A second important purpose is to provide the information to external stakeholders and employees so they can make informed decisions about the organization's commitment to invest in its workforce. A third purpose is to provide information so that researchers can better explore the correlation and causality between higher levels of investment in skills and capabilities and organizational performance.

## 4.4 Formula

### 4.4.1 General

Total development and training cost is simply the sum of all spending on training and development by an organization.

The operational formula is:

Total development and training cost = sum of spending by all training departments within the organization + sum of spending on training by other departments not already captured by the training departments (if available) + sum of spending on tuition assistance for certificate or degree programmes.

In practice, data for the first part of the formula should be readily available for any organization that has one or more training departments. Most of the spending on training and development should be captured in the training departments' expense statements.

Some organizations are too small to have a dedicated training department and, in this case, there can be an expense line item for training which can be used.

Even in organizations with a training department, it is not uncommon for spending on training to occur outside the training departments. Often, units send their employees to training outside the organization and this training is not typically captured by the training department. If data on these outside expenditures is available, it should be added.

Tuition assistance can be managed by the training department, a different HR function or the business units.

Total development and training cost should be calculated using the most aggregated data available. Start with the departmental expense statements for the training departments which should include all the costs associated with providing the training, including staff expenses, overheads (e.g. room rental, materials, travel, consultants, vendors, LMS), and internal charges (e.g. some organizations charge their training departments for space, HR, IT). Starting with aggregate costs is much easier and more accurate than trying to build up the cost of training on a programme-by-programme basis.

### 4.4.2 Case study 1

An organization with one centralized training department and five business units.

This example shows the calculation for an organization with five business units and one centralized training department. The tuition assistance budget rests outside the training department. In this example, training is highly, but not completely, centralized in the one training department.

Consequently, the training department accounts for about 80 % of the total development and training cost.

	<b>Spending</b>
	\$
Training department	515 000
Business unit 1	15 000
Business unit 2	10 000

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Business unit 3	35 000
Business unit 4	20 000
Business unit 5	25 000
Tuition assistance	30 000
<b>Total</b>	<b>650 000</b>

**4.4.3 Case study 2**

An organization with one small centralized training department, three business units with their own training departments and two business units without training departments.

This example shows the calculation for an organization with a decentralized structure for training. There are still five business units but three of those units have their own training department. There is a small central training department with responsibility for leadership development. Tuition assistance again rests outside the training departments.

	<b>Spending</b>
	\$
Training department	65 000
Business unit 1 with training department	115 000
Business unit 2 with training department	145 000
Business unit 3	25 000
Business unit 4	15 000
Business unit 5 with own training department	230 000
Tuition assistance	30 000
<b>Total</b>	<b>625 000</b>

When aggregate data are not available in a small organization, the cost of training should be calculated on a programme level and then summed, using the following formula for each programme:

Total cost of training and development = (staff time × fully burdened labour and related rate) + other direct programme costs (e.g. room rental, materials, vendors or consultants, travel of staff)

**4.4.4 Case study 3**

An organization with no training department.

This example shows the calculations for a small organization with three programmes. The first two programmes are developed and taught internally while the third programme is purchased and facilitated by an outside vendor. The following have been calculated or estimated:

- a) Programme 1
  - staff time to develop, deliver and manage = 40 hours (see NOTE 1);
  - average labour and related rate for staff = \$35/hour (see NOTE 2);
  - burden rate for staff = \$50/hour (see NOTE 2);
  - fully burdened labour and related rate = \$35/hour + \$50/hour = \$85/hour;
  - direct costs = \$5 000.
- b) Programme 2
  - staff time to develop, deliver and manage = 80 hours;

- average labour and related rate for staff = \$40/hour;
- burden rate for staff = \$50/hour;
- fully burdened labour and related rate = \$40/hour + \$50/hour = \$90/hour;
- direct costs = \$10 000.

c) Programme 3

- staff time to manage vendor = 20 hours;
- average labour and related rate for staff = \$50/hour;
- burden rate for staff = \$50/hour;
- fully burdened labour and related rate = \$50/hour + \$50/hour = \$100/hour;
- direct cost = Vendor cost = \$25 000.

NOTE 1 “Develop, deliver and manage” includes all the effort associated with identifying and confirming the need for training, designing and developing it or selecting and managing a vendor to do the same, delivering the training or managing a vendor to deliver, reinforcing the learning, measuring results and closing the programme out.

NOTE 2 The labour and related rate includes hourly salary plus any benefits tied directly to hourly salary, such as employer-paid taxes. The burden represents the overhead cost and can be calculated as departmental expense less the labour and related and direct (programme-attributable) costs. The burden rate is the burden cost divided by the number of hours actually worked in a year, which takes into account the fact that employees don't work 40 hours per week  $\times$  52 weeks per year due to vacations, holidays, sick days and time spent in staff meetings and training. (The accounting department can help determine the burden rate. As the example shows, the burden rate can easily be as much or more than the labour and related rate.)

The programme costs can now be calculated as follows:

Programme 1 cost = (40 hours  $\times$  \$85/hour) + \$5 000 = \$3 400 + \$5 000 = \$8 400.

Programme 2 cost = (80 hours  $\times$  \$90/hour) + \$10 000 = \$7 200 + \$10 000 = \$17 200.

Programme 3 cost = (20 hours  $\times$  \$100/hour) + \$25 000 = \$2 000 + \$25 000 = \$27 000.

Finally, the total cost of training and development for the organization can be calculated as follows:

Total cost of training and development = \$8 400 + \$17 200 + \$27 000 = \$52,600.

## 4.5 Use

### 4.5.1 General

The use of this metric and its derivative metrics is explored for three different user groups: internal users, external users and academic users.

### 4.5.2 Internal users

Total development and training cost is a key metric of an organization's investment in its workforce. As such, every organization should know the value of this metric and it should be managed strategically to produce the desired results. Key internal users include the CEO, CFO, heads of HR and learning and development, and employees. The right investment in development and training differs for each organization depending on the challenge of its goals and needs and on the existing competency of its workforce.

It is common to track total development and training cost over time as illustrated in [Figures 1](#) and [2](#).