Competency-based Learning

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Competencies

Organisation

Meet business objectives

ability to apply knowledge

Knowledge
**Competencies**

- Competency = skills + knowledge + behavior

Different types of training

= state or quality of being adequately or **well qualified**, having the **ability to** perform a specific role

Competencies affect:

- Individual performance
- Process performance
- Business performance
Aligning learning with processes

- Especially for learning at the workplace, there exists often no **seamless coupling** of planning and execution of learning processes with on-going work and business processes.
Traditionally: a multi-layer training mechanism is required
Vision

- The learning employee should be able to learn **directly** when the need for education is identified.

- The **delay** between identification of a learning need and the actual learning should be **minimal**.

- This can result in significantly improving the performance of the employee at the workplace.
Need to support of a complete learning process life cycle

- 1. Analysis of business processes
- 2. Determination of competencies required for an effective and efficient process performance
- 3. Establishment of competency based learning components and matching with individual competency development needs.
- 4. Identification of learning goals, and on-going learning processes.
- 5. Monitoring of learners’ performance according to the competency development and process performance goals defined.
Learning process life cycle: support mechanism

- Analyze Business Process
- Establish Process based Competencies
- Determine Competency Oriented Learning resources
- Ongoing Performance Monitoring
- Ongoing Learning
Life cycle of Business Process-oriented Learning

The "Organisational" View

- Analyse business needs
- Analyse competency gaps
- Model learning scenario
- Design learning process
- Learning Process Execution
- Monitor Performance/Analyse business value

The "Individual" View

- Individual Performance
- Individual Gaps
- Individual Goals
- Personal Learning Style
- Individual Learning Process

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Employee perspective

- Taking the employees perspective, the aligning of business and learning processes will enable employees to improve their skills and performance at the workplace in a verifiable and provable manner.

- By enhancing and broadening their skills they become even more valuable assets on the job market, enabling them to apply for new and even better-paid position, securing their job, etc.
Organizational Perspective

- From an organizational point of view, this approach will significantly contribute to the change management process.

- Furthermore, companies will be able to increase their competitiveness with market-oriented targeted educational activities at the workplace, delivering the respective learning material tailored to the single users needs AND to corporate requirements.
Application examples

- Scenario 1: Maintaining business performance
- Scenario 2: Managing/supporting changes in the business processes of the organisation
- Scenario 3: Managing job vacancies (recruiting, internal employee mobility)
- Scenario 4: Supporting personal development
Scenario 1: maintain business performance

Q2 assessment reports for Branch Nr12 indicate poor performance results regarding Loans products.

Individual employee performance measurement:

- The Q2 results of Loans Counselor Mary Adams (individual KPIs) fell bellow the expected values, and were significantly lower with regards to the results of other Loans Counselors from the same Branch
- Mary Adams’ skills record shows a significant lack of skills in areas that are critical to the Loans Counselor role.
- A training program is required, in order to fill Mary Adams’ skills gap
Mary Adams’ skills record: status with respect to the requirements of her job role – skills gap

Lacking in skills
Skills exceed requirements
Has just-the-right skills level
Search for courses to fill the skills gap

Training course proposed for Mary Adams

missing skill
Training

- By examining the missing skills, a set of training courses can be identified for Mary Adams.
- The proposed training courses can cover Mary Adams’ competency gaps with respect to her job role.
- The HR & Training Department of GrB enrolls Mary Adams in the courses.
- Mary Adams can start training (online and/or in the classroom).
- The HR & Training Department can monitor Mary’s progress and update her skills record accordingly.
Scenario 2: Managing/supporting changes in business processes
Scenario 2: Managing/supporting changes in business processes

- Accommodate changing job role requirements (e.g. change in legislation, IT systems infrastructure etc)

- In order to address the change, the HR & Training Department of GrB needs to:
  - Investigate employee skill gaps resulting from the business process change
  - Examine the availability of relevant training courses in the Courses Catalogue (and if needed enhance the Courses Catalogue accordingly)
  - Organise and execute a training program to fill the skill gaps identified
Scenario 3: Managing/supporting changes in business processes
Internal staffing for Loans Manager

- Mr Smith, Loans Manager with GrB, has announced his retirement at year’s end.
- A current staff member of GrB will be promoted to Loans Manager to replace Mr Smith.

The HR &Training Department needs to:
- Select the most suitable candidates by conducting **employee comparison by job profile** in the Staff Pool.
- Investigate the competency gaps of the selected employees
- Examine the availability of relevant training courses in the Courses Catalogue
- Organise and execute a training program to fill the skill gaps of the selected employees
Employee comparison by Job Profile

<table>
<thead>
<tr>
<th>First name</th>
<th>Last name</th>
<th>Job profile</th>
<th>Suitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary</td>
<td>Adams</td>
<td></td>
<td>52%</td>
</tr>
<tr>
<td>Richard</td>
<td>Arnolds</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Jack</td>
<td>Been</td>
<td>Loans Manager</td>
<td>0%</td>
</tr>
<tr>
<td>Hugh</td>
<td>Davis</td>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>Diana</td>
<td>Dikke</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Jill</td>
<td>Owen</td>
<td>Loans Manager</td>
<td>0%</td>
</tr>
</tbody>
</table>

Most suitable candidate: Mary Adams (52%)
Scenario 4: Supporting personal development
Carrier path planning for Mary Adams

• Marry Adams has been working for GrB for several years, is a very motivated and competent person and would like to become Loans Manager in two years time.
• Together with the Training Coach assigned to her by the HR & Training Department of GrB, Mary Adams can
  – review the exact competencies required for the role of Loans Manager
  – Compare her skills record with the skills of the Loans Manager role and identify her competencies gaps
  – Create a personal training plan
  – Apply to her manager for approval of the training plan
Overview of the approach

Learning Modules

Competency acquired

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Competency based learning components
COCAL Competency-based training in detail

- Business process
  - Is composed of ...
  - Process steps (tasks)
    - requires competencies
  - Organisational role
    - requires competencies
      - Aggregation of the competencies profiles of the tasks assigned to this organisational role

- Organisational role
  - Competencies profile of role
    - equals competencies
      - equals actual Competency gap of employee
      - equals Total Competency gap of Business process
        - define target Competency gap of Business process
          - meets Business criteria

- Employee
  - possesses competencies
    - equals Competencies profile of employee
      - Learning style & preferences
        - Learning profile of employee
          - Learning criteria
            - meets Learning process
              - agrees with individual
Open Educational Resources

OER: "technology-enabled, open provision of educational resources for consultation, use and adaptation by a community of users for non-commercial purposes". (UNESCO, 2002).
THE COCAL PROJECT
COMPETENCY-BASED CONTENT ACQUISITION AND LEARNING

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Education and Culture DG
Lifelong Learning Programme
COCAL Objective

- The major goal of COCAL is to align people and processes in complex & dynamic working situations by addressing the needs of employees and companies at the same time.
COCAL Project Partners

National Centre for Scientific Research (NCSR) Demokritos
- Project Coordinator, Leading: Linking external content repositories (WP4), Dissemination & Exploitation (WP7)

Information Multimedia Communication (IMC) AG
- Leading: Services development and integration (WP3)

Piraeus Bank
- Pilot User, Leading: Methodology for the combined management of competencies and learning resources (WP5)

Tracoin Quality BV
- Leading: Quality Management, Training needs assessment and architecture specification (WP2), Piloting & Evaluation (WP6)
AIMS AND OBJECTIVES of the Project

Banking Institutions
To address the upskilling needs of the banking sector by: providing a holistic approach for the combined management of competencies and learning resources.

Vocational Training
To increase the effectiveness & efficiency of VET services in the sector by:
- increasing the capacity to deliver “just-in-time”, quality services, tailored to the needs of the individual learner.
- allowing for the better use of available learning resources and exploiting open content repositories
COCAL METHODOLOGY

COCAL Architecture

- Business Process Management
  - Business Process modeling
  - Business Performance monitoring
  - Employee performance appraisals
- Competencies Management
  - Matching Engine
  - Competencies & Competency profiles
  - Competency Analyzer
- Learning Process Management
  - Learning Management System
  - Learning Content retrieval
  - Learning Content authoring/repurposing
  - Content repositories
  - Learning Content retrieval/generation
Impact of training in organisations

- Training --- Employee effectiveness, performance, motivation

Need
- Training to support business processes → improve/maintain performance
- Assist organisations to adapt quickly to changing business needs → reduce Time2Competence
- Better business alignment of training → avoid useless, non applicable training
- Support flexible training paths → enable talent management, personal development, changing business conditions
- Support informal training interventions → learner empowerment (self-instigated training)

- Just the right training to the right people at the right time