

COMPETENCY MANAGEMENT FRAMEWORK



REVISION YEAR-2022



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1. Executive Summary

The resourcing landscape in the Engineering & Construction Services industry has been experiencing a war of talent¹. This is largely driven by shortage of skills, owing to the complexity of the projects fanned by the boom in the industry. Organizations therefore are fighting over scarce talent pools, and it is about time for organizations to have a strategy for Attracting, Engaging and Retaining talent.

The challenge faced by the industry is multifold:

- In spite of having a large number of applicants, organizations find it challenging to recruit suitable employees as traditional hiring methods have their own set of limitations.
- Ever changing dynamics of the project works makes it difficult for organizations to have a structured plan for Talent Management in place.
- As work force is shifting from Baby Boomers to Millennials, HR departments must prepare for different type of employee.

At Emend, we not only understand this challenge but also know how to help organizations to partner with the power of people. Emend has the capability to provide range of services in Human Capital Management, specific to Engineering & Construction Services Industry, by providing customized solutions in the area of Recruiting, Retention, Engagement & Performance Management. By collaborating with industry experts Emend Human Capital Management has developed a 7 Pillar Competency Based process that will help organizations to:

- Replace the traditional methods of recruiting with a competency based approach following the Top Grading Methodology.
- Develop a fit for purpose competency matrix for the organization that would help in developing the succession plans for the organization.
- Implement an Online learning management system, that will help organizations to delivery effective and relevant trainings to the work force, with industry specific learning & development opportunities.

An attempt has been made to give a comprehensive overview of this process.

(1) 'The war for talent' was coined in 1997 by McKinsey & Co, when they published a similarly named article. The company used data to suggest the competition for talent is heating up, as managerial talent is becoming increasingly scarce.



2. The Competency Catalog and its application

This Competency Catalog provides a common and immediate reference to the Human Resource Management Division to support its following activities:

- 1. Recruitment and Selection
- Development of Competency-based assessment tools
- Development of Competency-based Job Descriptions
- 2. Development of Competency-based Performance Management System by building a fair performance appraisal system (results-focused) by structuring evaluation devices around competencies
- 3. Career Development of Employees by establishing criteria for promotion or development of career path within the Departments.
- 4. Learning and Development
- Competency-based curriculum development and design
- Competency-based Training Needs Assessment
- 5. Workforce Analysis and Planning in assessing current and future needs of the organization based on strategic plan, goals and objectives, priority programs and projects
- 6. Succession Planning to manage the gap that will occur when employees of key positions leave or are promoted
- 7. Reward Management for positive recognition of employees' work to motivate and improve their performance. This is also an important factor in recruitment and retention of high performing employees.



3. Understanding the meaning of Competency

3.1 Competency Definition

A competency is defined as "a cluster of related knowledge, skills, and attitudes (KSA) that affects a major part of one's job (a role or a responsibility), that correlated with performance on the job, that

- 1) can be measured against well-accepted standards, and that
- 2) can be improved via training and development." (Parry, 1996)

3.2 Competency KSA Framework

- a) Knowledge Understanding acquired through training.
- b) Skills Capabilities acquired through practice.
- c) Attributes Inherent characteristics which are brought to the job.
- d) Behavior -The observable demonstration of competency, skill, knowledge and personal attributes related to excellent performance.

Figure 1: Human Capital KSA Framework

HUMAN CAPITAL KSA FRAMEWORK

Technical

Knowledge

Flexible
Challenging
Enquiring

Global Perspective / Forward-looking



3. Understanding the meaning of Competency

3.3 Characteristics of Competencies

A competency is defined as "a cluster of related knowledge, skills, and attitudes (KSA) that affects a major part of one's job (a role or a responsibility), that correlated with performance on the job, that

- Skills and knowledge that can be learned
- Expressed in behaviors
- Drives achievement of objectives
- Building block of success
- Competency must be demonstrated and hence, must be observable.
- Competency embodies the capacity to transfer skills and abilities from one area to another

Figure 2: Competency Ice-Berg Model

Skills Easy to Knowledge observe Qualifications & measure Attitude, Traits Harder to see Values & but make the Motives most difference

Skill, Knowledge Attitude, Motives, Personality Traits.... Observable Behaviour

Job Performance

In the traditional method of hiring, most of the organizations looked at just the visible components of competencies, the knowledge and skills.



4. Benefits of Using Competencies

4.1 For the Organization

- Provides an integrating framework for designing HR systems such as recruitment and selection, learning and development, performance management, career development, workforce analysis and planning, succession planning, and rewards management (a.k.a. competency-based HR system).
- Align individual contribution to organizational goals since competency models are anchored on strategic directions of the organization.
- Fosters performance-driven culture as it defines what an average job holder needs to do to attain superior performance, while it provides behaviorally anchored standards for recognizing exemplary performers.
- Helps in planning and budgeting HR development in a more rational and purposive way since critical competency gaps are systematically identified and addressed.
- When developing new position, enables organizations to "begin with the end in mind," i.e., defining expected outputs and outcome from the job rather than beginning with a list of tasks and activities.
- For succession planning, facilitates the selection and placement of best candidate or develops the right competencies of potential successors to critical positions.



4. Benefits of Using Competencies

4.2 For the Management

- Provides the foundation for sharpening their ability to select and hire best fit candidates
- Provides more objective performance standards since competencies are anchored on specifics, measurable behaviors
 - Enables managers to clearly communicate performance expectations to staff
 - Minimizes subjectivity in assessing performance
 - Creates solid platform for dialogue between managers and staff on performance as well development and career-related issues
 - Guides managers in identifying staff development initiatives in a more purposive and effective manner

4.3 For the Employees

- Provides the foundation for sharpening their skill set.
- Clarifies success factors in their current roles enabling them to give their best on the job
 - For career planning, provides information on what it takes to move to their targeted positions whether this is a lateral transfer or promotion
 - Empowers staff to proactively seek competency-development activities (i.e., instead of just relying on the sponsorship of their leaders or the organization)



5. Career paths in a typical Engineering Service Industry

The Career Pathways show the possible options for vertical and lateral progression for advancement and growth. Although each organization may have their own structures there are six tracks (or Skill Pool) in the career pathway,

- (i) Project Financing,
- (ii) Project Development,
- (iii) Engineering Procurement,
- (iv) Engineering Design,
- (v) Engineering Construction and Commissioning,
- (vi) Operations and Maintenance.





6. Defining the Competency Management Framework

From above we can infer that each an every role in an organization would require specific skill set. For the individual to deliver in an organization, in an effective manner there is a need to define the Skill set required for the role, to measure the current competency level and to have a development plan for the individual in line with the organization growth strategy.

A competency management framework is a written description of the how the organization competencies will be identified, managed and assessed which will not only drive successful or exemplary performance in a job category, work team, work setting, profession but also drive organization efficiency. Competency models have two critical elements

- (a) Functional Competency also called as core competency and
- (b) Leadership attributes or skills. In a Competency Management framework these attributes are:
 - Described in behavioral terms, using behavioral indicators so that the competencies are recognized when demonstrated.
 - Assigned to a proficiency level, which facilitate comparison of jobs and roles in terms of competency requirements and proficiency levels needed using a common incremental scale.

Competency Management Framework therefore helps organizations in managing

- (a) Recruitment and Selection
- (b) Learning and Development
- (c) Performance Management System
- (d) Succession Planning.

Emend will implement the 7 Pillar Competency Framework in your organization by following the 3 step process.

- **Step 1** Develop Fit for purpose Competency Framework for the organization in line with the organization Vision.
- **Step 2** Diagnose the organisational skill pool health with respect to the competency framework.
- **Step 3** Gap Closure for skill upgradation will be achieved by curated e-learning modules, which is a self paced learning module and assessed by our industry experts to confirm the course completion.



7. Competency Management framework

A typical Competency Management framework is depicted in the figure below, every organizational structure and processes are unique and therefore, this framework will be customized as per the needs of the organization.

	Tramework will be castoringe																				
	Proficiency Levels for Competencies : B = Basic I = Intermediate A= Advance E= Expert	Finance Executive	Finance Manager	Sr. Finance Manager	Finance Director	Project Engineer	Sr. Project Engineer	Project Manager	Project Director	Buyer	Sr. Buyer	Manager C&P	Sr. Manager C&P	Design Engineer	Sr. Design Engineer	Lead Design Engineer	Engineering Manager	Field Engineer	Ops & Maint. Manager	Sr. Ops & Maint. Manager	Operations Director
Areas	Competencies																				
	Projects Contracts and Contracting	В	ı	ı	Α	В	ı	Α	Е	В	ı	Α	Е	В	ı	ı	Α	В	В	ı	Α
ent	Materials & Inventory Management	В	В	1	Α	В	ı	Α	Е	В	- 1	Α	Ε	В	1	ı	Α	В	ı	Α	Ε
Project Management	Contracts Performance Management	В	В	ı	Α	В	1	Α	Е	В	ı	Α	Е	В	1	ı	Α	В	-	Α	Е
roj	Program Management	В	В	ı	Α	В	ı	Α	Е	В	В	ı	Α	В	ı	ı	Α	В	В	ı	Α
Mar	Project Planning and Scheduling	В	В	ı	Α	В	ı	Α	Е	В	В	ı	Α	В	ı	ı	Α	В	В	ı	Α
_	Project Risk Management	В	В	1	Α	В	1	Α	Е	В	В	- 1	Α	В	- 1	ı	Α	В	В	- 1	Α
								7													
	Hazards and Risk Identification & Management			В	В	В	1	Α	Е			В	В	В	1	Α	Е	В	-1	Α	Ε
HSE	Workplace Safety Culture Development			В	В	В	1	Α	Е			В	В		В	ı	Α	В	ı	Α	Е
光	HSE Management Systesm			В	В	В	1	Α	Е			В	В		В	ı	Α	В	_	Α	Е
	Emergency Response			В	В	В	ı	Α	Е			В	В		В	ı	Α	В	1	Α	Е
b0	Engg. Design Specifications & Drawings					В	В	ı	Α					В	- 1	Α	Е	В	В	1	Α
rin	Safety in Design					В	В	_	Α					В	- 1	Α	Е	В	В	1	Α
Engineering	FEED			В	В	В	В	_	Α			В	В	В	- 1	Α	Е	В	В	1	Α
ngir	3D Modelling					В	В	_	Α					В	1	Α	Е	В	В	1	Α
ū	Reliability Engineering					В	В	ı	Α					В	ı	Α	Е	В	ı	Α	Ε
., ej	Commissioning and Startup					В	В	- 1	Α					В	В	1	Α	В	ı	Α	Ε
8 8 ncc	Maintenance Strategy and Reference Plans					В	В	ı	Α					В	В	ı	Α	В	ı	Α	Е
tior	Maintenance Planning & Scheduing					В	В	-	Α					В	В	ı	Α	В	-	Α	Е
Operations & Maintenancce	Asset Management			В	В	В	В	_	Α			В	В	В	В	ı	Α	В	_	Α	Ε
o E	Inspection and Testing					В	В	_	Α					В	В	- 1	Α	В	_	Α	Ε
														'		'					
ره بد	Business Budgeting	В	1	Α	E	В	- 1	Α	E	В	В	1	Α	В	В	1	Α	В	- 1	Α	E
ject	Cost Management	В	1	Α	E	В	- 1	Α	Е	В	В	- 1	Α	В	В	-1	Α	В	- 1	Α	Ε
Project Finance	Project Finance	В	ı	Α	Е	В	-	Α	Е	В	В	- 1	Α			1	Α	В	_	Α	Е
	Financal Management & Reporting	В	I	Α	Е			ı	Α	В	В	- 1	Α			1	Α			ı	Α
	Learning and Development			В	-			В	1			В	- 1			В	- 1			В	- 1
	Personnel Management			В	Ι			В	ı			В	ı			В	- 1			В	- 1
	Continous Improvement Management	В	В	ı	Α	В	I	Α	Е	В	В	I	Α	В	В	ı	Α	В	ı	Α	Е
	Organisational Risk Management	В	В	ı	Α	В	ı	Α	Е	В	В	I	Α	В	В	ı	Α	В	ı	Α	Ε
ent	Organisational Resource Management	В	В	ı	Α	В	ı	Α	Е	В	В	ı	Α	В	В	- 1	Α	В	-	Α	Ε
em	Quality System Management			В	1	В	- 1	Α	Е			В	ı			ı	Α	В	1	Α	Ε
nag	Strategy Development			1	Α			١	Α	В	ı	Α	Ε			ı	Α			ı	Α
Mar	Business Negotioations	В	В	1	Α	В	- 1	Α	E	В	-1	Α	Ε	В	В	ı	Α	В	1	Α	Ε
General Management	Business Proposal Writing	В	В	1	Α	В	- 1	Α	Е	В	-1	Α	Ε	В	В	- 1	Α	В	١	Α	Ε
	Business Performance Management	В	В	- 1	Α	В	ı	Α	Е	В	-1	Α	Ε	В	В	-1	Α	В	Ι	Α	Ε
	Change Management	В	В	ı	Α	В	ı	Α	Е	В	ı	Α	Ε	В	В	ı	Α	В	-	Α	Е
	Conflict Resolution			-	Α			-	Α	В	ı	Α	Ε			- 1	Α			I	Α
	Stakeholder Management	В	В	- 1	Α	В	-	Α	Е	В	-1	Α	Ε	В	В	-1	Α	В	-	Α	Ε
	Third Party Management			- 1	Α	В	- 1	Α	Е	В	-1	Α	Ε			-1	Α	В	- 1	Α	Ε
	Technical Report Writing	В	В	l	Α	В	ı	Α	E	В	В	l	Α	В	В	ı	Α	В	ı	Α	E
		_																			



8. Competency Descriptions

Emend Human Capital Management has identified the following functional areas that are largely applicable to the Engineering & Construction Services Industry, viz. Project Management, HSE Management, Engineering, Operations & Maintenance, Project Finance & General Management. Every functional area embeds a number of competencies & individuals are required to demonstrate certain proficiency as per their role in the organization, as depicted in the table above. For each competency a relevant purpose, ability and attitude aspect is defined, which can be tweaked as per the organizations requirement. A sample competency description for the HSE Management Fuctional area is shown below.

COMPETENCY DESCRIPTION WORKPLACE SAFETY CULTURE DEVELOPMENT -BASIC

High Level defination - Create and maintain a Workplace Safety & Health culture based on a common set of attitudes, behaviours, and competencies

Proficiency	Basic								
Expectation	Collaborate with stakeholders to promote the Workplace Health, Safety and environment (HSE) culture program								
Ability to do (Articulate /	Workplace HSE programs that promote a safety culture								
SkillSet)	Workplace HSE policy and procedures within work area								
	HSE Legal requirement								
	Methods of promoting HSE culture								
	Types of HSE culture Programs								
	Benefits of promoting a positive HSE culture								
	Types of barriers to HSE culture development								
Attitude to do (Attribute)	Adhere to Workplace HSE policy and procedures								
(terribate)	Report unsafe behaviour and work practices								
	Escalte issues adhering to HSE policy and procedures								
	Participate in and promote HSE culture building programs								
	Implement HSE culture program within own work area								
	Promote the benefits of a positive HSE culture within own work area								
	Communicate potential barriers to HSE culture development in the organization								



9. Competency Assessment

After defining the competency framework for the organization, the organisational skill pool health is diagnosed using a computer based assessment. Employees will be prompted to carry out a self assessment against the different competence areas using a simple checklist as in figure below. The response are then validated by the supervisor / manager.

1. Hazard & Risk Assessment Management

	None	Poor	Average	Good	Excellent
How familiar are you with your organisation's workplace Health, Safety & Environment policies & procedures?	0	0			
What is your awarness about "Principles of Risk Assessment and Risk Management"?	0	0	0		

10. Learning and Development Agreement

After this step the validation the employee is able to print out a report which clearly indicates his / her development priorities. These development priorities get discussed during the yearly / half yearly performance reviews and recorded in a learning and development agreement. The employee is then assigned relevant learning modules through the Online Learning & Management system STRIDES.

Our blended learning programs follow the 70-20-10 rule, where 70% of learning happens on site by working on assignments, 20% of learning happens through peer – peer interaction / learning from experiences of others and 10% of learning is through curated content delivered online.

The modules offer the learner a rich experience through series of self paced learning modules & case studies. At the end of the modules the learner is required to submit a assignment which is graded by our experts. The aim of this assessment is to assess the quality of the 70% (on job training) and 20% (learning form experience) aspects of this learning and development. Upon successful completion of the modules and the assignment the learner will be awarded a completion certificate and the same will be recorded in the system.



11. Success of the program

Emend Human Capital Management will help you partner with your people by developing and deploying the customized solutions in the areas of Talent Acquisition, Talent Management and Talent Optimization.



The success of these programs can only be achieved when the organization slowly transforms to create a culture that attracts, engages and retains superior talent (and not employees). Our HR Consultants become an extension of your team – We help you strategically manage your human capital risk. Everything we do impacts the employees well being and your company's bottom line.