

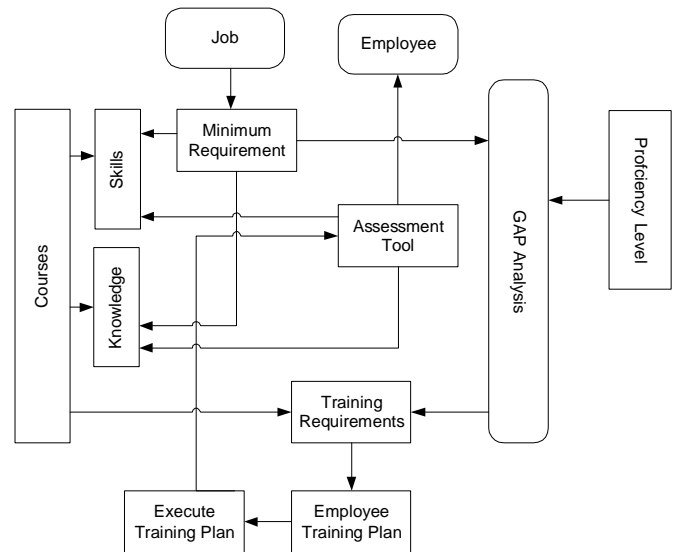
# iTrain<sup>®</sup>

## Abstraction Model, & Framework

### Abstraction

iTrain is a comprehensive training management system that is totally integrated with other Interact products such as iPerformance, iContract, and iCareer. The basis for iTrain abstraction Model is that an employee is trained to develop certain lacking skills or knowledge which are required to conduct specific job, either already assigned to the employee or to be assigned to him/her in the future. Under this abstraction model, the following need to be known and made available before we can plan or provide an effective training to the employee:

1. Job Knowledge and Skills Requirements – For every job that is used by the organization we need to know what knowledge and skills are required to perform such a job. Second we need to know how to assess and ascertain that certain person has the said skills and knowledge associated with the said job. The assessment tool need not only to tell us in a "YES", or "NO" approach whether the person has the skill or knowledge required or not, but such tool needs to be smart enough to tell us the level of skill/knowledge mastery the person has in comparison to some unified basic mastery level. In addition, we need to know the training courses and associated subjects which can be taken by the employee the develop the required skill or knowledge which he/she is lacking.
2. Employee, Knowledge, and Skills – We need to have a mechanism by which we can assess and ascertain what level of knowledge and mastery of skills an employee has. A test or an assessment tool that can tell us whether an employee has sufficient knowledge and has mastered the required skill as required by the job to which he/she is assigned. Such an assessment tool should tell us for a skill-A, employee mastery of skill-A is level-x, and level-x is 20% below the required minimum skill's proficiency for the job to which the employee is assigned.



3. Training Subjects and Courses – As previously stated, for each skill and knowledge, we need to develop a course curriculum that simply states that in order to develop this skill you need to take course-A, course-B, and Course-Z. Furthermore, and if an employee already has some proficiency level in the skill, then we need to be able to measure the level, and conclude that the employee does not need course-A and Course-B, but he/she need to take course-Z.
4. Skills and Knowledge Assessment Tool – We need assessment toolsets, which will enable us to assess and ascertain the level of his/her proficiency in specific skill as well the level of knowledge he/she has in specific knowledge area/subject.

Having the above components, we will be able to answer the following question: Given a certain Job to which an employee will be assigned, what training is to be provided to the employee so that he/she can perform the said job in accordance some predefined quality standard. With the above we will be able to conduct a Gap Analysis by comparing the Job skills and knowledge requirements to the employee's skills and knowledge, and deriving the lacking skills or skill level, and knowledge. And by doing so, we will be able to determine what training courses the employee needs to take to achieve the required proficiency level in the skill and knowledge. Thus developing a training plan for the employee. Simply stated the basis for the abstraction model of iTrain is based on the following three principles:

- Very well defined Job Skills and Knowledge Requirements
- Training Courses Required to build specific skill or knowledge
- Assessment tools to assess the employee's skills and knowledge, leading to the GAP analysis

Figure-1 depicts the abstraction model of the principles that are the basis for the design of iTrain. This abstraction of how the training requirements are determined, planned, and executed is fundamental to the understanding of the functionality of iTrain.

## Framework

Additionally and in order to understand the training model used to build iTrain, we need to understand when the training needs to take place. In the above we have defined the "HOW" abstraction, the when abstraction is defined by the events that triggers the requirement for the training of an employee. So the following are the trigger events which leads to planning some training for an employee:

1. Hiring New Employee – When an employee is hired, and though he/she might meet all the Job requirements including education, experience, skills, etc., in the majority of cases some of the employee may be deficient in some skills or knowledge are and may need some type of trining to build the mastery level in the required skill or area of knowledge.
2. Career Planning – A second case, the employee is planning a career change within the organization, which requires a change of job, which in turn requires new skill's set and/or new knowldge, at which time we need to develop a training plan for the employee.
3. Succession Planning – The third case is when an employee is selected as a potential succession for another employee for a different job, in which the succession employee may need a training plan.
4. Performance Evaluation – As a result of the performance evaluation an employee may be found that he/she lack or deficient in certain skills, in which case a training plan is required to improve the skill's set of the employee.

**Skill Assessment Indicators** – These are the skill assessment indicators which are used to assess the employee level on the skill. For each skill a set of assessment parameters need to be defined. Once defined, then can be modified and at the job level, and be used to define the Job requirements with regard to the skill and associated assessment indicators.

The above event training triggers are known as the training event trigger framework:



Any of the above four events may trigger the need for some type of training requirement, leading to the planning and execution of some type of training. Under iTrain, these trigger events are initiated through the application concerned with the relevant transaction, and the process instance is handled through the workflow.

## Business Process Workflow

**Job Skills and Knowledge Definition** – The first thing that needs to be done under iTrain business workflow is to define the skills and knowledge required for each Job Defined in the Job Catalogue. In addition to defining the skills for the Job, you'll need to define the minimum proficiency level for the skill. The proficiency level is defined by the user and can be set as a number between 1 and 100, or can be set as a discrete value "Good" from range of values.

**Training Subject/Course Definition** – The next thing that needs to be defined are training subjects such as (computer science, radiology, medicine, nursing, electrical engineering, etc.). Then we need to define the training course, each course will define by its unique ID, title, subject, number of training hours per week, assessment type, pre-requisite course, etc.

**Skills-Course Upgrading Matrix** – This is a definition step which consists of defining the training courses required to bring the skill's proficiency level of an employee from from one specific level to another. For example, to bring an employee's skill's level from C to A, he/she will need to take training course-K and Training Course-T. The same needs to be done for knowledge.

**Skill Assessment Tool** – Once we've built the assessment indicators for each skill by job, then these can be grouped to form a complete assessment tool for each skill as it relates to each Job.

**Instructor** – Two types of training are supported under iTrain, either internal training where the organization/employer has its own Training Department as well as trainers or instructors, and the second is external training whereby specialized training institutes are contracted to conduct the training for the organization employees based on specific training plan. Under the first model, we need to define the internal training resources, specifically instructors, including courses that can be taught by the instructor, course and time preference of instructor and others.

**Training Institutes** – If the organization will be outsourcing the training, these institutes need to be defined to the system. Definition include name, address, contact person, facility, courses that can be taught by the institute.

**External Training Contract** – If the training is to be conducted externally, then an external training contract needs to be created with the concerned training institute. The training contract defines the courses of training, the number of employees to be trained, time table, and payment modality.

**Employee Training Plan** – Each employee may have a training plan resulting from (1) his new employment whereby the supervisor after conducting the skills/knowledge assessment decides that the employee needs to take specific training courses, (2) as a result of employee performance evaluation, whereby the employee supervisor or manager may decide that the employee needs to take specific training to improve his/her skills or knowledge, (3) employee career plan, (4) employee succession plan.

**Training Schedule** – Once the above definitions are completed, then a training schedule needs to be created. The training schedules defines course offering during a specific training period. What course will be offered, when, where, and who will be conducting the training. Note that the training schedule is derived from the employee training plans resulting from the employee new hire, performance evaluation, career plans, and succession plans.

**Training Registration** – Once the training schedule is defined, then employees my register for the training either through employee MyPage, or can be registered by their supervisor. The registration for training is triggered through: (1) New Hire event, or (2) as a result of the employee performance evaluation, (3) employee career plan, or (4) succession plan.

**Training Attendance** – Once the employee registers in a training course, then attendance roster can be generated, and the trainer can complete the attendance roster which is submitted to the employee supervisor or the concerned organization unit.

**Training Assessment** – Once the training is completed then the instructor can generate the training assessment roster, which is completed by the instructor, and submitted to the employee supervisor, and the employee will be able to view his/her training assessment through employee myPage.

**Training Plan Update** – After completion of the training and associated assessment, the employee training plan is automatically updated to depict progress again plan.

**Training Cost** – As training courses are delivered, the system maintains the cost of training by course and by employee.

In summary the training business process workflow that is supported by iTrain is based on the Gap Analysis Model, whereby an employee is assigned or to be assigned to a job, the job requires specific skills and knowledge proficiency level. The employee is assessed to determine his/her skills and knowledge proficiency level as they pertain to the job. The employee skills and knowledge level are compared to the job requirements, then the GAP is determined. Once the GAP is determined, then we know what training courses that the employee needs to take in order to meet the job's skills and knowledge requirements. Once the training course required by the employee are defined, then we develop the Training Plan for the employee in view of his time availability. The training courses are then scheduled, and the employee registers in the training, after which a post training assessment of the employee is conducted, and a GAP is derived again, and the training plan is updated. The process of GAP definition, Training Planning, Training Delivery, and Assessment will continue until the employee has built the required skills and knowledge proficiency level.



**We don't provide HR Software, we provide HR Technology Solutions that Work ....** *Our strategy is not to have the customer adapt to the HR application, but to have an HR solution that is adaptable to the customer needs.*

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