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BEHAVIOR BASED SAFETY IN ORGANIZATION
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Corresponding Author:	Sajeev Nair MUMBAI, INDIA
Corresponding Author Secondary Information:	
Corresponding Author's Institution:	
Corresponding Author's Secondary Institution:	
First Author:	Sajeev Nair
First Author Secondary Information:	
Order of Authors:	Sajeev Nair SAJEEV NAIR, Ph D research scholar
Order of Authors Secondary Information:	
Abstract:	BBS-Behavior Based Safety is one of the best and latest safety approaches. BBS is a data driven decision-making process .BBS is a teamwork; it is companywide, and people driven

BEHAVIOUR BASED SAFETY IN ORGANIZATIONS

Author:- Sajeev Kumar Nair – Ph D Research scholar (Senior Vice President , Reliance Industries Limited, Mumbai)

Internal Guide- Dr. Nehal Siddiqui- Asst. Professor, UPES-Dehradun

What is Behavior Based Safety?

- Behavior Based Safety is one of the best and latest safety approaches.
- BBS is a data driven decision-making process.
- BBS is teamwork; it is companywide, and people driven.
- BBS increases safe behaviors and reduces injuries, illnesses and related financial costs.
- Reflects a proactive approach to safety and health management.
- Reflects a proactive approach to injury prevention.
- Focuses on at-risk behaviors that can lead to injury.

Eight aspects that behavioral safety:

1. PPE
2. Housekeeping
3. Using tools and equipment
4. Body positioning / protecting
5. Material handling
6. Communication
7. Following procedures
8. Visual focusing


Consequences of a Behavior Bases Program


They say “Most Effective” Personal protective equipment
↓
Training and Procedures
Warnings
Engineering controls
They say “Most Effective” Elimination &/or Substitution

BBS CONCEPTS:

- BBS is collecting observation data on specific behaviors.
- BBS is “Safety for self & others”.
- BBS believes that each employee can make a difference in organizational safety.
- BBS believes that what gets measured gets done.
- BBS is a data driven decision-making process.

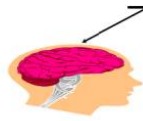
Human behavior is both:

⇒ Observable 

⇒ Measurable 

therefore

Behavior can be managed !

Attitudes 

are inside a person's head -
therefore they are not observable or
measurable
however
*Attitudes can be changed by
changing behaviors*

Reasons why we focus First on Attitudes:

- Most believe that attitude is important
- Attitude has the power to change behavior

- An attitudinal approach appeals to “common sense
- Therefore, we are tempted to focus on attitudes first.

BBS is not

- BBS is not punishment or disciplinary action.
- It does not focus on incident rate, or personal prejudice.
- BBS does not substitute or replace process evaluation, incident analysis, or environmental solutions.
- BBS is not a top-driven but bottom-up approach.

How to start implementation of BBS?

- BBS success depends upon a strong steering team, which clearly defines its roles and Responsibilities.
- Initially BBS can be implemented in one or two departments and then introduce to other
- Departments.

3-TYPES OF BEHAVIORS

- Enabling Behaviors
- Non-enabling Behaviors
- Difficult Behaviors

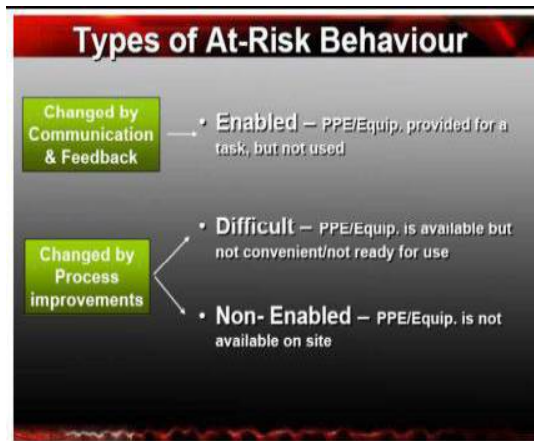
Types of At-Risk Behavior

➤ **Changed by Communication& feedback**

- Enabled-PPE/equip. provided for a task, but not used.

➤ **Changed by Process improvements**

- Difficult - PPE/equip. is available but not convenient/not ready for use
- Non-Enabled - PPE/equip. is not available on site



What Problems may arise during Implementation of BBS?

- What will I get? The observer may feel that what he would get in return.
- Whether observe will take in right spirit?
- Fear of workers' buy-in to BBS;
- Taking advantage of BBS – not doing regular work;
- Remove existing unsafe conditions first;
- Integrating BBS with other committees in organization;
- Manpower / extra-time for BBS;
- Huge documentations;
- Interpersonal communication; and
- Launching problem in introducing BBS.

Where BBS started?

- ❑ In India, Essar, ITC, Reliance, CFCL, Bayer, HPCL, ONGC, M & M, Sandoz, Tata, Adani Groups and many other corporate have started implementing BBS.

Benefits of BBS to Employees.....

What Employees want:

- ❑ A safe workplace
- ❑ A positive Workplace
- ❑ To take Care of One Another
- ❑ To stop the Hurt!

Benefits of BBS to management

What Management wants:

- ❑ An accident free workplace
- ❑ Empowered employees
- ❑ Pro-active rather than re-active work process
- ❑ To minimize direct and indirect costs and threat of liability from accidents.

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Corresponding Author: Mr. Sajeev Nair, Ph D scholar

Corresponding Author's Institution: RIL

First Author: Sajeev Nair, Ph D scholar

Order of Authors: Sajeev Nair, Ph D scholar

Abstract:

Safety Culture and competency development is the set of enduring values and attitudes regarding safety issues, shared by every member of every level of an organisation. Safety Culture refers to the extent to which every individual and every group of the organisation is aware of the risks and unknown hazards induced by its activities; is continuously behaving so as to preserve and enhance safety; is willing and able to adapt itself when facing safety issues; is willing to communicate safety issues; and consistently evaluates safety related behaviour.

Cover Letter

Safety culture Development in Industries:

Author - Sajeev Nair, Senior Vice president – Learning and development Reliance Industries Limited, Mumbai- PhD Research scholar- UPES.

Guide - Dr. Nehal Siddiqui, UPES-University of Petroleum and Energy studies - Dehradun

Safety Culture and competency development is the set of enduring values and attitudes regarding safety issues, shared by every member of every level of an organisation. Safety Culture refers to the extent to which every individual and every group of the organisation is aware of the risks and unknown hazards induced by its activities; is continuously behaving so as to preserve and enhance safety; is willing and able to adapt itself when facing safety issues; is willing to communicate safety issues; and consistently evaluates safety related behaviour.

***Title page with author details**

Safety culture Development in Industries

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***Highlights (for review)**

Highlights

Safety Culture and competency development is the set of enduring values and attitudes regarding safety issues, shared by every member of every level of an organisation.

Safety Culture refers to the extent to which every individual and every group of the organisation is aware of the risks and unknown hazards induced by its activities; is continuously behaving so as to preserve and enhance safety; is willing and able to adapt itself when facing safety issues; is willing to communicate safety issues; and consistently evaluates safety related behaviour.

To support the assessment and management of Safety Culture, the six main components (Called Characteristics) of Safety Culture are described:

- ❑ Commitment
- ❑ Behaviour
- ❑ Awareness
- ❑ Adaptability
- ❑ Information
- ❑ Justness

***Manuscript without author identifiers**
[Click here to view linked References](#)

Safety culture Development in Industries

Author - Sajeev Nair, Senior Vice president – Learning and development Reliance Industries Limited, Mumbai- Phd Research scholar- UPES.

Guide - Dr. Nehal siddiqui, UPES-University of Petroleum and Energy studies –

Dehradun Safety Culture and competency development is the set of enduring values and attitudes regarding safety issues, shared by every member of every level of an organisation. Safety Culture refers to the extent to which every individual and every group of the organisation is aware of the risks and unknown hazards induced by its activities; is continuously behaving so as to preserve and enhance safety; is willing and able to adapt itself when facing safety issues; is willing to communicate safety issues; and consistently evaluates safety related behaviour. To support the assessment and management of Safety Culture, the six main components (called Characteristics) of Safety Culture are described:

- Commitment
- Behaviour
- Awareness
- Adaptability
- Information
- Justness

The various types of organizations have their own specific organizational structure, processes and operational environment. These domain-specific circumstances necessitate a domain-specific approach to Safety Culture. For this reason, the paper provides guidance on how the Characteristics may be assessed through the use of domain-specific questions. This approach allows for a domain-specific assessment

and management of Safety Culture based on a framework that is common to all organizations bearing a responsibility for aviation safety.

How to Create a Culture for Risk Management:

- To create a culture that combines healthy risk taking with effective risk management, the leaders need to set in place a risk-management system in place, promote and reward the right practices and most importantly employ the right people. The organization culture needs to promote risk taking whilst at the same time maintain risks under control without impeding the growth of the organization.
- Successful companies develop and adhere to an effective risk management system that enables them to ride through difficult and uncertain times and help minimizing risk exposure across the organization whilst maximizing the return in any of their business activities. As far as risks are concerned, the most critical gaps are not related to the risk management tools used to monitor risk exposure, but rather rated to people's roles and the decision-making processes within an organization.
- Organizations need to realize and maximize short-term profits places and intense pressures on short-circuiting the risk management process to approve risky business dealing or transactions.
- Such behaviors undermine the core of the risk management discipline throughout the company. Judging by the impact of the current credit crisis on companies across all sectors, it is evident that the severity level on businesses has varied significantly; companies possessing strong risk management culture have maintained strong positions and seem to weather the credit crisis fairly well.

- Such companies appear to be immune by building sharp and effective lines of defense against unnecessary risk taking, and support individuals who exhibit risk awareness and set an example for others to follow.
- Such organizations embrace risk management and view it as a competency that protect, if not create, value, as opposed to an obstacle to profits. In order to understand, define, and actively manage risk appetite, organizations need to have a core of executive directors on the board with solid business and risk expertise.
- Such executives are expected to appreciate the risks being taken and understand the tradeoffs between risk and return during the decision making process. Furthermore, the board must be willing to take responsibility and accept the implications of major risk making decisions. The risk management process is a collective responsibility and no single individual can solely be responsible for identifying and mitigating all possible causes of unacceptable losses.
- The goal is to ensure that no one assumes that risk is not his responsibility. One approach is to create a dedicated department for risk management and to consistently place risk management at the top of the executives' agenda, where they can check compliances, offer opinions and recommendations.
- The risk management department has two distinct responsibilities for (a) developing sustainable strategies and tactics to keep the right balance between risk and return, and (b) providing senior management with an independent controlled mechanism should managers fail to adhere to the risk management systems. To earn respect from their managers, risk managers must be competent and able to challenge non-compliances, and help executives understand the risk scenarios.
- Safety culture development is complex, and slow. Organisations (and indeed industries) will typically be at different levels of safety culture development across

different facets of their operations, due to location conditions. This is important to recognize as safety culture development requires certain key elements to be in place, and working reasonably well, before the next steps can be taken – trying to run before you can walk nearly always ends in frustration and failure.

This has some significant messages:

- Safety interventions need to be appropriate to the prevailing culture or they are very likely to fail (ie. management commitment to health and safety improvement is not ‘felt’ by the organisation).

- Safety culture development can be thought of in terms of an evolutionary ladder – key elements need to be in place before the next steps can be taken. Focus on the few key enablers that will move the culture towards the next level – do not attempt to address all the issues that have been identified; keep things simple and do not pursue things that are not working.
 - A *proactive* first step an organisation can take to gauge the ‘maturity’ (or ‘health’) of its ‘systems’ is to undertake a safety culture assessment. This will enable existing strengths to be identified and built upon in order to move the culture to the next level.
 - Even when all the key elements/components are in place and working well, safety performance can ‘plateau’ or even decline. Therefore sustained focus is required to ensure continuous improvement. Attitude surveys that measure the ‘what people feel’ dimension of organizational safety culture (such as the self-assessment questionnaire in this toolkit) are only a starting point; they need to be followed up with in-depth discussions with staff to understand what is driving the responses, and supplemented with detailed examination of company data, safety systems and objective measures of actual ‘safety behaviors’.

In Safety culture assessment toolkit, an organisation's overall level of maturity is determined on the basis of their maturity on each of the following 11 key safety culture components:

- Management commitment
- Communications
- Training
- Organizational learning
- Barriers and influences
- Employee participation
- Organizational commitment
- Risk taking behaviors
- Workmates influence
- Supervisor's role
- Personal role

Five levels of safety culture

Key features of each of the 5 levels of safety culture maturity underpinning RSSB's Models are given below:

Maturity Level	Key Features
Level 5 – Continually improving	<p>The prevention of all injuries or harm to employees is a core company value.</p> <ul style="list-style-type: none"> ➤ The organisation has a sustained period (years) without a recordable accident or high potential incident – but there is no feeling of complacency. ➤ The organisation uses a range of (leading and lagging) indicators to monitor performance but it is not performance driven – it has confidence in its

	<p>safety processes.</p> <ul style="list-style-type: none"> ➤ The organisation strives to be better and find better hazard control approaches. ➤ All employees share the belief that health and safety is a critical aspect of their job and accept that prevention of non-work injuries is important. ➤ The company invests considerable effort in promoting health and safety at home.
<p>Level 4 - Cooperating</p>	<p>The majority of staff is convinced that health and safety is important –from both a moral & economic view point.</p> <ul style="list-style-type: none"> ➤ Management recognizes that a wide range of factors lead to accidents – and the root causes are likely to stem from management decisions. ➤ Front-line staff accepts responsibility for their own and others’ health and safety. ➤ The importance of all employees feeling valued and treated fairly is recognized. ➤ The organisation makes significant effort into proactive measures to prevent accidents. ➤ Safety performance is actively monitored using all data available. ➤ A healthy lifestyle is promoted and non-work accidents are also monitored.
<p>Level 3 – Involving</p>	<p>Accident rates are low, but have reached a plateau.</p> <ul style="list-style-type: none"> ➤ Organisation realizes employee involvement is essential for safety improvement. ➤ Management recognize that a wide range of factors lead to accidents – often stemming from

	<p>management decisions.</p> <ul style="list-style-type: none"> ➤ A significant proportion of frontline employees are willing to work with management to improve health and safety. ➤ The majority of staff accepts personal responsibility for their own health and safety. ➤ Safety performance is actively monitored and the data used.
<p>Level 2 – Managing</p>	<p>Safety seen as a business risk and management time and effort devoted to accident prevention.</p> <ul style="list-style-type: none"> ➤ Safety focus is on adherence with rules, procedures and engineering controls. ➤ Accidents seen as preventable. ➤ Management perceive that the majority of accidents are solely due to the unsafe behaviour of front-line staff. ➤ Safety performance measured with lagging indicators (eg. injury rates). ➤ Safety incentives based on reducing loss time incidents. ➤ Senior managers only become involved in health and safety if accidents increase; punishment likely to be used. ➤ Accident rates are near the industry sector average – but tend to have more serious accidents.
<p>Level 1 - Emerging</p>	<p>Safety focus is on technical and procedural solutions and compliance with regulations.</p> <ul style="list-style-type: none"> ➤ Safety not seen as a key business risk. ➤ Safety department perceived as being primarily

responsible for safety.

- Many accidents seen as unavoidable.
- Most front line staff not interested in safety – only used as a lever on other issues.

Safety Culture Assessment

Measuring safety culture seems to be the equivalent of the “holy grail” for the safety world, made more difficult by the lack of an agreed definition and scope. However, the assessment of safety culture is key to measuring key elements of safety culture and identifying an organisation’s current level of development (or ‘maturity’) in order to learn and improve.

There are a variety of different assessment methods including:

- Safety attitude surveys (using questionnaires to elicit workforce attitudes);
- Safety management audits (using an audit process and trained auditor to examine the presence and effectiveness of safety management systems);
- Safety culture workshops (involving a cross-section of the workforce to consider perceptions of the safety culture and elicit improvement ideas);
- Leading (and lagging) safety performance indicators (e.g. analyzing data on the number of employee safety improvement ideas suggested and actioned, the number of safety tours performed, or root cause analysis of near misses). The safety culture assessment and improvement toolkit provided on this website uses a safety culture assessment questionnaire to measure employee attitudes, values and perceptions towards safety and safety management which can be administered to a cross section of your company.
- The toolkit then allows you to analyse the results of the questionnaire and indicates your level of safety culture development. From here, the results will link directly to both general and specific improvement guidance and to examples of good practice.

The objectives of a safety culture assessment

There can be several objectives for conducting a safety culture assessment, and these can affect the choice of the most appropriate method. The objectives can include:

- Identifying areas that need improving;
- Identifying strengths and weaknesses;
- Benchmarking – both within the industry and more generally;
- Seeking the views of staff and identifying their concerns;
- Seeking improvement suggestions from staff;
- Raising awareness and profile of safety within the company.

A consequence of any major safety culture assessment is that it raises expectations within the workforce about management’s response to the findings. This can be very useful if the company’s response to the findings is prompt, positive and meets workforce expectations – this will then help to demonstrate management’s commitment and genuine interest in safety, and hence is likely to “kick start” further improvement.

Failure to respond adequately – either too little, too late, or not communicated, will do more harm than if the assessment had not been undertaken at all. Small scale, low profile reviews can be useful to inform management on options and strategies prior to, or instead of a full safety culture assessment. Survey approaches are very good at allowing all employees views to be sought, but are of limited use in obtaining improvement ideas.

Workshops are very good for obtaining employee concerns and improvement ideas, but frequently only include a selection of employees.

Safety climate/attitude surveys

Safety climate/attitude surveys	
Description	<ul style="list-style-type: none">• Questionnaires designed to elicit workforce attitudes on key aspects of safety culture.• Generally the whole workforce is surveyed.

<p>Advantages</p>	<p>Allows all the workforce's views to be considered:</p> <ul style="list-style-type: none"> • High profile – and if used correctly can help to enhance belief in the company's commitment to health and safety. • Reveals current attitudes & perceptions towards safety and safety management. • Can clearly point to issues that need to be addressed. • May be capable of identifying issues in some aspects of the safety management arrangements.
<p>Limitations</p>	<ul style="list-style-type: none"> • May only identify some inadequacies of the safety management systems. • High profile raises workforce expectations about responses –can lead to management losing credibility if response perceived as being inadequate. • High response rates required to ensure results fully reflect organisation's culture – this can be difficult to achieve unless implemented well. • Results often do not directly identify what underlying issues cause responses hence: <ul style="list-style-type: none"> - need to do further investigations to interpret results; - understanding the problem does not necessarily identify how to improve.

<p>When and how to use</p>	<ul style="list-style-type: none"> • As part of a committed safety culture improvement programme as a high profile intervention AND when prepared and committed to respond to the outcomes. • Repeat surveys (every 18 months – 2 years) for benchmarking and sign of continuing commitment. • As a way of enabling all employees to participate in a safety improvement activity. • As a means of demonstrating management commitment BUT only if prepared to respond promptly and fully to outcomes. • DO NOT use if uncertain what issues are likely to be revealed, or without planning, resourcing and being committed to address outcomes.
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Safety management audits

<p>Safety management audits</p>	
<p>Description</p>	<ul style="list-style-type: none"> • Audit processes devised to examine key aspects of the safety management system. • Based on underlying models of safety management those include aspects of safety leadership, competence and commitment to safety. • Normally look for both presence of a system and its effectiveness. • Use trained or accredited auditors – normally external – to perform audits.
<p>Advantages</p>	<ul style="list-style-type: none"> • Provide a detailed and extensive examination of the safety management process. • Reveals many tangible aspects of safety culture and management commitment to safety.

Limitations	<ul style="list-style-type: none"> • Does not reveal much about workforce attitudes and behaviors. • Debatable how well underlying SMS model fits some organizations/industry sectors. • Does not give opportunity for all employees to give their views and participate in the process.
When and how to use	<p>Useful for a comprehensive review of safety management systems.</p> <ul style="list-style-type: none"> • Approach to HSE advisors can be used effectively to drive the organisation's safety culture – ethos of continual improvement against elements; element leaders/champions etc.

Safety culture workshops

Safety culture workshops	
Description	<ul style="list-style-type: none"> • Series of workshops with cross-sections of the workforce. • Participants consider and debate their perceptions on key aspects of safety and safety management. • Workshops normally elicit views on improvement ideas.
Advantages	<ul style="list-style-type: none"> • Powerful way of eliciting/exposing differing perceptions within an organisation. • Provides very useful insights into many key aspects of safety culture. • Enables improvement ideas to be identified. • Allows employees to participate and raises profile of safety culture. • Flexible – allows key issues to be explored as appropriate.
Limitations	<ul style="list-style-type: none"> • Only involves participation of a limited number of employees hence may not reflect views of whole organisation.

	<ul style="list-style-type: none"> • Does not generate responses on a wide range of questions. • Can be difficulties conveying the outcomes of the workshops to senior managers – especially if not present (lose emotions etc.). • High profile raises workforce expectations about responses can lead to management losing credibility if response perceived as being inadequate. • Be careful to ensure that confidentiality is maintained.
When and how to use	<ul style="list-style-type: none"> • As part of a committed safety culture improvement programme as a high profile intervention AND when prepared and committed to respond to the outcomes. • An alternative to a survey approach. • As a means of demonstrating management commitment BUT only if prepared to respond promptly and fully to outcomes. • DO NOT use if uncertain what issues are likely to be revealed, or without planning, resourcing & being committed to address outcomes.

Safety Performance Indicators

Safety Performance Indicators	
Description	<ul style="list-style-type: none"> • Measures of safety performance, eg. reportable incidents; loss time injuries etc. • Key indicators of aspects of safety culture, eg. Number of safety tours performed; safety observations made; near misses reported etc.
Advantages	<ul style="list-style-type: none"> • Selected leading indicators can be very useful for monitoring key inputs that will enhance safety culture, eg. number of safety tours, safety observations. • Safety performance outcome (or ‘lagging’) indicators’ (eg. Lost

	<p>Time Injuries, etc.) give insights into the current safety culture at a macro level.</p> <ul style="list-style-type: none"> • Selected combinations of indicators can be very useful to overall monitoring of an organisation's safety culture – can help to prompt more detailed investigations.
Limitations	<ul style="list-style-type: none"> • Do not reveal underlying attitudes at all. • Do not readily identify the underlying problems – just show the outputs. • Do not give any insights into how to improve.
When and how to use	<ul style="list-style-type: none"> • Should be a key part of the overall safety monitoring arrangements. • Can prompt need for further investigations and/or action.

What are the benefits?

- ✓ A safety culture assessment allows an organisation to better understand how its people Perceive safety and the company's approach to health & safety management. It allows the organisation to identify both strengths and weaknesses that then enable it to continuously monitor and improve its approach to health and safety.
- ✓ The most important reason for understanding a company's safety culture is because it has a direct impact on the safety of its employees, contractors and the public. Several high profile accidents in the rail and other industries have highlighted the consequences of poor safety cultures. The benefits of an improved safety culture are improved safety performance and reduced accidents.
- ✓ The improved management processes and attitudes to work involved in developing a good safety culture will also have benefits external to safety, such as improved reliability and performance, and reduced costs due to the reduction of errors. The industry regulator, The Office of Rail Regulation (formerly HMRI) believes a good safety culture is vital for safety performance and expects rail companies to perform safety culture assessments and act on their findings

Robust Competency Development

To develop a robust HSE (Health Safety and Environment) competency a management system, we need to do the following important thing,

- Develop a HSE competency frame work
- Develop HSE Competency catalogues for various roles
- Develop HSE Competency assessors who can carry out the assessment
- Start doing the assessment as per standard
- Identify the HSE gaps or Training needs
- Fill the gaps through blended learning approach

References:

- Adapted from the Federal Aviation Administration Office of System Safety, FAA System Safety Handbook, Chapter 3, Principles of System Safety, December 30, 2000, Chapter 4, Pre-Investment Decision Assessment
- Roughton, James, Nathan Crutchfield; Job Hazard Analysis. A Guide to Compliance and Beyond, Butterworth-Heinemann, 2008
- Roughton, James; Developing an Effective Safety Culture: A Leadership Approach,
- Butterworth-Heinemann, 2002

Related Articles:

- [Real-World Risk Assessment Examples \(brighthub.com\)](http://brighthub.com)
- [ASME-ITI Issues Risk Analysis Standard for Natural and Man-Made](#)
- [Hazards to Higher Education Institutions \(eon.businesswire.com\)](http://eon.businesswire.com)
- [Risk assessments - doing that all the time! \[Bob Brotchie\] \(ecademy.com\)](http://ecademy.com)
- <http://easa.europa.eu/essi/ecast/main-page-2/sms/>
- http://EzineArticles.com/?expert=Yahya_Shakweh
- <http://www.safetyculturetoolkit.rssb.co.uk/safety-culture-information/safety-culture-assessment/what-are-the-benefits.aspx>

***Biographical sketch of all authors**

Let me introduce myself. I am Sajeev Nair, qualified Graduate Engineer, Chartered Engineer, Fellow of Institution of Engineers, with additional International Qualifications in HR- training and Competence Assessor and Verifier qualifications from Edexcel-UK (D32/33/34) along with other post graduate qualifications including Human Resources Management Diploma. I am a Ph D research scholar. I have more than 29 years of Professional experience from reputed organizations from Shell Gas and Power for LNG project - starting from scratch to start up, Petroleum Development Oman-(shell OPCO explorationm and Production), Muscat, Exterran – US, ADGAS-Abu Dhabi Gas Liquefaction company Ltd Abu Dhabi (LNG/LPG/ Sulphur production), KELTRON and other Engineering Education Institutions.

I am currently employed as a corporate **Senior Vice President – Learning and organization Development** in a Major Group comprises of petrochemical Manufacturing, Refinery, E&P, oil and gas Organization in India. Before that I was working in a Major oil and Gas service company in USA as Corporate **Senior Training and Development Manager- Global Talent Management-** stationed at Dubai , responsible for the training and Development activities of Company’s entire Eastern Hemisphere locations . Prior to that I was working as **Senior Corporate L&D Advisor (training and Competence Dev)** in Abu Dhabi Gas Liquefaction Company limited (ADGAS)in Abu Dhabi (LNG Plant) , prior to this job I was working as **Training Manager in SHELL GAS AND POWER (ROYAL DUTCH SHELL and TOTAL Group CO)** for an LNG Terminal in Hazira, India from 3 rd June 2003 to 10 th Nov 2005. I was having 9 years professional experience in **PETROLEUM DEVELOPMENT OMAN- SHELL Operating Co, MUSCAT as Senior Training and Development coordinator** prior to join in SHELL-India.

CV of Sajeev Nair



Er. SAJEEV K S NAIR. CEng, MISE, ASME, MIEE, DHRMS, MIE, Assessor & Verifier –Edexcel UK, FIE, Lead Auditor, Ph D –Research scholar

Phone +91 7738181950

Email: sajeevksnair@yahoo.com

Senior level assignments in Corporate Training and Development, Talent Management, Competence assessment, Training quality assurance & verification, People development, Organisation development, Selection, Recruitment Graduate Engineers, Managers, Operators and Technicians, conduct and organise HSE Training and building Core competency profiles, Project Management training, Company's need based Career Development programme, coaching, Mentoring, E-learning and on the job training systems,

PROFESSIONAL PROFILE

- Over 29 years of extensive experience in Corporate Training and Development, Competence Assessment and assurance system, Organisation development, HRM, HSE, Infrastructure set up, commissioning, start up and operations, Engineering, selection, recruitment HR, on the job training, operations and maintenance management in Leading Major organisations, Oil & Gas, Petroleum, and petrochemical industry, Manufacturing co, Reputed Institutions, including international exposure.
- Have worked with reputed companies including Shell Gas and Power- LNG project, Petroleum Development Oman- Shell OPCO Muscat, Exterran, ADGAS- LNG (Abu Dhabi Gas Liquefaction company limited), EXTERRAN in the US, KELTRON, Manufacturing Co-KAL, Engineering Educational Institutions
- Proficiency in Managing, supervising and implementing professional Learning and Competence management and assurance systems, preparing Policies and procedures in Human Resources and performance management, Training and Development, Competence assessment for senior and junior levels, staff appraisal, organizing training courses-technical and non technical , career progression plan, Competency map for different job role, Organization Training Plan, Job Description for the personnel, developing competency profiles and Gap analysis exercises, Fill the Gaps by training programmes-on the job, off the job, E learning etc.
- Mentoring and carrying out base line assessment for selection and recruitment, Training and development, Competency Assessment and Assurance, Auditing the whole assessment process, Guide and support the assessment team, Gap Analysis, arranging short training as per needs, maintaining the quality of training in a high standards, Maintaining training management Data Base, Advisory role to the Line and senior management on assessment and development plan. Liaison work with external training bodies, Maintaining LMS (learning Management systems) for staff development.
- Strong analytical & organisational abilities with skills in enhancing systems to bring greater cost efficiency levels by utilising the resources in a most effective manner.
- Qualitative experience in HR, field Engineering, field operations and maintenance, International Training and Competency based assessment and assurance system implementation, master data building and development of computerised systems for Training process.
- Keen understanding of the implementation & documentation formalities for policies, procedures and Quality Systems.
- Effective communicator with strong problem solving & information analysis skills.
- Did various presentations on Competency Assessment and Assurance, on the job training, Training and Development.
- **Graduate in Electrical Engineering, Post Graduate Diploma in Industrial Engineering, QUALIFIED COMPETENCE ASSESSOR AND QUALIFIED INTERNAL VERIFIER from EDEXCEL- UK (International training awarding bodies) and Diploma in Human Resources Development, PhD – Research scholar.**

ORGANISATIONAL EXPERIENCE

- Dec 11- present **Reliance Industries Limited-** a Major Group comprises of Petrochemical, Manufacturing, Polyester, E&P, Refinery, oil and Gas /petroleum company in India, working as Corporate **Senior Vice President – Learning and Organisation Development** , responsible for Learning and competency development, Heading various academies and Learning Management systems including, OD , staff and Graduates development programmes
- Nov 08- Nov 11 a Major oil and Gas /petroleum service company in **US-Exterran** , worked as Corporate **Head- Senior Training and Development Manager- Global Talent Management** in company's various locations Heading entire **Eastern Hemisphere regions**.
- Nov 05- Nov -08 **ADGAS- Abu Dhabi Gas Liquefaction Company, LNG Plant, Abu Dhabi as Team Leader /Senior L&D Advisor – Training and Competence Development**
– A Major Government Oil and Gas Company in UAE
- June 03-Nov'05 **Shell Gas and Power, LNG, Hazira, Surat. as Training Manager.**
A Royal Dutch/ Shell Group company- For LNG Terminal &Port.
- Aug '94- Ju'03 **SHELL-OPCO-Petroleum Development, Oman as Senior Training and Development Coordinator**
A Shell International Operated company- A major E & P company.
- Dec'89-Aug'94 **KELTRON- Department of Electronics –Government of India as Senior Engineer-Plant and Maintenance.**
- Ju'84-Dec'89 **KAL- KERALA AUTOMOBILES LIMITED- A Government automobile manufacturing company- as Maintenance Engineer**
- Part time /Full time **NI INSTITUTE OF ENGINEERING / UNIVERSAL COLLEGE OF ENGINEERING- As Lecturer in Industrial Training Centre and Engineering College**
- Special assignment** **Sponsored by the Government of India as “EXTERNAL EXAMINAR” for various course conducted in Industrial Training Centres.**

WORK EXPERIENCE IN DETAIL {Total + 29 years}

Chronological

Position - Senior Vice President – Learning and Organisation Development

Present Organization / Position – A Major group comprises of Petrochemical, Manufacturing, refinery, oil and Gas /Petroleum, E&P company in India. Working in the Corporate, responsible for Learning and competency development, Heading various academies and Learning Management systems including, OD , staff and Graduates development programmes

Responsible and Accountable for creation and operation of Learning and development academies in various disciplines – such as Mechanical , Electrical, Instrument, operations, Technology, HSE and Fire academies as a part of BT (Business Transformation) initiative. A core member of people

development throughout the organization. Responsible for implementing best Graduate engineering development programmes, Responsible for hiring various senior roles in Learning and Line functions. Responsible and accountable for gearing up various competency development and competency assurance programmes throughout the organization
Implement various HSE training and HSE competency assessment and gap filling exercises. Closely coordinate with HSE department head and Line management for implementing lots of HSE training and promote HSE awareness throughout the organization to avoid LTI- Lost time Injury thereby minimize down time and people injury while working in company's various hazardous locations

Develop Line Management functions relating to training and development activities, Career Progression activities for the staff, Implementing coaching and mentoring programme for the staff development, Implement Competence assessment and assurance system for the entire organization. Responsible for conducting base line assessment for hiring various levels in the organizations. Responsible for organizational and performance development issues such as career progression systems, professional career ladder Implementation, succession planning, LMS (Learning Management systems) for staff development including E learning modules maintenance for further training etc.

Responsible to implement CDT- competence development tool for various region in line with line management requirements, Implement various Project management training as and when required

Responsible for maintaining various training data base through SAP, Elearning, company intranet for Governance and validating the training events time to time. Maintain Budget for the whole training and competency development programmes of the organization.

EXTERRAN – AN US OIL AND GAS SERVICE COMPANY BASED IN TEXAS-HOUSTON , OPERATING IN 30 COUNTRIES WORLD WIDE

Position Held: - Head- Senior Training and Competency Development Manager (Global Talent Management)

A leading oil and Gas /Petroleum service organization in USA. Worked as Corporate **Senior Training and Development Manager- Global Talent Management** in company's various locations in entire Eastern Hemisphere regions, stationed at Dubai – UAE.

Responsible for implementing Training and Talent Management programmes, HSE training, Competence assessment and assurance systems, performance management, Recruitment , Project Training and Development , system verifications for Engineer trainees, Lead Engineers, Non-technical officers, executives and supervisory personnel working in Production, Engineering, Maintenance, HR, Administration, HSE, Operations and all HSE critical departments (technical and non-technical).

Responsible for EDP – Engineers development Programme.. Fully responsible for graduate engineer screening assessment , interview and selection from various locations of EH Eastern Hemisphere region. Conducting and delivering presentations to various career fair promote our business and importance of training etc .. to attract meritorious and smart people to the organization.

Implement various HSE training such as HSE induction, various HSE mandatory courses, HSE competency assessment and gap filling exercises. Closely coordinate with HSE department head and Line management for implementing lots of HSE training and promote HSE awareness throughout the organization to avoid LTI- Lost time Injury thereby minimize down time and people injury while working in company's various hazardous locations

Act as Corporate Competence advisor to all Line Management functions relating to training and development activities, Career Progression activities for the staff, Implementing coaching and mentoring programme for the staff development, Implement Competence assessment and assurance system for the entire organization. Responsible for conducting base line assessment for hiring various levels in the organizations. Responsible for organizational and performance development issues such as career progression systems, professional career ladder Implementation, succession planning, LMS (Learning Management systems) for staff development including E learning modules maintenance for further training etc.

Implementation of various just-in-time training programmes as per TNA- Training Need Analysis- , Performance appraisal, interim evaluations and assessment to enhance people development and retention initiative throughout the organization

Responsible to implement CDT- competence development tool for various region in line with line management requirements, Implement various Project management training as and when required

Advise the Proposal department personnel time to time while preparing the tender documents on highlighting the training infrastructure and facility, how we are developing the people, how we are assessing our staff on core, technical and HSE competencies etc in line with Clients requirements

ADGAS – ABU DHABI GAS LIQUEFACTION COMPANY LTD, LNG Plant, ABUDHABI , UAE

Position Held: - Team Leader /Senior L&D Advisor – Training and Competence Development

Responsible for implementing HR -Training and career development programmes, performance management, Recruitment ,Training and Development , system verifications of CAMS (Competence Assurance Management systems), staff appraisal, career progression for Lead Engineers, Non-technical officers, executives and supervisory personnel working in Production, Engineering, Maintenance, HR, Administration, HSE, Operations and all HSE critical departments (technical and non-technical). The responsibilities include the following areas

1. Develop Competence assessment manual , Training development manual for the entire department
2. Recruit professional staff in all levels as per professional recruitment methodology.
3. Actively participate in implementing effective performance management strategy in all levels
4. Select Graduate Engineers and Business Executives from Universities and Technical Institutions. Prepare Induction Training as per the Line requirements.
5. Develop competency based training management programmes for all levels.
6. Organize various HSE training, Technical Training and Business development Training for technical and non-technical personnel working in LNG Plant as a part of organization development programmes
7. Focal point for making PDP (Personal Development Plan) and Training Template for staff development.
8. Monitor and improve the standards of existing Competence assurance Management system in ADGAS
9. Act as Observer and Verifier for the competence assurance management systems for Engineering and Administrative staff
10. Focal Point for implementing SVQ (Scottish Vocational Qualifications) for the Training department for International accreditation and certification
11. Focal Point for system verification for the entire training management systems in ADGAS
12. Train the existing Competence Assessors and Verifiers to meet the required standard.
13. Advisor to the Line and Management on Quality assurance issues and organization development & performance Improvement programmes.
14. Maintain LMS-Learning Management systems for staff development and Gap analysis exercise on regular basis.
15. Advisor to the Senior Personnel in production, Engineering, Operations and HR for the Implementation of career laddering/progression system, staff appraisal and professional Training management systems and standardization
16. Verifier for the whole Training Documents related to CAMS, Career progression systems, Promotion records for staff
17. Advisory role to the Line management career ladder progression system and performance management for staff as per set KPI.
18. Conduct Train the Trainers workshop time to time for maintaining the quality and standards
19. Advisory to the senior Management for matters relating to personnel promotions and transferring potential staff to the HSE critical positions.
20. Maintain and control all Training and Quality assurance records.
21. Advisor to Line Coaches, Mentors, skill and Knowledge Trainers, on job Trainers, Technical Authors for the effective implementation of Training and performance Management systems in ADGAS

SHELL GAS AND POWER, HAZIRA LNG TERMINAL & PORT, Surat, Gujarat

Position held: Training Manager

Fully responsible for staff development during construction, commissioning, start up of LNG Plant, Initial recruitment, setting up a new training and development department to implement training and competence management services for LNG terminal & Port operations and maintenance. The responsibilities include the following areas.

1. Prepare operations training Implementation plan for the whole LNG Terminal operations.
2. Prepare Procedures for the competence assessment system for the shell gas and power in Hazira.
3. Prepare pre-assessment modules for the selection and recruitment for the new operations and maintenance staff in association with HR department.
4. Recruitment through Conducting phone interview and organise the baseline assessment for the selection of technical and non-technical personnel.
5. Coordinate with recruitment agencies and advise the agencies for proper way of head hunting and screening for the appropriate personnel for oil and gas personnel.
6. Prepare Operations Monitored professional Development Scheme for new Graduates in Shell Hazira LNG.
7. Prepare Base line competency map for all operations and maintenance staff to meet the required standard for start up, operations and maintenance.
8. As a Lead member of HR, actively participate in recruitment and selection for local Graduates and reserve the potential staff in skill pool for future openings.
9. Prepare Training and career progression plan for the new graduates.
10. Implement Competence Assessment and Assurance system in Shell Hazira.
11. Advise Line managers/Engineers and senior management on all matters relating to competence assessment.
12. Actively participate in operations and maintenance HSE Criticalities.
13. Maintain and control all Competence and training documents
14. Guide Line and HR for preparing the PDP-Personal Development Plan for staff in performance appraisals.
15. Participate with senior management team for effective organisation development programmes
16. Develop Career Laddering progression and Tracking system for performance management effectiveness.

A SHELL OPCO- PETROLEUM DEVELOPMENT OMAN, Muscat

Position Held: Senior Training & Development Coordinator

Fully responsible for Omani's Training and Competence Development programme as a part of Omanisation programme (Nationalization). Acted as a Senior Trainer, advisor, Mentor and Coach for the effective competence management implementation programme for uplifting the Knowledge and skill for the Omani work force in various levels, to meet the required level of competency in their job role The nationalization programme in PDO was successful and more than 90 % of the omanisation had been achieved due to excellent Professional Competence management systems, Training methodologies and Quality performance Management systems.

Responsible for implementing a Competence Assessment and Assurance system within the company operating departments covering Operations and Maintenance HSE Critical positions. This has involved the building of a Competence Assessment and Assurance process that is fit for purpose and accredited by an awarding body. The system is fully implemented for 500+ staff and is being further broadened to include all operations, engineering and maintenance disciplines. CA&A development is being used to deliver competent staff, either existing staff or newly hired and trained staff. Qualifications attained through the system;- 80+ TDLB D32/33 Qualified Assessors, 12 TDLB D34 Internal Verifiers, large number of competent operations and maintenance personnel

I was fully responsible for Setting up Electrical Training Department. Joined as Senior Electrical Trainer and set up the training Department. Actively participated and prepared the Trainees Task Book, On the job Training plan, Log Book and related all documents for the Training department.

I was responsible for imparting on the job training and off the job training to the trainee engineers, trainee technicians, newly recruits Graduate trainees, Apprentice trainees. Our three years training programme for the trainee Technicians was recognised and affiliated by BTEC. We were conducting the block examinations (once in four months) and conduct the final examination after the completion of 3 years training programme. SSPS (Staff skill Profile system) is implemented for the Evaluation of Technician's knowledge and skills on operations and maintenance. Technicians are assessed against the tasks mentioned in the SSPS Evaluation book. Training needs Analysis will be prepared and adequate training will be provided to the Individual to meet the required standard of Competency. OMPDS (Operations Monitored Professional Development Scheme) is successfully implemented for Engineer's and officer's development. Project work , quarterly presentations will be closely monitored for their development. Actively in Launching of CA&A (competence Assessment and Assurance) system in the organisation. Successfully launched the programme and the staff are certified against their standard of competency.

KELTRON – Department of Electronics – Government of India

Position: Senior Engineer- Plant and Maintenance.

Responsible for commissioning and maintenance on new projects and existing assets in State Electronics Development Corporations such as Industrial Electronics Products, Mass communication Products, Special Purpose Departments. The position encompassed responsibility for construction liaison, equipment acceptance, maintenance and the coordination of 32 Electrical technicians and Supervisors.

Responsibilities: Maintenance of various LV/HV equipments installed in various departments as per computerized maintenance planning. Ensure that the personnel are done the job as per the Maintenance Craft Procedures (MCP). Involved in Corrective / Breakdown maintenance of different equipments installed in the plant. Involved in Operation and Maintenance of Power Station and Related Substations.

Training: Responsible for apprentice trainee engineers and technicians in the Plant. Guide and train them on safety and technical competence. Conduct theory and practical classes for the apprentice trainees, crafts man trainees are also under my responsibilities. Preparing course material, delivering specialised courses as per the required standard to the technical personnel is also included in the training section.

Conducting in house training programme based on the needs of Engineers and Technicians. Organising short and long training programmes through internal and external vendors.

KAL(KERALA AUTOMOBILES LTD), Trivandrum, India.

Position: Maintenance Engineer

I joined in the company during the construction/Installation stage of the company itself. I got sufficient experience in installation, commissioning and testing of various types of Electrical Equipments/Machine tools for the automobile production. Worked in the Engineering/construction division and involved the installation, commissioning of power station and associated sub station.

I was the in charge of maintenance division after starting automobile production. I have set up a good maintenance planning / inventory and prepared Maintenance Craft Procedures for all Equipments installed in the plant.

UNIVERSAL COLLEGE OF ENGINEERING / NI INSTITUTE OF ENGINEERING, Trivandrum, India.

Position: Lecturer

Coordinated, prepared and delivered the courses for Maintenance Training, writing lesson plans and examinations and preparing lecture material. Moved to Advanced Training section responsible for 15 Craft Instructors, 140 Trainees and all aspects of training and administration within this section.

PROFESSIONAL SKILLS TRAINING

- ◆ **HSE** : H2S , Road safety, Permit to work, First aid, Fire extinguisher ,Environmental awareness
- ◆ Industrial Safety by National Safety Council. Supervising safety from PDO
- ◆ Team management training conducted by petroleum development Oman [PDO].
- ◆ Systematic plant Maintenance by the National Institute for Training in Industrial Engineering.
- ◆ Supervisory skill development conducted by PDO.**LEAP** course from PDO
- ◆ **Electronic mailing** (MS open mail), **MS-word, MS Excel MS-access, Free-lance graphics, MS POWER POINT** etc
- ◆ **Have done on Trainer's Training workshop**
- ◆ **Attended the “Competence assessment and Internal verification work shops” in number of occasions.**
- ◆ *Have done training on Frame 6 Gas Turbines - THOMMASSEN [GEC]*
- ◆ *Have done training on **Electrical power protection -JOHN BROWN***
- ◆ *Have done training on ESP[Electrical Sub-mersible pump]- CENTRILIFT*
- ◆ *Had training on Kriloskar Cummins Diesel Engines.*
- ◆ *Had training on **Maintenance Management.***
- ◆ *Trained as Internal Verifier under the effective Guide and Supervision of External Verifiers and Lead certifying bodies*
- ◆ *Trained as Coach and Mentor for technical and non technical personnel working in oil and gas Industry*
- ◆ *Trained as Observer for career laddering progression system for the staff promotion in oil and gas Industry*

QUALIFICATIONS

- **Ph D research Scholar**
- **Qualified Competence Assessor and Internal Verifier – EDEXCEL-UK -TDLB D32, D33 & D34 Units**, Assessment and Internal Verification
- DEGREE IN ELECTRICAL ENGINEERING
- POST GRADUATE DIPLOMA IN INDUSTRIAL ENGINEERING
- POST GRADUATE DEGREE IN COMPUTER APPLICATION (1ST SEMESTER)
- DIPLOMA IN HUMAN RESOURCES DEVELOPMENT.

PROFESSIONAL MEMBERSHIP

- FELLOW OF INSTITUTE OF ENGINEERS [**FIE**]
- MEMBER OF INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS[**MIEEE-USA**]
- MEMBER OF INSTITUTE OF STANDARD ENGINEERS[**MISE**]
- **CHARTERED ENGINEER [INSTITUTION OF ENGINEERS].**
- **Qualified Assessor and Verifier / Lead Auditor on compliance – from Edexcel UK**

AGE/DOB : 53 YEARS / 15-05-1959

Mobile Phone : + 91 7738181950

PASSPORT DETAILS : Z1919103, INDIAN, Expiry 2019.

ADDITIONAL INFORMATION

- ❖ Indian, Married with two children
- ❖ Available for domestic or international assignments
- ❖ Experience with numerous PC software applications including MS Project, MS Word, MS Excel, MS Access, Freelance, MS PowerPoint.
- ❖ Possessing a valid UAE Driving License and Indian Driving License

HOBBIES

Play Musical Instruments like Drums, Tablas, visiting places of natural beauty, swimming and squash. Music, Dance and Theatre