



Human Performance Blueprint

This document provides a strategic approach to the implementation of a human performance programme within an organisation.

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Implementation of Human Performance within an Organisation: A Blueprint

A general misconception of human performance is that it is individual focussed; that to manage human performance is to manage individual behaviours and 'human error'. In fact human performance is a systems-based approach, addressing errors as consequences rather than causes, having origins not so much in the waywardness of human psychology as in the upstream workplace and organisational factors. To manage human performance is to manage a strategic approach to reducing error and managing defences within an organisational context, including culture and leadership. This document provides guidance on how to manage that strategic approach.

It is not intended, within this document, to provide detailed knowledge and learning on human performance theory and principles. The aim of this document is to provide a blueprint for implementing a successful human performance programme within an organisation. The document provides some introductory details on the key attributes required and provides references to further reading and guidance.

Improved human and organisational performance is a journey. There is no silver bullet. A successful programme will be one that meets the needs of the organisation. Elements of human performance can be implemented via a staged approach, through which organisations can achieve the full benefits listed below.

A successful human performance programme can deliver:

- Significant opportunities to reduce business losses and make efficiency gains,
- Improvements in the reliability of performance of both personnel and plant,
- Increased regulatory and customer confidence,
- Trust and confidence in employees.

This blueprint will cover the attributes and processes an organisation will need to have in place before the implementation of a human performance programme can go ahead. This blueprint outlines these attributes and processes in seven distinct chapters.

1 Organisational Culture

2 Leadership and Accountability

3 Engagement of Teams

4 Capability

5 Reporting, Learning and Measurement

6 Management of Latent Conditions

7 Reducing Error

1 Organisational Culture

Introduction

The culture of an organisation will influence human behaviour and human performance at work. An organisation that wishes to implement a human performance programme will need to understand the strengths and weaknesses of their culture as this will have an impact on the effectiveness of the interventions they intend to employ.

Organisational culture is shaped by the priorities, goals and processes of that organisation.

Definitions

Organisational culture has been defined in a variety of ways, including:

‘The way we do things around here’ (ref 1),

‘A set of attitudes, beliefs or norms’ (ref 2).

Key Steps / Activities

Understanding the strengths and weaknesses of the culture of an organisation is important as it will help establish whether or not the programme of work will be effective or not. Gaining an insight into the culture of an organisation can be done in a number of ways including:

- Conducting surveys (these can be used to identify attitudes and opinions of staff, and this information can be used to attempt to predict how people might behave at work),
- Studying behaviour directly through observation and interviews,
- Collating information about how people behave at work through audits, event investigations and inspections.

The culture of any organisation is not static and evolves according to the pressures and priorities that the organisation is facing. Understanding what these pressures and priorities are help us to understand why people make certain decisions at work.

In order to shape the culture of the organisation, leaders should understand the strengths and weaknesses of the existing culture of the organisation and its potential impact on the effectiveness of a human performance programme.

They should also ensure that leaders understand the key role they play in shaping organisational culture.

References

1. CBI (1990)

<http://www.safetyculturetoolkit.rssb.co.uk/safety-culture-information/what-is-safety-culture.aspx>

2. Turner (1989)

<http://www.safetyculturetoolkit.rssb.co.uk/safety-culture-information/what-is-safety-culture.aspx>

Further Reading

Safety Culture: A Review of the Literature: HSL 2002/25

<http://www.hse.gov.uk/humanfactors/topics/culture.htm>

2 Leadership and Accountability

Introduction

Leadership commitment and engagement to a human performance programme is vital to its success. Leaders have the power to influence what staff believe is important to the organisation and they can ensure that the staff retain a focus on activities that support the goals of a human performance programme.

Definition

A leader is defined as: 'any individual who takes personal responsibility for his or her performance as well as the organisation's performance and attempts to influence the improvement of the organisation that supports that performance' (ref 1).

Key Steps / Activities

In order to ensure that leaders are engaged and brought into the human performance programme, the organisation should ensure that they:

- Understand and believe in the benefits of the programme,
- Have the appropriate skills and knowledge for their role in leading human performance.

Once the organisation has engaged leaders with the human performance programme, they should be encouraged to lead others through the process. For example leaders should:

- Act as ambassadors of human performance principles and lead by example,
- Set clear expectations of roles, responsibilities and accountabilities, relating to human performance,
- Visibly support the human performance programme by providing resources, time and oversight,
- Be engaged in activities that support the programme such as observation and coaching.

References

1. INPO (2006) [INPO Human Performance Reference Manual 06-003](#)
[October 2006.](#)

3 Engagement of Teams

Introduction

Driving improvements in human performance requires not only leadership commitment but also team engagement. Leaders will need to ensure that the human performance programme includes elements that encourage team engagement as an engaged team will be committed to the goals of the human performance programme. If teams are not committed and engaged, the human performance programme will stall and eventually fail.

Key Steps / Activities

Activities which will ensure that teams are engaged in a human performance programme include:

- Ensuring that staff understand what the organisation is trying to achieve with human performance and the role they have to play in ensuring that vision is achieved,
- Ensuring that time and resources are available to identify and resolve those issues which may affect human performance,
- Providing feedback on the successes and failures of the team or individual activities that have been carried out to support the human performance programme,
- Reinforcing and rewarding behaviours that support the goals of the human performance programme. Challenging those behaviours which do not support it,
- Monitoring performance of the team in achieving their goals.

4 Capability

Introduction

Training and capability in human performance must be developed at all levels of the organisation to support the implementation of a human performance programme. All staff, from senior leaders to the front line operator, should be provided with the knowledge and skills to support human performance improvements. However, different levels of the organisation will need different competency levels. For example, those who lead human performance will need a greater depth of training and development compared to other staff members who may need just a general understanding.

Organisations should ensure that they have access to people who have specialist knowledge on human performance topics and implementation techniques in order to ensure that appropriate guidance is available when needed. The organisation should be clear when that specialist knowledge or guidance should be sought. Working relationships between the human performance and human factors departments should be developed.

Key Steps / Activities

The organisation should:

- Understand the desired competency levels for all staff in the organisation,
- Be clear on how training, coaching and mentoring will be implemented and how that will ensure staff reach the desired competency levels,
- Be clear when specialist help is required to resolve human performance related issues,
- Develop links with other departments which may support the human performance programme, for example human factors.

5 Reporting, Learning and Measurement

Introduction

Organisations that have successful human performance programmes will have a healthy reporting and learning culture. This will ensure that:

- Failures in human performance are reported, understood and resolved,
- The organisation learns from those errors and does not experience repeat loss-of-control-events.

Organisations that encourage a high level of reporting will encourage the reporting of 'low consequence' loss-of-control-events. This will provide the organisation with an opportunity to address and rectify any underlying root causes which may contribute to a potential 'high consequence' loss-of-control-event.

Mature organisations will monitor trends in both reporting levels and the causal factors in loss-of-control-events.

Definitions

A loss-of-control-event is defined as: 'a negative consequence exceeding some criteria of significance, involving either an unwanted change in the health and well-being of employees, the environment, or safety margins or the ability of the plant to perform its desired function' (ref 1).

A reporting culture is defined as: 'a means of cultivating an atmosphere where people have confidence to report safety concerns without fear of blame. Employees must know that confidentiality will be maintained and that the information they submit will be acted upon, otherwise they will decide that there is no benefit in their reporting' (ref 2).

A learning culture is defined as: a culture which is engendered within an organisation that allows it to 'learn from its mistakes and make changes' (ref 3).

Key Steps / Activities

- The organisation should have a process in place to report, investigate and trend the root causes of loss-of-control-events. It also should have a process in place to learn from the events they have and look to learn from events in other industries,

- A healthy reporting culture will only be cultivated if the organisation can balance personal accountability with organisational failings,
- The organisation should understand the strengths and weaknesses of their reporting and learning culture.

References

1. Human Performance Tools For Individuals, Work Teams, and Management (2007) <http://homer.ornl.gov/sesa/corporatesafety/hpc/docs/FinalDraft-HPCToolsforIndividualsWorkTeamsandManagement.pdf>

2. Air Safety Support International:
http://www.airsafety.aero/safety_development/sms/safety_culture/

3. Air Safety Support International:
http://www.airsafety.aero/safety_development/sms/safety_culture/

6 Management of Latent Conditions

Introduction

Organisations employ organisational defences to reduce the likelihood of a loss-of-control-event occurring or to limit its consequences. Over time the robustness of these defences can become compromised, introducing latent conditions into the organisation.

Loss-of-control-events involve breaches of organisational defences. Therefore systems for proactively identifying weaknesses and flaws in defences need to be managed. For an organisation to do this it needs to know what defences they have in place and how robust they are. Understanding how well defences operate can be done through a number of routes, for example by selecting a number of leading, lagging and process indicators and by audits and inspections.

Definition

Latent conditions are defined as: 'deficiencies in management control processes (for example, strategy, policies, work control, training, and resource allocation) or values (shared beliefs, attitudes, norms and assumptions) that create work place conditions that can provoke errors and degrade the integrity of controls' (ref 1).

A loss-of-control-event is defined as: 'a negative consequence exceeding some criteria of significance, involving either an unwanted change in the health and well-being of employees, the environment, or safety margins or the ability of the plant to perform its desired function' (ref 2).

A defence is defined as: 'a means or measures (controls, barriers and safeguards) taken to prevent or catch human error; to protect people, plant or property against the results of human error; and to mitigate the consequence of an error' (ref 3).

Key Steps / Activities

The organisation will need to:

- Understand what defences it has in place,
- Understand whether or not these defences are sufficient to protect the organisation from a loss-of-control-event,

- Have a process for resolving weaknesses in identified organisational defences,
- Identify indicators that provide feedback on the robustness of the defences, for example, a mixture of leading, lagging and process indicators. These might include: backlogs in defects (which would identify weakness in engineered defences) or backlogs of documents (which would identify weakness in administrative processes),
- Have a programme of audits and inspections which will provide assurance that the defences are robust.

The organisation should understand the trends revealed by the indicators, audits and inspections.

References

1. Reason. Managing the Risks of Organisational Accidents, 1998, p10-18
2. Human Performance Tools For Individuals, Work Teams, and Management (2007)
<http://homer.ornl.gov/sesa/corporatesafety/hpc/docs/FinalDraft-HPCToolsforIndividualsWorkTeamsandManagement.pdf>
3. Human Performance Tools For Individuals, Work Teams, and Management (2007)
<http://homer.ornl.gov/sesa/corporatesafety/hpc/docs/FinalDraft-HPCToolsforIndividualsWorkTeamsandManagement.pdf>

Further Reading

[DOE Human Performance Reference Manual Volume 1](#)

[DOE Human Performance Reference Manual Volume 2](#)

[Managing Human Performance to Improve Nuclear Facility Operation, IAEA Nuclear Energy Series No. NG-T-2.7](#)

7 Reducing Error

Introduction

Human performance programmes combine an understanding of human error with the use of error avoidance tools. These tools should be used when the potential for human error is understood but can not be reduced to an acceptable level.

Error avoidance tools are behaviours derived from practices used by workers within organisations that are known to reduce the likelihood of an error occurring. Rigorous and thoughtful application of error avoidance tools will influence the frequency of loss-of-control-events. When the likelihood of human error at the job site is systematically reduced or eliminated, the frequency of loss-of-control-events will drop. The severity of these events is influenced by the robustness of defences (see section 6: Management of Latent Conditions).

Error avoidance tools do have their merit but are limited in their ability to deliver lasting improvement because they do not focus on the underlying organisational factors that give rise to the symptoms of poor performance. Excellence in human performance is only achieved if error avoidance tools are used in combination with:

- Mature organisational processes that minimise the number of scenarios where error is likely to occur,
- Robust organisational defences that reduce the severity of loss-of-control-events.

Definition

An error likely situation is defined as: 'An error likely situation is a work situation in which there is greater chance for error when performing a specific action or task' (ref 1).

Key Steps / Activities

- The organisation should have processes in place to systematically identify error likely situations in the workplace. Action should be taken to remove them or reduce their influence to an appropriate level of risk,
- Where the risk or the consequence of error remains, the use of error avoidance reduction tools should be considered,

- Staff should have the capability to select and use the most appropriate tool.

References

1. [Integrating Human Performance Improvement into Work Planning](#)

Further Reading

[DOE Human Performance Reference Manual Volume 1](#)

[DOE Human Performance Reference Manual Volume 2](#)

[Managing Human Performance to Improve Nuclear Facility Operation, IAEA Nuclear Energy Series No. NG-T-2.7](#)