

Talent Management in Hydrocarbon industry – A Critical Issue ?

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Abstract

Talent Management is an art to retain talent to sustain challenges for growth, to cope with competition in the industry, to maintain the core competencies, curtail attrition, to progress and develop business. Geoscience domain is dissimilar to other industrial sectors in many aspects. More so in hydrocarbon exploration wherein geological processes which are inherently random control the end results in terms of accumulation. The success is achieved through a continuous process of looking out for anomalies and bringing out correlations among the causatives. The results when achieved as predicted leads not only to success story but also create a talent pool with knowledge which gets nurtured further.

Organizations in hydrocarbon industry need talent pools to ensure repeatability of successes to have competitive edge and to cope with Technological innovation which primarily has resulted in expansion of the Hydrocarbon industry. Though automation of many processes has helped in reduction of time for computations however, decision making plays a critical role in success/failure, wherein the talent steps into the picture. This phenomenon has been realized and attention is drawn towards talent management by Organizations as one of the strategy, starting from recruitment, identification of competencies, succession plan, career growth, building up of talent pools, performance evaluation and rewards to keep up the competitive edge. This paper is an attempt to explore the possibilities of key dimensions namely workforce planning, talent acquisition and retention for understanding actionable insights.

Introduction

Hydrocarbon Industry has grown multi fold over time due to vast applications of the products derived from the crude oil. Early history reveals Petroleum in an unrefined state has been utilized by humans for over 5000 years. Oil in general has been used since early human history to keep fires ablaze and in warfare. Hydrocarbon accumulations takes place in the earth's subsurface due to geological processes and are derived from the carbon rich remains of ancient plankton subjected to heat and pressure in the Earth's crust over hundreds of millions of years are preserved gradually transforming into oil reservoirs. Subsequently, migration and entrapment may occur due to the tectonic activities within the subsurface of the Earth. These processes are inherently of random control in nature. Geoscientists' attention has been focused on to the study of generation migration and entrapment of this wonder mineral, Oil (hydrocarbon). In the 18th century geoscientists concentrated mostly on the study of physical geology (mapping, structural, mineralogical), exploration of metallic ores, coal, gold and precious stones. Technology developments took place as per the needs to identify the natural resources directly and indirectly by using geophysical methods.

Importance of oil to the world's economy evolved gradually, with whale oil used for lighting in the 19th century and wood and coal used for heating and cooking well into the 20th century. The Industrial Revolution generated an increasing need for energy which was met mainly by coal, and with other sources including whale oil. However, when it was discovered that kerosene could be extracted from crude oil and used as a lighting and heating fuel, petroleum was in great demand, and by the early twentieth century had become the most valuable commodity traded on world markets. After World War II ended, the countries of the Middle East took the lead in oil production from the United States. Important developments since World War II include deep-water drilling, the introduction of the Drillship, growth of a global shipping network for petroleum relying upon oil tankers and pipelines. In the 1960s and 1970s, multi-governmental organizations of oil-producing nations OPEC and OAPEC played a major role in setting petroleum prices and policy. Oil spills and their clean-up have become an issue of increasing political, environmental, and economic importance.

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Hydrocarbon Industry and Talent Management

Hydrocarbon Industry structure is broadly categorized into Upstream (exploration, development and production of crude oil or natural gas), Downstream (oil tankers, refiners, retailers and consumers), Services and supply. Advancement of the technology in drilling, production, imaging, civil construction and peripheral services to meet the challenges of the nature in meeting the E & P objectives is marvellous. Improvements in the processes of acquisition processing and interpretation techniques of the data, high tech drilling, offshore technology have made many things possible which were like fiction before. These developments are due to the Research & Development, core competencies build up by the dedicated wings of the industry.

The evolution of hydrocarbon industry into modern day high technology gamut with advances in technology are as interesting as study of History. Integrated geo-scientific data is studied through a continuous process to look out for anomalies and to bring out correlations among the causatives, result in a designed geological model. These geological models are proved through successful drilling. On arriving at predicted results of the model, the event leads not only to success story but also create a talent pool with knowledge. Organizations nurture the gained knowledge further to build-up competencies and to obtain competitive advantage.

Hydrocarbon industry operates in diverse and harsh geographies, it is difficult to attract young talent mostly aspiring for white collar jobs like that of the Information Technology industry. Attracting and retaining the best employees lies in the organization's ability. Oil price variations due to increase in demand, geopolitical reasons, recession, caused voids of human resources opting career in Oil industry. In other words people have chosen alternate upcoming sectors as their choice of profession. Conversely on the rising oil prices and globalization which attracted new areas of exploration has caused talent hunt and new opportunities for the aspirants to compete for a fast track career growth. Attrition, brain drain were a serious issues during the last decade which the organizations faced. Figure 1 shows the crude oil price variation, year wise average crude prices of OPEC from 1960.

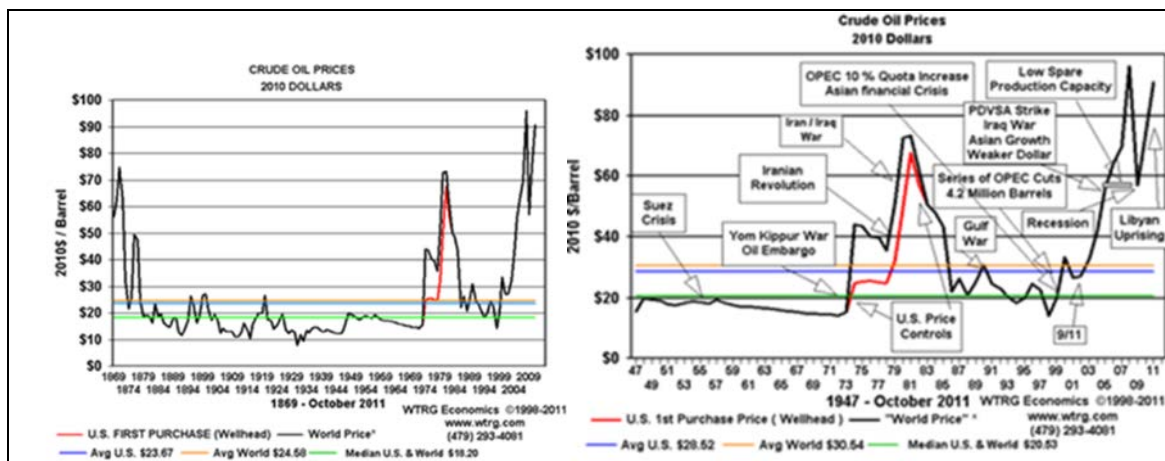


Fig1. Crude oil price a) variation since 1869 to 2011 b) variation during 1947 – 2011 with causatives (sources WTRG Economics)

Year	USD/bbl	Year	USD/bbl	Year	USD/bbl
1960	1.63	1979	29.19	1997	18.86
1961	1.57	1980	35.52	1998	12.28
1962	1.52	1981	34	1999	17.44
1963	1.5	1982	32.28	2000	27.6
1964	1.45	1983	29.04	2001	23.12
1965	1.42	1984	28.2	2002	24.36
1966	1.36	1985	27.01	2003	28.1
1967	1.33	1986	13.53	2004	36.05
1968	1.32	1987	17.73	2005	50.59
1969	1.27	1988	14.24	2006	61
1970	1.21	1989	17.31	2007	69.04
1971	1.7	1990	22.26	2008	94.1
1972	1.82	1991	18.62	2009	60.86
1973	2.7	1992	18.44	2010	77.38
1974	11	1993	16.33	2011	107.46
1975	10.43	1994	15.53	2012	109.45
1976	11.6	1995	16.86	2013	105.87
1977	12.5	1996	20.29	2014	105.35
1978	12.79				

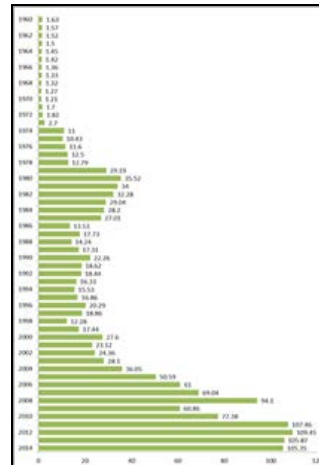
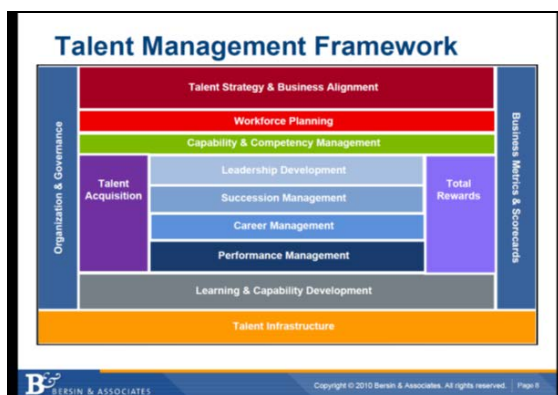


Fig 1.c) OPEC Year wise Average Crude prices-US\$/barrel

Organizations realized that Human resource management is not only a strategic but also a crucial issue of concern to retain resourceful employees for success in business. Personal management functions have extended into Human resources domain to meet the organizational goals/strategy for better Performance, identification of competencies and creation of competitive advantage. Fossil fuels would continue to dominate for energy at least for another six decades unless there is an announcement of a break-through of an economical alternate energy resource. Quest for hydrocarbon resources worldwide has brought in not only advancement in technology but also in intercontinental alliances, strategic partnerships, Joint ventures, mergers, acquisitions, integration etc. Hunting for hydrocarbon resources through these ventures have also warranted for competent human resources which resulted in attrition and rat race for attractive compensation and career growth. Under the changing scenario, talent management has become an important task for the organizations. Key functions of development of identified competencies through training, succession planning /career growth and to retain the developed talent and nurture for the future of the organization.

Key areas to focus for a successful talent management as revealed by several researches are on Recruitment, competency mapping and development, multi-level development, Leadership, succession planning, concepts of on-boarding, SMART(Specific, Measurable, actionable, realistic and timely) etc. Talent Management teams can play major role in workforce planning, acquisition and retention to attain the Organizational strategic goals.

Several concepts and practices are described by the pioneer researchers and consultants viz ., Cornerstone On Demand, Inc, SHL Group Limited, UK., Deloitte Center for Energy Solutions, Development Dimensions International, Inc.,Bersin & Associates bring in awareness on the issue. Karen O'Leonardo, Principal Analyst, Bersin & Associates in the presentation on Talent Management: Benchmarks, Trends, & Best Practices has shown the talent management Framework Integrated Talent Management concept shown in Fig 2.



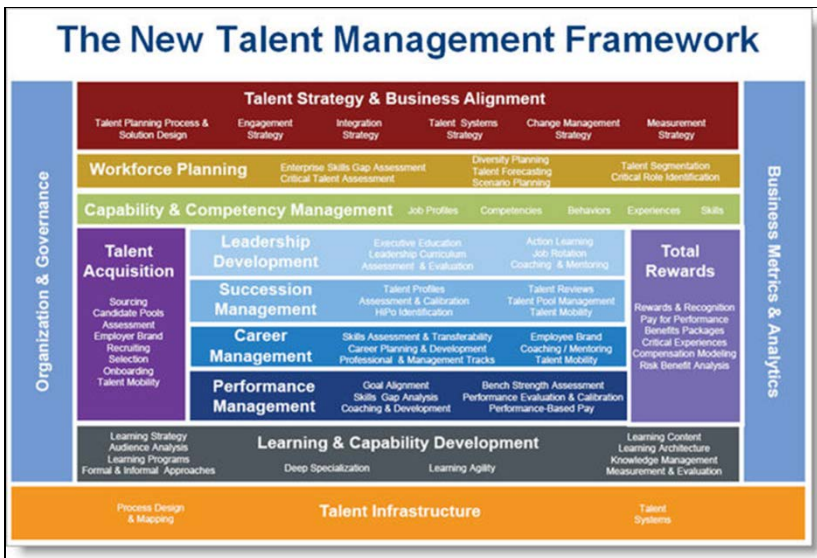


Fig 2. Talent Management Framework , New Talent Management Framework and Integrated Talent Management as per Bersin & Associates

Workforce planning and Acquisition :

Identification of necessary competencies at the stage of recruitment and selection process leads to successful performance in every job. Long term and short term objectives/Goals must be defined so as to plan for the required workforce, it would be a guiding factor to plan for competencies required, their availability, strategy(how and when).

There is a vast demand for talent in the hydrocarbon industry figure.3 shows the future talent friction points. The industry is not only challenging but also adventurous. On reaching the goals would even be thrilling. For creating the instinct in the youth, proper awareness needs to be propagated. Towards this, measures like academia and industry interactions through knowledge societies, incorporation of suitable curriculum etc., would be worthwhile.

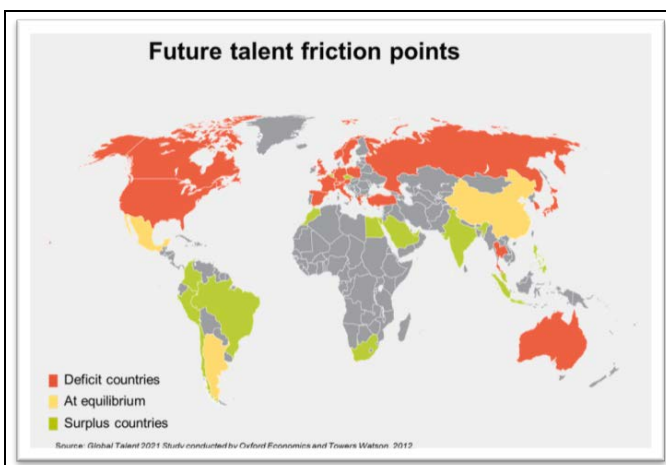


Fig.3 New Era for Talent Management - Today's challenges and tomorrow's opportunities (2013 HR Strategic Talent Management Forum) HRPS(HR People & Strategy)

Creation and usage of a knowledge base of the successful performers' quality may turn out to be very cost effective. Enabling adoption of insights and experiences in an organization which comprise knowledge, either embodied in individuals or embedded in organizational processes or practice in other words dissemination of Knowledge, which has been defined as the process of systematically and actively managing and leveraging the stores of knowledge in an organization [Laudon and Laudon,1991],or the framework for discovering,

capturing, transmitting, and reusing knowledge to gain advantage [Butler Group,1999]. An important and popular distinction in industry is between that of knowledge which is explicit i.e, readily available – and that which is tacit – embedded in a person’s experience and often difficult to articulate clearly [Polanyi,1966]. The former are amenable to IT management; the latter require contact with people like Subject Matter Experts, Communities of Practice, etc. The latter can be attained by creation of a knowledge bank and facilitating enablers.

Creation of enablers and culture:

Experience of hydrocarbon industry particularly with reference to Exploration & Production companies and their operating procedure is an admixture of divergence and congruency against a back drop of work culture variances. The skill and knowledge used for the insight of exploration is institutional knowledge based largely on years of experience and best practices. Talent management teams can facilitate knowledge societies as a continuum of tacit knowledge rubrics from individual to industry and suggest ways and means for institutionalizing knowledge capturing for future use and operations. Employees with aptitude for research can be provided a platform to carry out their studies even after their superannuation which may keep the scientific thinking alive and provide a significant opportunity.

Retention of acquired talent and nurturing:

Acquired talent needs to be enriched with adoption of standard practices. Hydrocarbon industry is an established one with every company having its own characteristic pattern of deeply ingrained standard operating procedures (SOP) & Manuals. Talent or capabilities are potentially important resources of competitive advantage. Creation of effective communication network, teams with specific tasks to venture out innovative/challenging projects. Innovation in designing methods to manage aging reservoirs/brown fields for enhancement of production, reduction of time between data acquisition (G&G) and putting the discovery on production, effective industry Health Safety Environment(HSE) practices etc.

Competency Mapping to integrate personnel planning and their development. It helps manage personnel by talent, instead of trying to manage by the job position. Competency Mapping aids in better understanding the full capabilities of the workforce in order to more effectively plan and meet the organizational goals. Organizations need to manage two types of competencies. One is the primary competency to meet the business objectives. The other is the individual employee’s talent, knowledge and potential that are readily available without any further development or learning. Individuals’ assignments must also address to tap inherent talent than merely to fill up vacancies, so as to motivate and create job satisfaction. Identifying and placing the right people in right positions at the right time dramatically increases their motivation and commitment. It builds a strong connection between employees and the business, helps in filling up of key vacancies economically and efficiently. It also reduces employee turnover, avoiding the cost, disruption of finding a replacement and the accompanying loss of critical knowledge.

Career growth and development must be based on the abilities, creating an atmosphere for increasing their engagement and commitment to the organisation. Appreciation of good deeds through awards and rewards encourage involvement of employees. Provision to acquire higher education, exposure as per the needs of the employee with reference to organizational relevance through training, seminars, work associations provide skill development opportunity. Database of human resources with their competencies and periodic profile up gradation would enable catering to effective business perspective, recruitment, succession planning through development. Ensuring social security for the employee and their kin, health care, education facilities would be a binding relationship of belongingness.

Leadership Development :

A successful talent management program develops personnel not only for their current roles, but also for transition to the next assignment or elevated position. Team building activities are to be performed to inculcate a vision for focusing on broader perspectives. Leadership development can be achieved by

investing in the most promising candidates by building competency to identify, resolve complexities through effective communication. Farming of talent and motivation, grooms leaders in-house with easy acclimatisation also reduces dependence on recruitment from outside. Succession planning is an essential factor for running an organization smoothly and it has to be done for all the key levels. Lack of attention to these key actors may force into outsourcing of the jobs which were otherwise performed efficiently and economically.

Conclusion :

Talent management in hydrocarbon industry has become an integral need for the organizations to effectively function and meet their business objectives and strategic goals. Globalization, competition to attain/ attract talent pools due to voids of human resources created by the fluctuations in the international crude oil prices, geopolitics, attractions of white collar jobs confined to cosy work places with less hazards and similar factors have warranted to realize talent management, a new dimension to HR function for integration with business. Preserving the knowledge bank of better practices, creation of organisational culture to care for the human resources through identification of competencies and development in accordance to the strategic goals of the organisations would strengthen competitive edge. Improvisation of the processes, safe working practices adhering to HSE concerns, succession planning and leadership development would enable steering smoothly in the changing scenarios of the industry. Lack of attention to these factors may lead to attrition, brain drain, leadership crunch landing into crisis of Talent, making it a CRITICAL issue at the end.

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