

# Developing a Competent Workforce for Today and for the Future



#### **ABOUT UETMT**

We bring global expertise and regional understanding to our Middle East clients, providing International Standard solutions that meet the Middle East requirement.

UETMT is a Training and Consulting Solutions group delivering workforce development solutions for the Energy Industry. From Oil & Gas Exploration and Production to Petrochemicals, from renewable energy sources to energy supply, UETMT offers courses, workshops and consultency services that enable companies to develop and maintain the workforce they need to achieve their business strategy.

UETMT comprises a group of experienced and forward-looking consultants and trainers who have been creating and delivering training and other development solutions across the Oil & Gas and other sectors for over 35 years.

The group apply a unique Competency Management Framework Development Cycle that achieves effective knowledge and capability transfer which is at the heart of all our activities.

#### GLOBAL STANDARDS AND ACCREDITATION

UETMT and with International bodies that provide access to global standards and certification. This ensures that our products and processes match global requirements and add a level of assurance to our clients, whilst enabling them to adopt standards that provide real business benefit to them and their employees.

UETMT is an Approved Center of the Scottish Qualification Authority (SQA), a UK Governmental Organization offering Customized Award Programs (SVQ Level) credit rated onto the Scottish Credit and Qualifications Framework (SCQF).



**UETMT** is an approved center of the Engineering Construction Industry Training Board (ECITB), a UK organization



#### **UETMT** is ISO Certified by QSR

ISO 9001: 2008- Quality Management System (QMS), ISO 14001: 2004- Environmental Management System (EMS),

OHSAS 18001: 2007- Occupational Health & Safety Management System (OHSAS)









#### Our Mission:

Partner with our clients to help them develop and sustain their workforce to meet current and future business needs

#### Our Vision:

To ensure a competent, qualified, and highly motivated workforce focused on achieving the critical outcomes, through the development implementation, and sustainability of cost-effective and result-oriented Human Resource and occupational training programs, services, and practices.

#### Our Values:

We believe in demonstrated competence, institutional integrity, personal commitment and deep sense of nationalism.

#### WHAT DO WE OFFER?

We offer comprehensive solutions to the development of workforce capability - making a real difference in capability and performance. All of our development solutions are based on identifying the competencies (the Knowledge, Skills and Attitudes - KSA) that lead to measurable and sustainable development of individuals and teams.

The question: Do you want a Trained Workforce or a Competent Workforce?

We supports the 4 Pillars of Competency concept of:

- 1. Determine and define the competency requirements of the job
- 2. Identify the learning solutions to close competency gaps
- 3. Manage the competencies and learning in an easy to use software
- 4. Implement the sustainable processes to ensure continuous improvement and business value of the competency solution

We also offer a range of consulting and training (learning and development) solutions that can be customized to your objectives and requirements, and that provide the parts of the 4 Pillars concept that meet your business need.

We believe that every client requirement is unique, and as such, treat each enquiry as a completely new project with different goals, requirements and budgets. We take great care in matching the solution to the need and that solutions are:

- Useful: answer a business need
- Usable: make sense and can be implemented effectively
- Sustainable: processes to ensure that the solution remains relevant



- Competency Development: We have a library of competency matrices that are based on international standards and qualification requirements. They have been created to be usable and useful, as too often the competency solutions offered to companies, or developed internally, are either too complex, not relevant or not detailed enough. The libraries are also provided with base-line learning solutions that meet the blended learning (70-20-10) concept that delivers real effective development.
- Competency Software: If you do not have competency software or you want a better one, or to integrate with existing software, UETMT offers Comaea (Competency Made Easy) as the software platform for competency management, development and assurance. Comaea is one of the easiest to use yet powerful and flexible systems, and links to other systems, such as SAP and ORACLE to provide integrated solutions that use the right (software) tools for the right business need.
- Training and Development Solutions: We offer a range of training solutions not just courses but integrated solutions that are competency-based to meet your requirements.

#### **OUR CREDENTIALS**

Our selected Oil & Gas Clients



































## COMPETENCY-BASED HUMAN CAPITAL MANAGEMENT (HCM): INTRODUCTION

The development of the workforce for today and the future is essential to business success, continuity and improvement in all industries, but especially the Oil & Gas industry.

A company may choose to focus on only one or two of the element shown in the matrix below, such as Effective Employee Development and or Organizational Alignment, such as succession planning for key role, or national workforce growth and development.

#### HR CONSISTENCY

- Create a common vocabulary used across all people-related issues.
- Provide the basis for a more objective dialogue about performance, development and career-related issues.
- Continuously reinforce what is important.

#### **IMPROVED SHAREHOLDER VALUE**

- Companies scoring in the top quartile of talent management that leverage competencies outperform their industry's mean return to shareholders by 22%.
- Selecting for the right competencies at an executive level is worth \$3 million in profit per executive.

#### ORGANIZATIONAL ALIGNMENT

 Effectively focus work behaviors on both achieving specific business outcomes and attaining organization vision, values and critical success factors.

#### **ENHANCED HR PROCESSES**

- Selection, career, promotion and succession decisions enhanced by using competency framework.
- 5-10% higher rate of hiring successful candidates.
- 15-20% higher retention of desired employees.

#### EFFECTIVE EMPLOYEE DEVELOPMENT

 Consistently identify the most appropriate learning and development activities and tools so that performance can be enhanced in efficient manner.

#### **EMPLOYEE SATISFACTION**

- 15-25% higher morale as measured in employee surveys.
- 20% higher goal completion by individuals and teams.

The important consideration is that the solution adopted meets the immediate and future needs of the business. This key driver - understanding the overall business requirement, as expressed in the 3 specific requests - is part of our overall project methodology.

Any job is a combination of Knowledge, Skills and Attitudes / Behaviours (KSA), combined with experience, and to define the KSA enables the development of the appropriate level of competency.



A job will also comprise a combination of:

- Role-based technical competencies: the technical skills related to the Job Family / Job Position
- Transferable competencies: the broad-based non-technical skills that likely apply to a number of Job Families
- Core competencies: the corporate-level shared competency

#### **OVERVIEW AND CONCEPTS**

A Job Competency Model (JCM) is a competency framework that is based on Competency Units (CU), each of which has a set of competency statements (descriptors) that define four levels of competence:

- Awareness
- Knowledge
- Skilled
- Expert

Competency Unit (CU) example shown below for Petrochemical Engineer. The yellow boxes indicate the Job Level Requirement (JLR), so in this example the job requires the Skilled level. The bottom row shows the linked Learning Solutions (e.g. EQ-ARO-104-K, an e-learning module, and W-ARO-014-S, a Work Experience.)

#### ARO: CCR PLATFORMING (ENGINEER) AREA 1

General Statement: Know the unit process description, main components, philosophy of operation, troubleshooting, and improvement opportunities					
Awareness	Knowledge	Skilled	Expert		
Identify the potential hazards related to the operation and maintenance of the unit.  Identify the function of CCR and catalyst type Identify the specifications of the feed to reactor and outlet stream  Identify the terms catalytic reforming, endothermic reaction, reaction selectivity, Catalyst regeneration, and Conversion ratio.  Identify the function of the heater  Identify the main parameter for controlling the catalytic reforming  Identify the heat recovery and how it is apply in the CCR system.  List the poisons reactor catalysts  List pre-start checks for reactor start up and shutdown  Identify the reason for chloride injection  Recognize how catalyst transfer from regeneration system to reacting beds	Describe the operation conditions that favor desire catalytic reforming  Describe the causes which lead to catalyst poison and decreasing catalyst performance  Elaborate on what causes reaction killed and how it can be controlled  Describe the controlling of heat which required for reaction  Explain the proper actions taken in to control catalyst reactivity / catalyst deactivation / catalyst degradation  Explain the indications and effect of poisons on reactor catalysts, and proper action to avoid it.  Describe start up and shutdown steps for reactor  Explain the function of chloride base ,how to control the rate and corrosion	Apply relevant EQUATE EH&S policies to prevent any inherent hazards with the CCR platformer     Perform a test run, technical evaluation or troubleshooting of CCR Platforming.     Evaluate how catalytic reforming is achieved for converting naphtha to aromatic.     Assess how CCR Plat forming system can be improved.     Evaluate how to maximize the yields and profits by running the platformer in the optimal mode     Quantify the effect of temperature of inlet feed on the catalytic reforming     Compare the actual performance of Catalyst on a regular basis     Review the operating manuals or procedures, recommend improvements and explain your recommendations	Review existing processes and develop solutions for CCR PLATFORMING to increase productivity or reduce costs. Provide Technical advice for benchmark studies and recommend based on benchmarking gaps Plan and create methods to improve production processes. Ensure compliance with approved production methods and quality standards Develop engineering standards, policies, strategies and best practices.  Establish, track and continuously improve a root cause analysis program for unit problems		
• EQ-ARO-104-A	• EQ-ARO-104-K	W-ARO-014-S      UOP-CCR001	• W-ARO-014-E • UOP-CCR002		

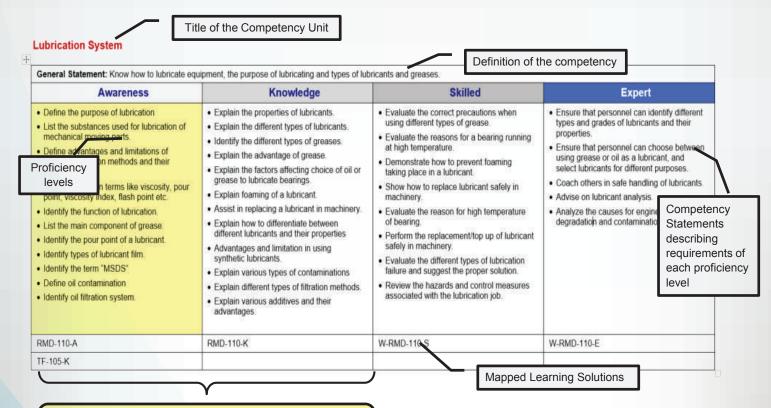
Competency Unit (CU) example shown below for Maintenance Technician. The yellow boxes indicate the Job Level Requirement (JLR), so in this example the job requires the Skilled level. The bottom row shows the linked Learning Solutions (e.g. RMD-110-A, an e-learning module, and W-RMD-110-S, a Work Experience/On-Job Training.)

#### **LUBRICATION SYSTEM**

General Statement: Know how to lubricate equipment, the purpose of lubricating and types of lubricants and greases.						
Awareness	Knowledge	Skilled	Expert			
Define the purpose of lubrication List the substances used for lubrication of mechanical moving parts. Define advantages and limitations of various lubrication methods and their limitations.  Define lubrication terms like viscosity, pour point, viscosity index, flash point etc. Identify the function of lubrication. List the main component of grease. Identify the pour point of a lubricant. Identify types of lubricant film. Identify the term "MSDS" Define oil contamination Identify oil filtration system.	<ul> <li>Explain the properties of lubricants.</li> <li>Explain the different types of lubricants.</li> <li>Identify the different types of greases.</li> <li>Explain the advantage of grease.</li> <li>Explain the factors affecting choice of oil or grease to lubricate bearings.</li> <li>Explain foaming of a lubricant.</li> <li>Assist in replacing a lubricant in machinery.</li> <li>Explain how to differentiate between different lubricants and their properties</li> <li>Advantages and limitation in using synthetic lubricants.</li> <li>Explain various types of contaminations</li> <li>Explain different types of filtration methods.</li> <li>Explain various additives and their advantages.</li> </ul>	Evaluate the correct precautions when using different types of grease.     Evaluate the reasons for a bearing running at high temperature.     Demonstrate how to prevent foaming taking place in a lubricant.     Replace lubricant safely in machinery.     Evaluate the reason for high temperature of bearing.     Perform the replacement/top up of lubricant safely in machinery.     Evaluate the different types of lubrication failure and suggest the proper solution.     Review the hazards and control measures associated with the lubrication job.	Ensure that personnel can identify different types and grades of lubricants and their properties.     Ensure that personnel can choose between using grease or oil as a lubricant, and select lubricants for different purposes.     Coach others in safe handling of lubricants.     Advise on lubricant analysis.     Analyze the causes for engine oil degradation and contamination.			
• EQ-TF-105-K	• EQ-RMD-110-K	• W-RMD-110-S	• W-RMD-110-E			



# **Job Competency Models**



The competency statements in the yellow boxes describe the level of proficiency required of the given Job Title for this specific Competency



# **Detailed Process**

Phase 1: Competency Model Developing Phase 2: Develop Career Ladder

Phase 3A: Perform Assessment Phase 3B: Analyze Assessment Results (Skill Gaps) Phase 4: Prepare Individual Development Plans(IDPs)

Phase 5: Identification Training Needs Phase 6: Organization Review

Phase 7: System Integration

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	-Review and evaluate Organization Individual Duties/Skills/ Responsibilities	-Describe the jobs place on the ladder grid -Set the education and competency standards	-Form the interview team -Prepare assessment interview process	-Record gather results into the CMS system -Generate indivdual gap analysis reports	-Identify and link training resources to competency models	covered by the competency assessment process.  -Libraries sent organization in word w/trackin -Review/feedb by organization (edits/additions)  -UETMT incorporates feedback -UETMT create individual JCM	identifies competency libraries to be	-Establish clear lines of communication with the SAP system integrator to pull the data from both systems It will be required for organization to clearly define and describe the data requirments which are to be integrated in this manner.
	-Develope / customize the competency statements associated with the relevent job families	-Show the potential for support mobility -Show the potential for horizontal mobility	-Schedule and run individual interviews -Conduct supervisors assessments (CMS)	-Review and validation of results with organization supervisors -Update system database	-Prepare individual development plans		-Libraries sent to organization in word w/tracking -Review/feedback by organization (edits/additions/ deletions)	
	-Consolidate the final listing of job titles by organization manager and UETMT specialists	-Identification of job titles in each job family -Career path mapping	-Auto verification by CMS -Schedule and conduct verification interviews	-Generate individual & organizational gap reports	-Build training resource database		incorporates feedback -UETMT creates individual JCMs in CMS and exports	
	-Prepare job competency model for each job title (salary grade) in the technical/non- technical divisions	-Recommendation for job titles move between job families	-Verified assessment results				-Review/feedback by organization department heads on coverage of JCMs (change JLR and include / exclude CUs)	



We maintain a series of competency libraries in which the Competency Units are grouped by discipline, including technical and non-technical CUs. In the downstream (refining / petrochemical sector) the 40+ libraries.

The libraries are used to create the JCMs for a Job Family, e.g. Aromatics Production Engineer. The jobs within that Job Family are then created by selecting the Job Level Requirement for each CU, these provides a progression of competency requirements for the jobs within that job family. The job titles will vary between companies, but as examples using a notional job titles in the job family:

#### **Example 1:**

#### **Job Family:**

Aromatics Production Engineering

#### Job Titles (JCMs):

- Aromatics Production Engineer (Trainee)
- Aromatics Production Engineer
- Aromatics Senior Production Engineer
- Aromatics Technical Authority

#### **Example 2:**

#### Job Family:

• Mechanical Maintenance

#### Job Titles (JCMs):

- Trainee Mechanical Maintenance Technician
- Mechanical Maintenance Technician
- Senior Mechanical Maintenance Technician

The libraries are created and maintained by UETMT to reflect industry / discipline standards, benchmarks and certifications where appropriate. As detailed below, the libraries are used in the project with the client to enable rapid and standardized content, but with customized to the specific content and requirements of the client.

#### LEARNING SOLUTIONS

The UETMT competency libraries include baseline Learning Solutions:

- A Learning Solution (LS) is an approved method of developing a specific competency
- LS may be theory or application or a combination of the two
- LS enable consistent, cost-effective development of competency gaps

Learning Solutions are devised to meet the blended learning 70-20-10 methodology that recognizes the importance of structured training for theory (awareness and knowledge) and application (skilled and expert) through:

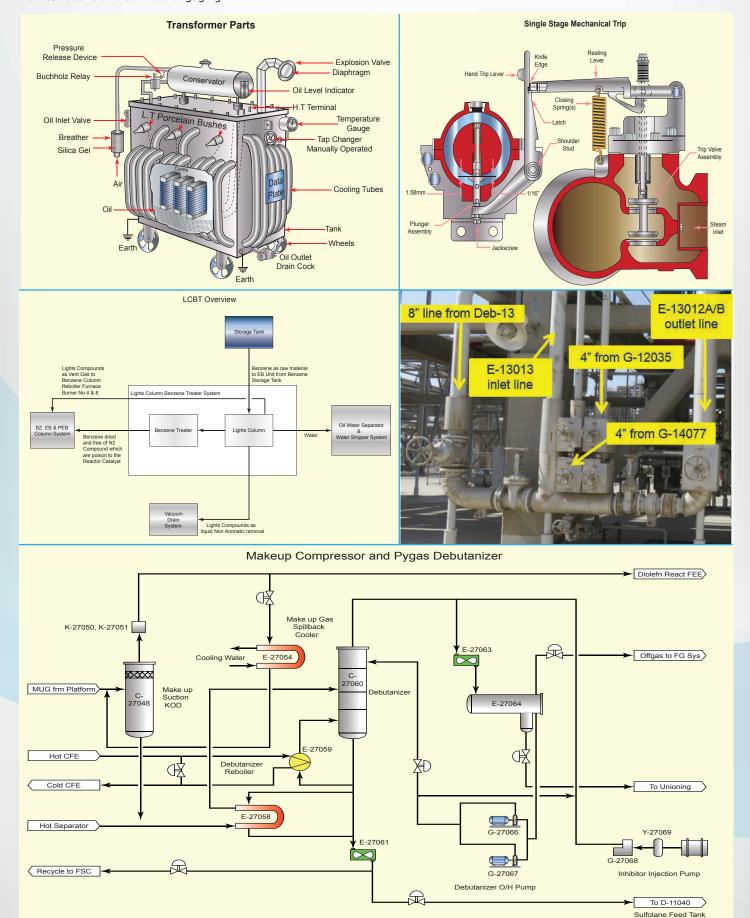
- Self-managed learning, primarily e-learning
- Instructor-led classroom courses by external vendor or internal by Company
- Work Experience / On-Job Training
  - o Supports 70-20-10 learning model
  - o Based on competency models (JCMs)
  - o Flexible to include projects, assignments, multiple experience requirements
  - o Managed by Department Trainer

Learning Environment Components					
Resources	People	Training and Education	Development Practices	Learn by Doing	
* Performance support  * Shared documents and spaces  * Podcasts, etc.  * On-line databases and KM environment  * Books, journals, articles  * Jobaids  * Briefings and presentations  * Procedure and technical manuals	* Peer support  * Mentoring  * Communities of Practice  * Professional networks  * Conferences and professional meetings  * Social media connections  * Expert directories	* Courses and seminars * E-learning * Formal coaching * On-Job Training (structured) * Certification programmes	* Action-based learning / programmes * Assignments * Rotations and experiential I opportunities *Supervisor support, feedback and coaching * After action review practices * Projects	* Experimentation  * Collaboration  * Projects  * Self-monitoring and analysis of outcomes and feedback	



Advantages of self-led (e-learning) for operations and maintenance personnel using learning styles appropriate to learner group; for example, greater use of actual plant / site photographs, supported by graphics and simple animations. This type of 'e-learning' can:

- Be accessed at any time; (Operators, for example, have 'down time' on shift when they can study assigned modules)
- Be studied at the pace of the learner and repeated until learner is confident
- 'Non-threatening' no pressure from an instructor or time constraint of a lesson
- · Have embedded self-testing
- Be inter-active and so more engaging



#### TYPICAL METHODOLOGY FOR COMPETENCY MANAGEMENT IMPLEMENTATION

#### **Define Job Competency Models**

The output of this Task is the set of JCMs and associated Learning Solutions

The JCMs will be created from the UETMT standard competency frameworks for technical competencies and support competencies, such as soft-skills and behaviours. The proposed JCMs will be customized your specific requirements.

#### **Competency Assessment, Gap Analysis and IDP**

The JCMs will be uploaded to the Comaea Competency Management System, which will be used to:

Perform Competency Assessment to determine the current status of competency of individuals for their assigned JCMs. This is conducted using the on-line Comaea competency software and comprises:

- Self-assessment by the individual
- Cross-assessment by a supervisor, manager or other assigned person
- · Approval / verification as required

Review Gap Analysis to determine the difference between required level of competency and current level of competency. This is usually conducted using the on-line competency software and comprises:

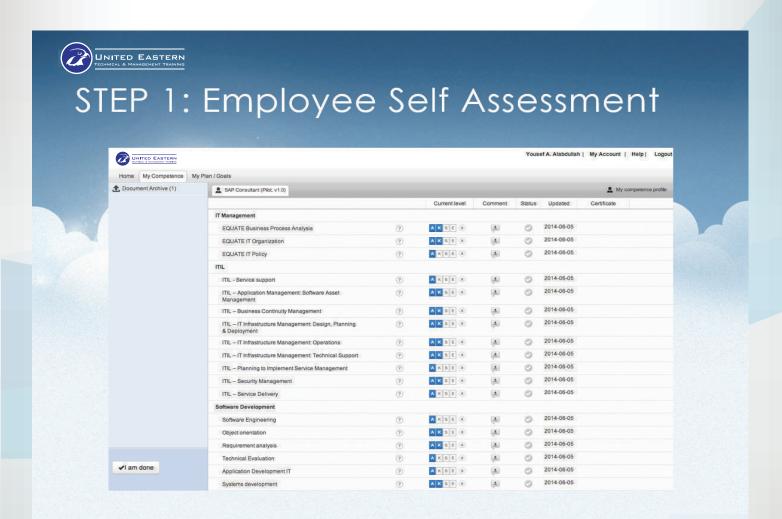
- · Determining priorities for development
- · Setting target levels for development

Create Individual Development Plan (IDP) for each employee based on the Gap Analysis and the approved Learning Solutions. This is usually conducted using the on-line competency software and comprises:

- · Assigning development for current job
- · Assigning development for succession planning or accelerated development

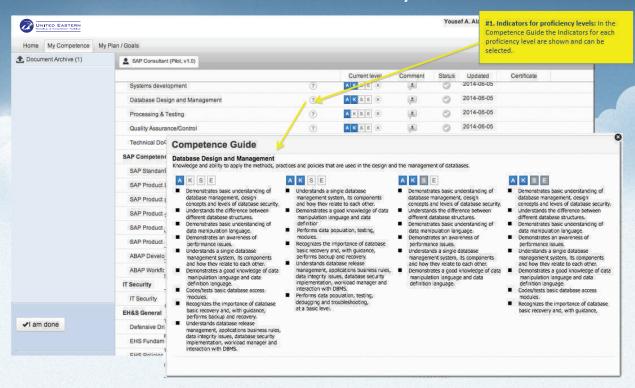
Note: Comaea can be interfaced with ERP systems such as SAP and Oracle, as well as other LSO, LMS, e-recruit and other systems.

The images below illustrate some of the basic features of the Comaea CMS, but to fully understand how this would meet your specific needs, please contact us for more details and a demo.





# Indicators for Proficiency levels

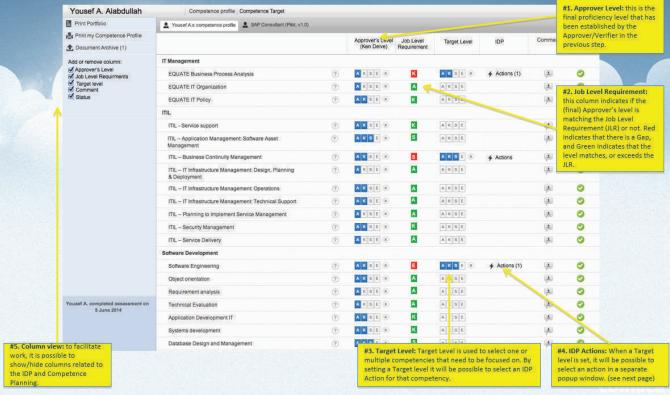


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# STEP 4: IDP and Competency Target

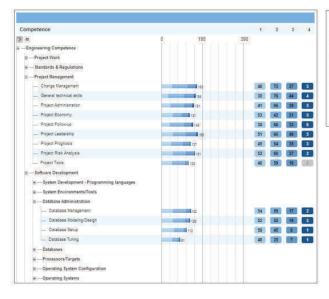


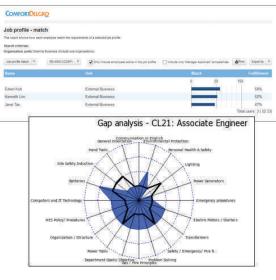
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# **Analysis & Reporting**

□ Reporting and gap analysis are based on verified or interim assessments. Comaea HCM currently has over 15 reports for analysis and advanced search and filter function to support the gap analysis on all levels of the organisation.





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#### CERTIFICATION AND QUALIFICATION TRACKING - AN ESSENTIAL BUSINESS PROCESS!

Companies need to know if their personnel are current in regulatory, compliance, mandatory certificates and qualifications, as well needing to track similar information for more general business reasons.

- Regulation
- Compliance
- License to Operate
- Etc....

The certification / qualification tracker element of Comaea provides a powerful solution to this problem. The selected screenshots below illustrate some of the basic features, but to fully understand how this would meet your specific needs, please contact us for more details and a demo.

#### **Home Page Dashboard (below)**

Customized content to present key information as required by that specific user – such as a global manager (hence global map shown), or any other level of manager / supervisor / trainer. The Red-Amber-Green gives an instant picture of issues (current or future).



#### **Certificate View (next page)**

In this view Administrators, and Managers, can easily overview Certificates in the company. In the list Certificates are shown and the status indicates if Certificates / Qualifications are:

Valid (not due to expire in the given time frame)
Renewal required within a given time frame
Expired (already beyond date)



#### WHAT ELSE? ... CAREER LADDERS? ... NATIONALIZING?

Other typical Workforce Planning and Development requirements include:

- Nationalizing
- Career Ladders
- · Recruitment and Selection
- · Specialist Technical Development
- ... and more

The foundation of any career structure is based on the definition of competencies that relate to the Job Positions and progression with the career ladder(s), which also allows for accurate development (training), assessment, cross-role, succession planning, and so on.

The 3 groups of competencies (Core – Role-based/technical – Transferable) need to be considered. So, in addition to developing the competencies of individuals based on the gap analysis from their assessments, the JCMs created in Task 2 can be used as the basis for:

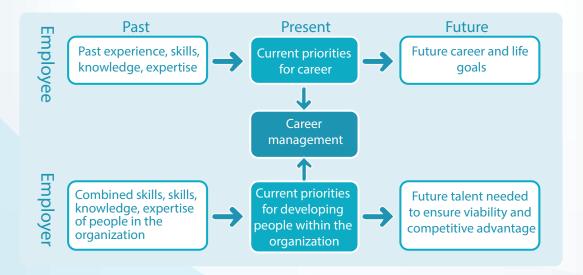
- · Career ladders, including development of managerial and technical positions
- Succession Planning
- Accelerated development of the national workforce

#### **Overview and Concepts**

Career planning involves the definition of career paths/ladders, the routes people can take to advance their careers within an organization. It uses all the information provided by the organization's assessments of requirements and of performance, potential and management succession plans, and translates them into individual career development programs and general arrangements for management development, career counselling and mentoring. The generic career stages are:

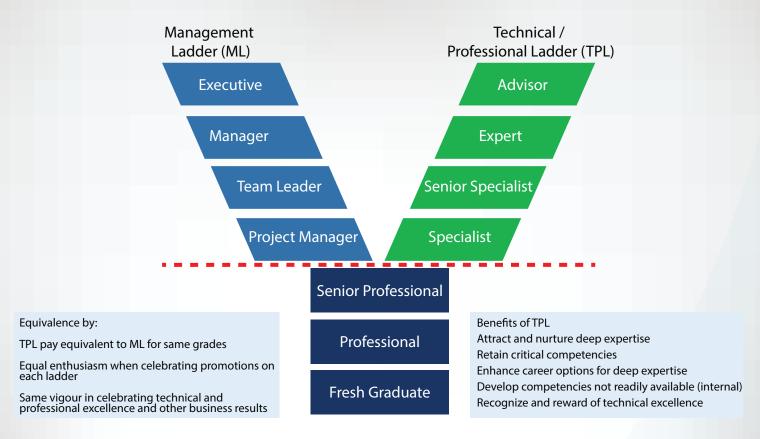
- Entry to the organization
- Progress within particular areas of work
- Mid-career Later career End of career

For employees the aims of career management policies are to give them the guidance, support and encouragement they need to fulfil their potential and achieve a successful career with the organization in tune with their talents and ambitions



Most companies are moving away from the independent technical and managerial ladders to the 'Y-shaped' discipline-based structure that has a common (within the discipline) stem, and managerial and technical specialist 'arms'.





#### **Nationalizing**

All commercial organisations need to have a robust and sustainable succession plan for its workforce, to allow for natural wastage through retirement, promotion, and commercial expansion. The addition of a Nationalisation program within this process needs careful management if the Company is to continue meeting the expectations of shareholders, Nationals and Government alike.

The system below covers the main points for consideration and process for an effective Nationalizing strategy. Much of its success is dependent upon what data is already in place within the Company regarding Job descriptions and Job competency models for both its Expat and National employees.

Succession planning (Nationalizing)	Comment		
What Nationalizing % has to be met over next 5 years	MOM directive		
Assess what Expat positions can be replaced with Nationals	Easy/moderate/dif icult		
What Talent is available from outside/outside	Company/National Talent pool		
What gaps remain			
Nationalizing process	Comment		
Must be all inclusive/informative to all workforce	Buy in from all, means a collective effort.		
Must involve those being replaced in its implementation	From concept to delivery. For Selection, training/mentoring of replacements. Incentive programs		
Must develop a system of closing the QEC Gaps	Assisted by Competency and blended learning management systems.		
Must have minimum effect on the critical business path	Over the longer period		
Must tie in with IDP and CDP programs	Targeted funding for critical training gaps.		
Should consider splitting 1 Expat job role into smaller manageable parts. (Commercial, technical, Project management, etc.)	Advantage of increasing Nationalizing% reducing risk and quickly closing the QEC gap		

We would be delighted to come and discuss these, and any other needs you have around developing your key asset – your people.



# Project Management Office (PMO)

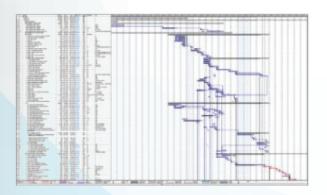
## **Weekly Progress Report**



### **Governance Model**



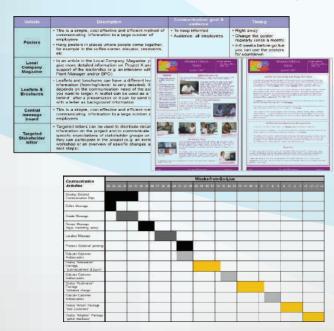
## **Project Plan**



#### **Critical Success Measurement**



# **Communication Plan & Campaigns**



# Risk/Issue Log









# INTERSTED TO KNOW MORE ABOUT OUR SERVICES PLEASE CONTACT US

Liberty Tower, Khalifa Street, P.O.Box: 7615, Abu Dhabi-UAE Tel: +971 2 627 2737 Fax : +971 2 627 0048 E-mail: ameneassy@ueg.ae

Web.: www.uetmc.ae

Al Salemiyah Tower, 1003, P.O. Box: 8670, Dubai - UAE Tel : +971 4 222 9911 Fax : +971 4 222 6642 Mob.: +971 50 830 7962 Web.: www.uetmt.ae

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