

SUSTAINABLE TRANSFORMATION & EFFECTIVE COMPETENCY MANAGEMENT PRACTICES in Nuclear Organizations

Lic. Sergio Gardelliano

International Consultancy & Learning Facilitation

Sustainable Organizational Transformation

S.Gardelliano@gmail.com

Abstract

Managing essential knowledge as a strategic organizational asset is a factor of upmost relevance in today's Nuclear Organizations.

The author considers evident that competencies are critical carriers of **Knowledge**. As such the use of an appropriate competency model could be the most effective way to capture the present reservoir of explicit and tacit **Knowledge** of specific functions or organizational areas. Besides we could use them into new or other redesigned functions or determine the needs of specific competencies for future positions.

Therefore, appropriate competency models or systems have to be developed or updated in each Nuclear Organization since it is a fundamental system for managing more effectively and efficiently the present nuclear human capital and a very significant system to forecast the evolving competence required in management, technical, scientific and safety areas to keep a continuous and highly competent nuclear workforce.

On the other hand, competency based management models or systems would not achieve the expected results if they are not fully designed and integrated within the strategic organizational infrastructure of the related nuclear organization.

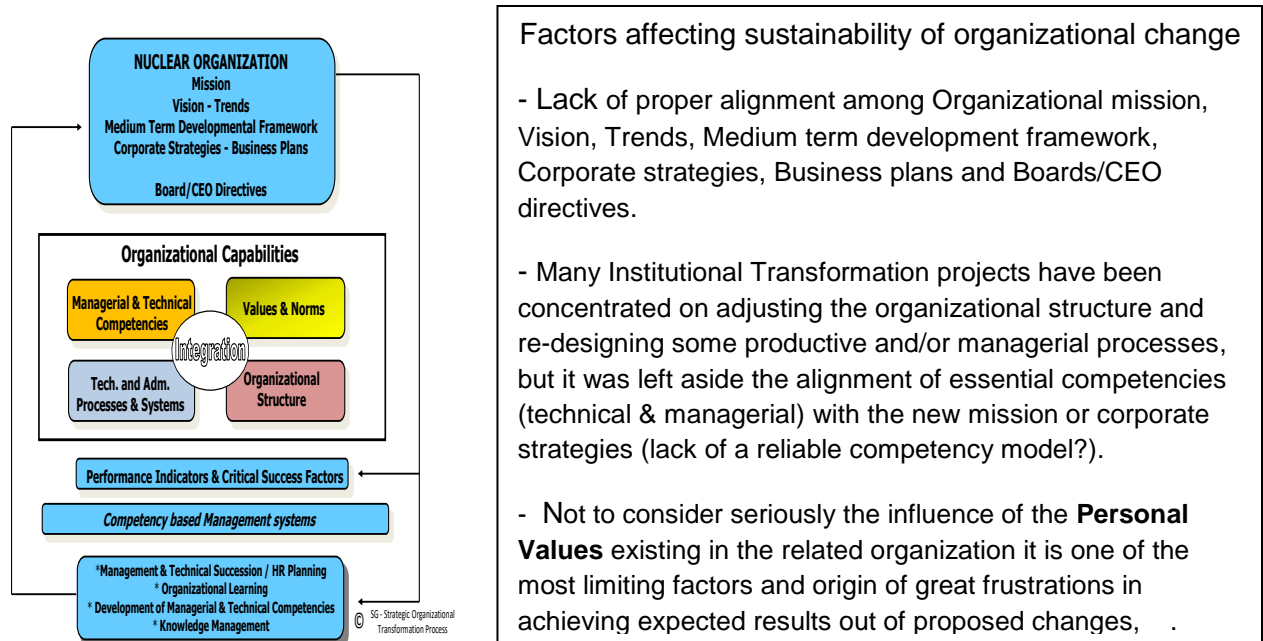
This paper is expected to provide a wider view and practical reflexions on organizational transformation issues and the benefits of using an integrative competency model in the nuclear industry. Particularly, a clear insight of an empiric model **Strategic Organizational Transformation process** © and **Integrative Management practices** on how to re-align strategic issues with top management processes and building organizational capacity through effective competency based management for the sustainable transformation of Nuclear Organizations.

Organizational Transformation and Integrative Management

During many years two main issues were of my professional concern, a) the realistic implementation of the term **sustainability** as accepted in the business world over the past years, synonymous with the ability/responsibility of a company/enterprise/ organization to continuously sustain the generation of economic, environmental and social benefits, and b) the processes of

change or restructuring in many organizations with their doubtful results, particularly for the mid or long term results. Based on managerial work done, observations in different types of organizations and many professional exchanges it was developed this empirical organizational model (Graphic 1) to visualize, analyze and take actions on main factors or areas affecting the sustainability of organizational changes.

Graphic 1. **Strategic Organizational Transformation Process** ©.



Integrative Management and Leadership are required to integrate and balance continuously the relation of fundamental pillars of organizational performance, vital for the organization's sustainability. The interrelation among mission / corporate strategies and values/norms, competencies (managerial & technical), management/ technical processes and organizational structure are key to keep an effective and efficient functionality of the related organization.

Probably now, it could become clearer the significant role and place of a Competency based Management system in Nuclear Knowledge Management and in the overall development of Human Capital for the Nuclear Industry.

Personal Values, Organizational Values & Organizational Norms

The values of managerial staff and the employees (Organizational Capabilities -Graphic 1) are the driving force of key behaviours in the operation of the organization. These values could lead to sustain transformation processes or create bureaucratic, inefficient and unsafe behaviours.

Research shows that companies that seek to align the values of the organization with the values of employees, and vice versa, are healthier to work in, are more successful and are more focused on the needs of their customers and their employees. Organizations that don't have this

alignment tend to be more inward looking, bureaucratic and stressful. (Richard Barret - Why values are important in Organizations? 2001)

In the context of our Strategic Organizational Transformation Process we define “VALUES” as enduring convictions that influence our actions and the choices we tend to make.

Today we are able to carry out comprehensive analysis of the distribution of Values in a selected Organization, i.e. the current personal values, current organizational tendencies and the feature of a desirable organization provides extremely useful information to create necessary values alignment processes to support improvements in the present operation and prepare the ground for main trends and strategies for the future.

Cultural Transformation is a change in the management values of the organization, which are translated into a measurable evolution of organizational processes and its consequences on the short and long-term results. Processes do not change without the support of appropriate personal values.

Also, it would be opportune to explore in simple terms the concept of Norms and Values. (Fons Trompenaars - Ridding the wave of Culture.1993)

Norms are the mutual sense a group has of what is Right and Wrong.

Values determine the definition of Good or Bad closely related to the ideals of the group.

The analysis of Values in organizations is a necessary complement of Competency based Management and very powerful information for Strategic Planning, Organizational Development and Human Capital management in Nuclear Organizations.

Safety as a Core value for nuclear organizations?

Note: The whole discussion of Values deserves a deeper presentation which has been limited in line of the main objective of the paper.

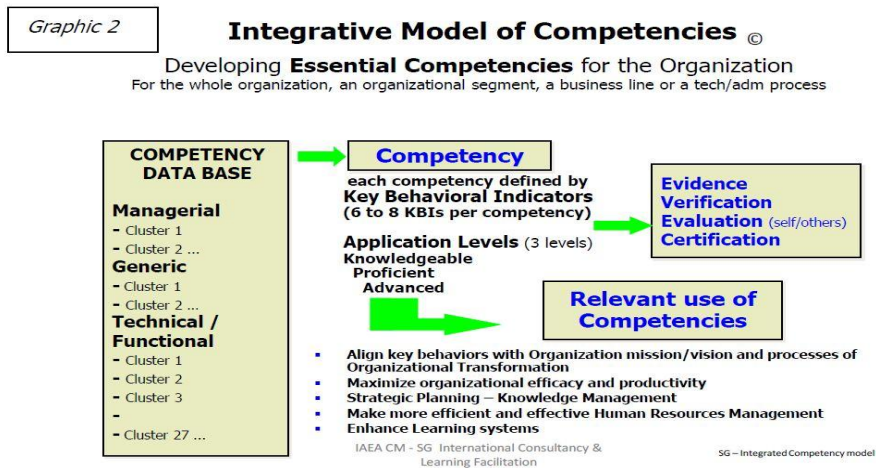
Competencies as the essence of Nuclear Knowledge Management

The use of a competency-based model relies on a thorough understanding of the knowledge and skills required for the job and of the knowledge and skills of the employee. One of the essential goals of NKM! However the applicability of explicit competency models will depend of the readiness of the related nuclear institution and how suitable is the proposed competency model for that organization.

In line with the Strategic Organizational Transformation Process, our Integrative Model of Competencies © (IMC) was conceived to assist and guide the selected nuclear organization managing effectively and efficiently a large variety of Strategic, Organizational and Human capital issues.

Applications and benefits by using the Integrative model of Competencies: *Align Competencies with Organization Trends/Mission/Vision, Business lines, Processes and Corporate Strategy - *Support process of Organizational Transformation - *Building Strategic plans - *Human Capital index- *Knowledge Management - *Skills/Knowledge obsolescence - *HR planning - *Succession Management - *Functions/Posts benchmarking - *Jobs descriptions - * Attrition programs - * Recruitment & advertising - * Interviewing/Selection of personnel - *Individual placement/Transfer - *Performance Management incl..360 feedback - * Building teams & Task forces - *Determine Learning needs – *Training programs - *Management development - etc.

After extensive research and deep analysis of Competency models or Competency applications in industrial corporations, public services and international organization became clear that our IMC (Graphic 2) could be operated as a comprehensive and reliable Organizational Competency Data base operated by a relational data base software.



a) The Integrative Competency model is applied for the whole organization; however the initial design could be started by an organizational segment, a business line, technological or management /administration processes. In this model a Competency is defined as a set of skills, related knowledge and attributes that allows a human being to perform a task or activity within a function or a job. A competency is demonstrated or mastered in a job and could be easily transferred to another job.

b) Any essential competency in the IMC is defined by 6 to 8 Key Behavioral Indicators (KBIs), which would describe the proficient application of the competency in the context of a particular organization. Behaviors should be observable and measurable in order to make it clear how the competency is demonstrated, i.e. **Team Leadership**, KBI 1. Can BUILD effective teams recognizing individual contributions, cultural factors and organizational context.

c) As described in Graphic 2, Competencies are being grouped through specific clusters in three main categories; **Managerial, Generic and Technical or Functional**. In this model, a simple and practical approach is used for the application level of each competency, **Advanced - Proficient - Knowledgeable**. It is to be noted that any **function or job** in the Organization requires a set of essential managerial/generic and technical/functional competencies to be performed effectively and efficiently. It has been the practice to describe functions or jobs with 8 to 12 essential competencies from the Competency Data Base. In some special cases it could be recommendable to extend it to 15 and 18 essential competencies.

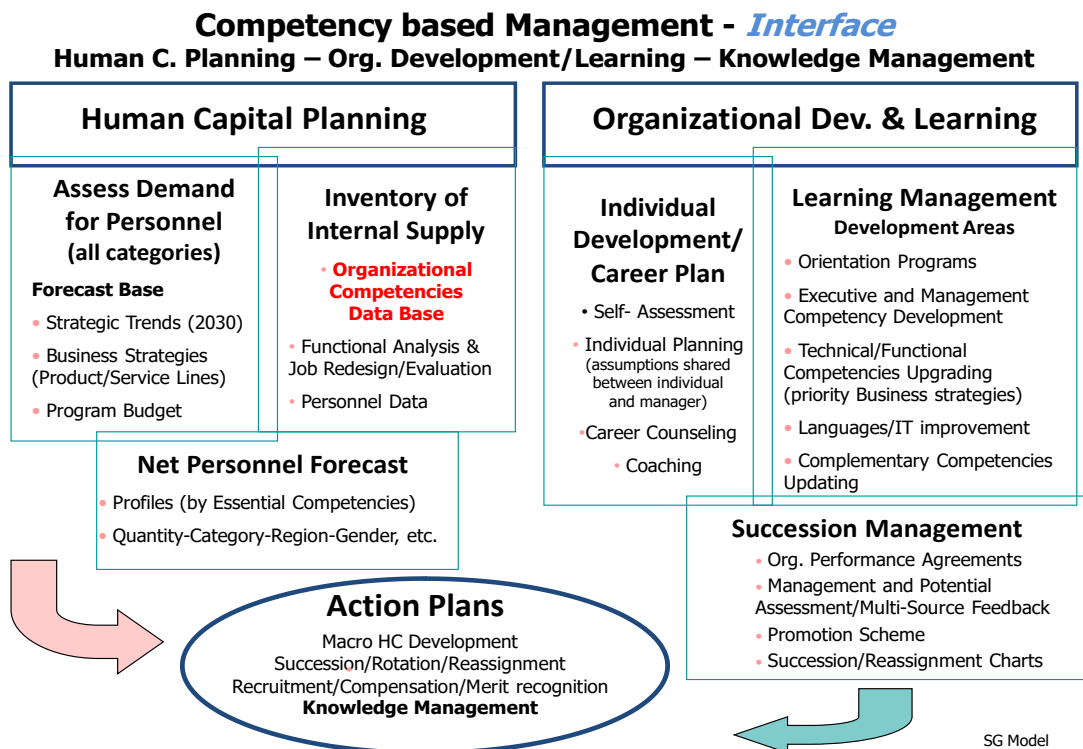
Competency based Management

The Competency based Management – Interface (Graphic 3) provides a graphic display to visualize the essential relation among main applications like Human Capital Planning, Organizational Development & Learning and Nuclear Knowledge Management.

As indicated in the Inventory of Internal Supply box, the **Organizational Competencies Data Base** will become practically the centre of the Competency based Management processes.

Each Nuclear Organization should develop its own Interface according to Management and Staff needs and priorities. From that moment the corresponding flow charts among different selected components could be designed or further developed.

When the basic competency data base is completed and adopted many specialized applications could be further developed by the related Organization. i.e. Competency based Interviews, Competency based Remuneration, Competency based Training, etc.



Conclusions

There can be no question that determining the competencies in a Nuclear organization takes an important amount of upfront work, but the rewards and benefits are far worth it. Management of HHRR will become more effective and efficient, i.e. training will be timely with significant reduction of training hours and costs, promotions or transfer of staff will be more effective, selection of personnel will be more targeted; career development will have a more clear purpose, etc. Also, it will have a great impact on NKM i.e. effective capture and forecast of Knowledge.

A competency based system, while relatively easy to see at a surface level, requires considerable experience, human resources on a broad level, knowledge management practices and behavioral sciences at work place to implement it. The Author strongly believes that Nuclear Organizations would need to establish a formal Knowledge and Competency Management function and carefully select a **Knowledge & Competency Manager**.