BizMerlinHR

Skill Management

Abstract

Today's competitive and enterprising industry requires that all organizations must optimally use all of its resources and also, there is a growing interest in adopting or creating leaner models in organizations. To deliver more business value, technology must support HR and recruitment team for real-time data of available resources skill sets. This strengthens the process and HR team will spend less time on traditional administrative activities and more time on strategic planning for optimal resource utilization. It is very difficult to combine project management and human resource management in a very effective and efficient manner without the help of proper skill management technique.

Introduction

The last decade has witnessed multiple fold increase in automation, the implications of which are also multifold and one of these implications is that there is a change in the competency sets required for the workforce. HR of such organizations is facing a very unique challenge of managing and upskilling its existing workforce to fill in the talent gap. In a few handful of cases, the reports have shown that the skills required are not easily available, hence the only available option is to train the current workforce.

Another challenge is that most of the organizations don't even have the proper knowledge of the skills possessed within the organization or the skills required within the organization. To become aware of the existing competencies, it is imperative for the organizations to have an up to date inventory of the skillsets that workforce possesses. Organizations well informed of the skills and the knowledge of their employees will be able to fulfill the following items:

- find the right single employee for a specific task or project
- retrieve and assemble flexible project teams
- develop and update employees skills
- explore the employees future career path

The employment of skill management systems can prove to be very efficient for service providers particularly when changing project and the flexible roles of the employees necessitate short reaction times in time-critical projects. The human resource management processes like personal planning, recruiting, selection or development benefit from a successfully implemented skill management system.

Skill Management and Assessment Process

In many organizations skill management systems are driven, developed and managed by the human resource department. Skill Matrix is a well accepted technique to record and view the skills of all the employees of an organization.

While the exact process can vary to some extent, the broad outline shown in the following schematic is a good representation of the process that can be followed by many organizations.
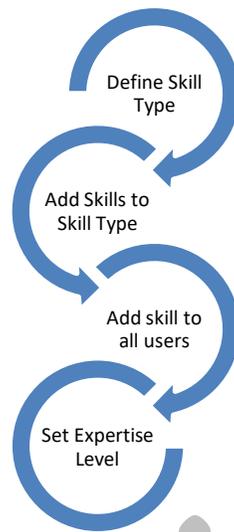

Figure 1: Overall Process for Skill Management in an Organization

Skill Set consists of a set of experiences and qualifications that are divided into hard skills (databases like DB2, SQL-Server, Progress, Oracle; programming languages like COBOL, PL/1, ICS, JAVA, C++, SmalTalk, XML; computer systems like MVS, Microsoft, Linux, etc.) and soft skills (leadership, motivation, teamwork).

The function that is listed above is to find the chunk of employees with a group of skill sets required for a project in a very fast and flexible manner.

Some of the smart human capital management systems have established skills as a compenent of the tranings taken by the workforce and the skills get automatically assigned after successful competion of the training and the assessment. Remember AI has fully penetrated into the HR systems and as such modern HR systems must be predictive in the choice of trainings offered to the workforce. If a manager has already successfully finished the training on "Sexual harassment – Part 1", then the sequel traning of the first training should become available to the manager.

User Skill Attributes

The storage of various skill attribute is important for getting good search results:

- name: Unique name for a skill in the database e.g. JAVA, PHP
- type: Group in which this skill is used e.g. Development, Quality Analysis
- description: Description about the skill
- level: Scale of expertise (Beginner, Intermediate, Advanced)

Administration of Skill Assessments

The association of the skill with the individual begins as early as the candidate is created and resume is parsed for the required skills. Skill assessments can be done during the time of performance reviews, dedicated sessions that are conducted on a periodic (annual or semi-annual) basis or with the trainings assigned.

Skill assessment for effective succession planning

A comprehensive skill assessment also feeds the candidature proposals at the time of succession planning.

Filtering and Searching

The primary functionality of skill matrix is to find the employees with a particular skill type required for a project.

Visualization of Skill Matrix

A common visualization of skill matrix is in the form of a two dimensional matrix (Employees and Skills). Depending on the specific needs, sub filters for skill types, and employees can be provided.

Filter users by selecting Department, Project Group and Projects.					Filter skills by using Skill Type.
Department: All	**Project Group:** All	**Project:** All		**Skill Type:** Development	← Previous | Next →

Skills → Users ↓	Java	PHP	Spring MVC	jQuery	RoR	AngularJS	CSS3	Node.js	AWS	jMock
Aaron Blash	9 (Perfect)	10 (Perfect)		6 (Average)		10 (Perfect)	6 (Average)		6 (Average)	5 (Average)
Alistair James	10 (Perfect)			2 (Poor)	10 (Perfect)		10 (Perfect)			7 (Average)
Anita Williams		7 (Average)		10 (Perfect)				10 (Perfect)		5 (Average)
Bob Cofod									10 (Perfect)	
David Balash	10 (Perfect)		10 (Perfect)	7 (Average)		10 (Perfect)			10 (Perfect)	8 (Perfect)
Kevin Kelly		9 (Perfect)								
Kusti Franti	10 (Perfect)		10 (Perfect)			8 (Perfect)				

Key Takeaways

Organizations that invest in having a robust skill management process stand to gain from improved employee utilization and satisfaction. Many tools and processes exist in today's market to aid you with a comprehensive skill management program for your organization. More information on skill management process can be found at https://www.bizmerlin.com/skill-management/.

References

1. A Practical Knowledge-based Approach to Skill Management and Personal Development by Wolfgang Hiermann, Max Hofferer – Journal of Universal Computer Science, 2003
2. Skill and Competence Management as a Base of an Integrated Personnel Development (IPD) – A (2003) by S Beck, Journal of Universal Computer Science.