

# Training Needs Assessment System (TNAS)



- Save time
- Save effort
- Save money



**Making Training Needs Assessment  
Fast, Easy, Accurate and Low-cost**

# A Huge Waste of Money in Training

- It has been found that 80% of training budgets go to waste and do not add value!



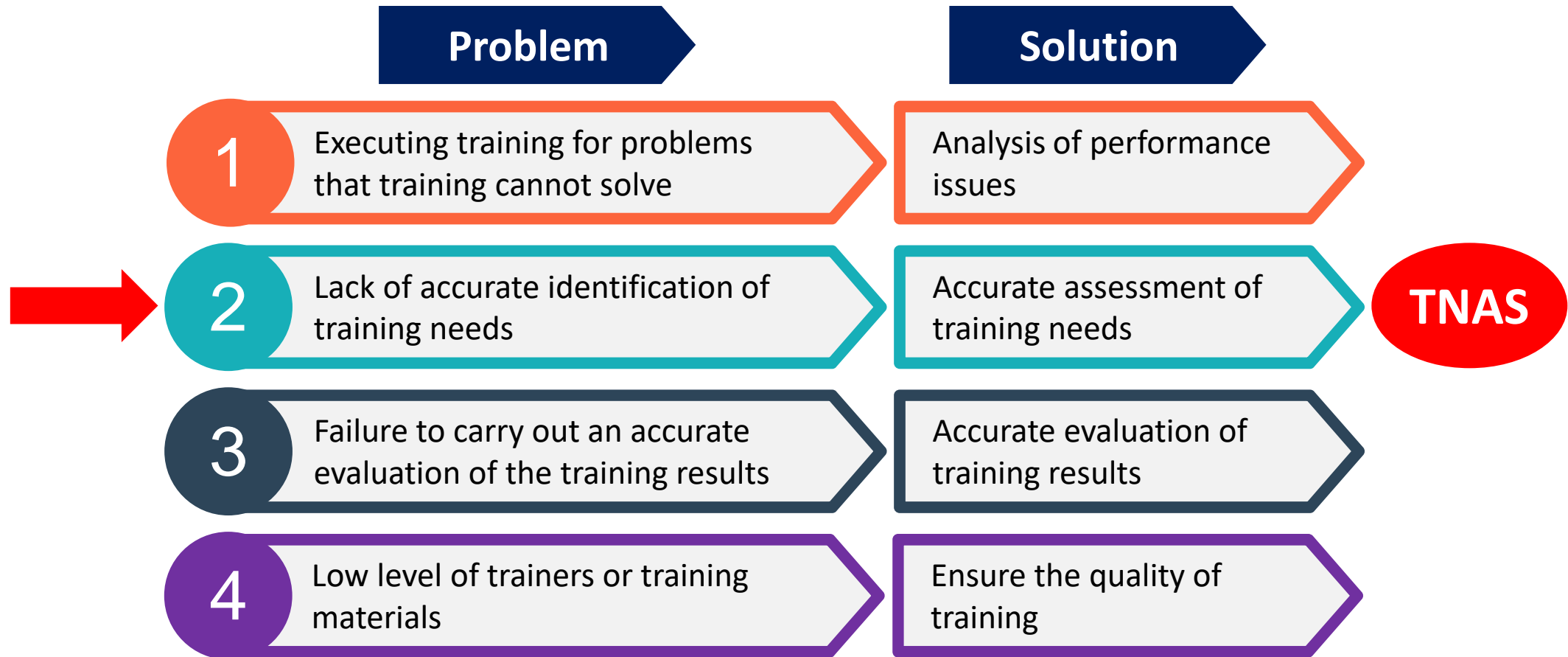
*About \$5.6 billion to \$16.8 billion is wasted annually on ineffective training programs*

**“American industry is spending billions and billions on training programs and doing no evaluation of their effectiveness. You have to measure it.”**

**- Cary Cherniss, Rutgers University**



# Four Causes of Waste in Training And How to Address Them



# Traditional Methods of Training Needs Assessment

# Traditional Methods of Training Needs Assessment

---

- There are many approaches to needs assessment. A combination of some of these techniques may be used, as appropriate:
  - direct observation
  - questionnaires
  - Consulting with people in important locations
  - Use appropriate references
  - interviews
  - focus groups
  - the exams
  - Study records and reports
  - work samples

**These methods  
require Skills and  
experience, take great  
time and effort, cost  
high, and often  
inaccurate results**

# Example of TNA Practices

---

As an example, Altarawneh and Aseery (2016) explored the management and practices for Training Needs Assessment (TNA) process at a General Educational Directorate in Saudi Arabia.

They reported that 42.9% of the participants indicated that they “never” identify the training needs; 17.1% declared that they “rarely” identify the training needs; 27.1% of the participants they “sometimes” identify the training needs. While, just 4.3% of the participants “frequently” identify the training needs of teachers and principals. 8.6% of the participants indicated they “always” identify the training needs of teachers and principals.

Altarawneh, I.I. and Aseery, A.I.A. (2016) Training Needs Assessment at Assir General Educational Directorate, Saudi Arabia. American Journal of Industrial and Business Management, 6, 188-204.  
<http://dx.doi.org/10.4236/ajibm.2016.62018>

# Modern Methods of Training Needs Assessment

# Importance - Performance Analysis (IPA) Model

- The Importance and Performance Analysis (IPA) model was developed by researchers (Martilla and James) in 1977.
- It is an analytical tool based on a matrix with two dimensions: importance and performance
- It is used to evaluate a product or service to satisfy customers. like:
  - The **importance** of service to the customer
  - The level of **performance** of the service provided to him



**Importance**

**1**



**Performance**

**2**

# Applying the Importance - Performance Model to Employees Work



The importance of a particular skill at work

1



The employee's performance level for this skill

2

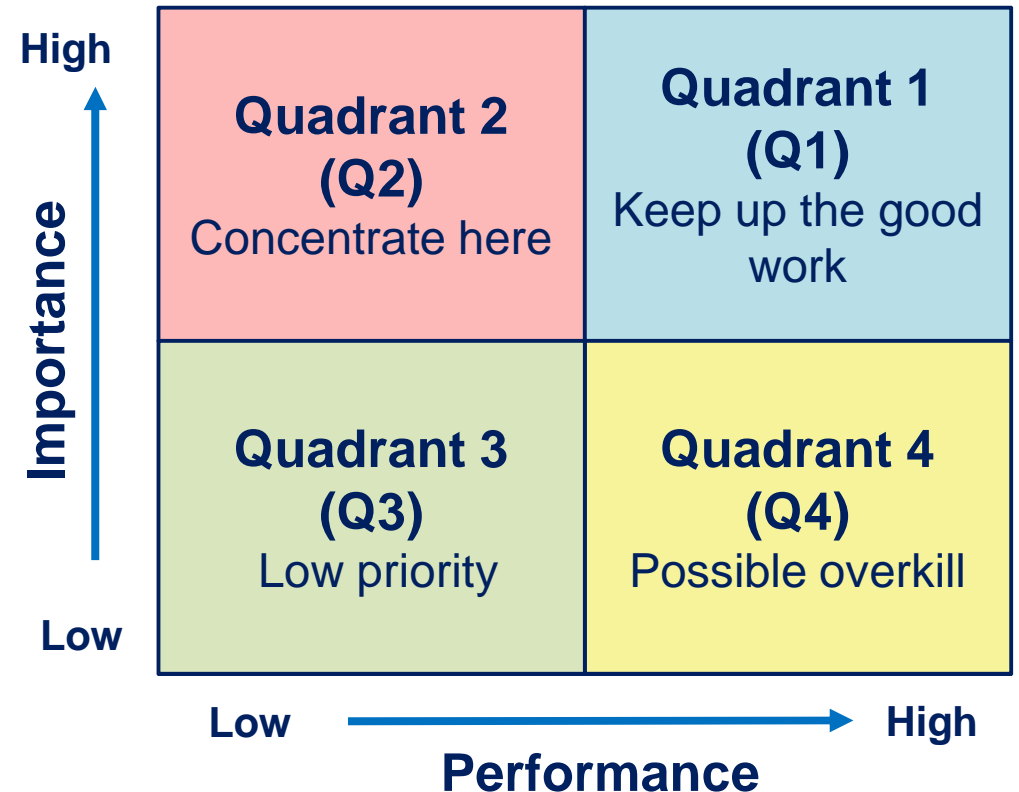
## Four Quarters:

Quadrant 1: High importance, high performance

Quarter 2: High importance, low performance

Quadrant 3: Low importance, low performance

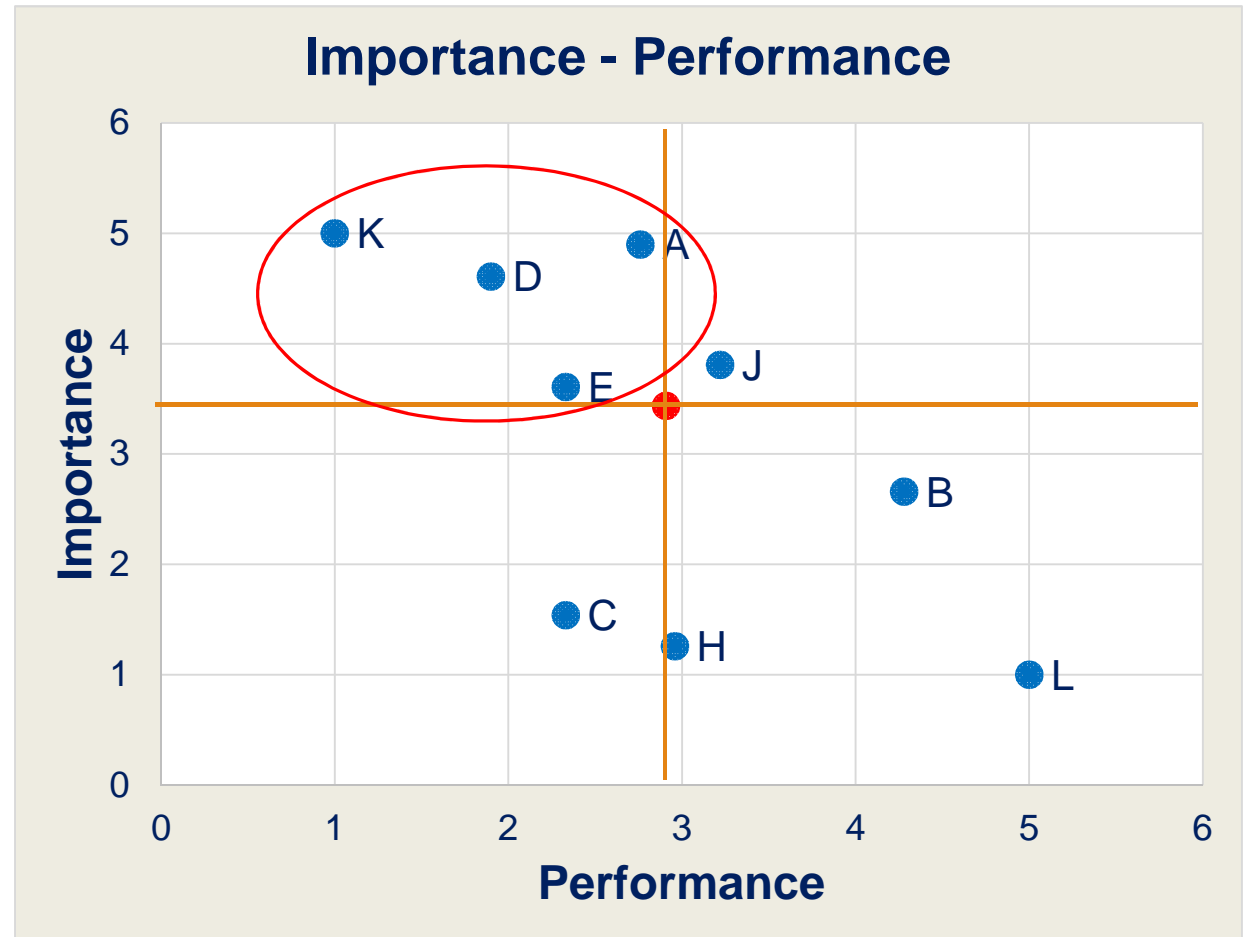
Quadrant 4: Low Importance, High Performance



Importance Performance Analysis (IPA)

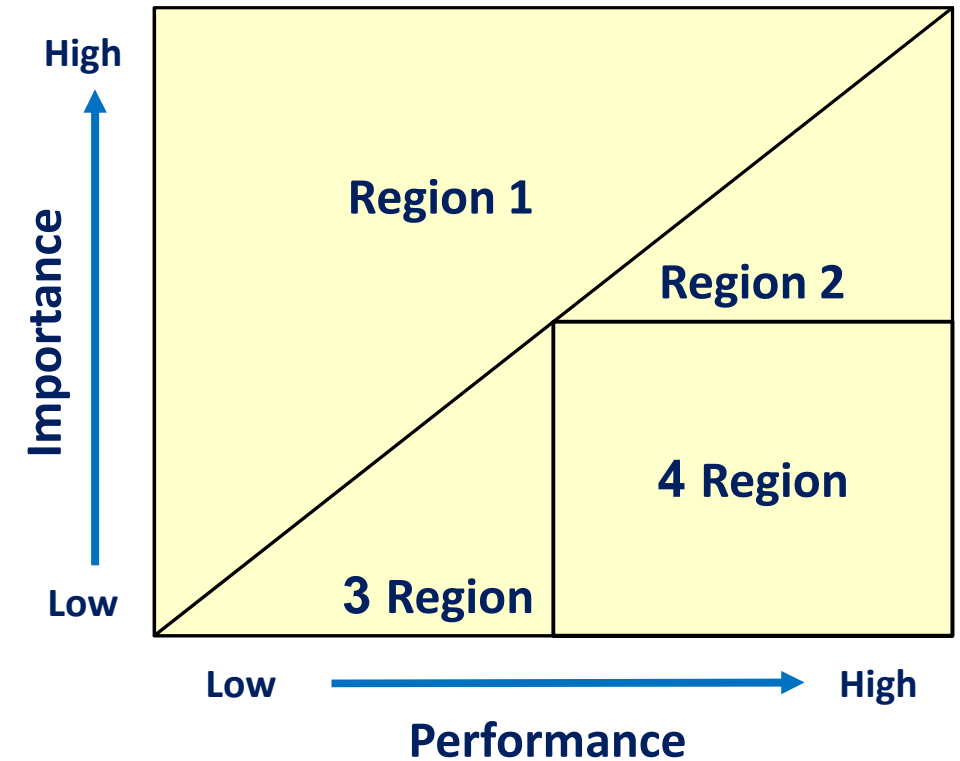
# Example of Applying the Importance - Performance Model to Employees Work

Skill Name	ID	Importance	Performance
Problem Solving	A	4.9	2.8
Quality management	B	2.7	4.3
Report Writing	C	1.5	2.3
Strategic Planning	D	4.6	1.9
Stress management	E	3.6	2.3
Learning Skills	H	1.3	2.9
Change Management	J	3.8	3.3
Team building	K	5	1
Time management	L	1	5
Average	M	3.4	2.9



# Modifications of IPA Model

- Where are the coordinates to divide the four quadrants?
- How to measure relevance and performance?
- How are improvement items prioritized?
  
- Further studies and reviews led to:
  - The concept of the gap (the difference between importance and performance)
  - Adding a 45-angle diagonal line called the iso-priority line
  - Other details



# Hennessy-Hicks Training Needs Analysis

## Hennessy –Hicks TNA Tool

### Developed by

Professor Carolyn Hicks, BA, MA, PhD, PGCE, CP sychol.

School of Health and Population Sciences,

College of Medicine and Dentistry

University of Birmingham, UK

&

Dr Deborah Hennessy BA, PhD, RN, RM, Diploma Public Health  
Nursing, HV, FRSM

Consultant to World Health Organisation

5 Westfield House, 80 Westgate

Chichester United Kingdom, UK

Copyright of University of Birmingham Licensed to WHO  
for On-line use

- Professor Carolyn Hicks and Dr Deborah Hennessy - University of Birmingham, UK
- Developed the Hennessy-Hicks Training Needs Assessment Using IPA model for Health Organisations
- Licensed to WHO for On-line use

Professor Carolyn Hicks, College of Medicine and Dentistry University of Birmingham, UK

Dr Deborah Hennessy Consultant to World Health Organisation

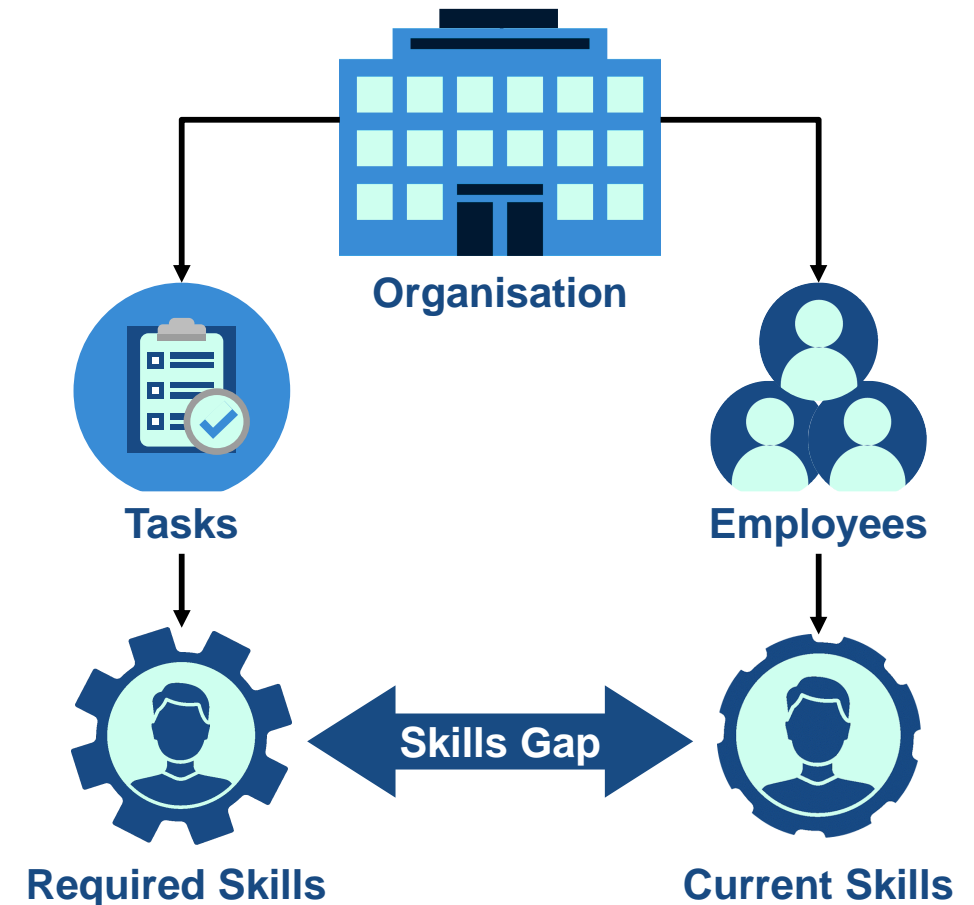
Copyright of University of Birmingham Licensed to WHO for On-line use



**Training Needs Assessment System (TNAS)**

# The Methodology on Which the TNAS is Based

- Using the Importance - Performance Analysis (IPA) Model
- Adopting the concept of the gap (the difference between importance and performance)
- Adopting the Iso-line diagonal
- Adding the concept of Priority Index
- Analysis of the requirements of the required work tasks
- Analysis of employees performance
- Training Needs Assessment



# Steps in Training Needs Assessment System



# Features of TNAS

Feature	Details	
<b><i>What, Why and Who</i></b>	TNAS answers What training is needed and Why, and Who needs it?	✓
<b><i>Scalability</i></b>	Use TNAS for individuals or groups with or without manager or employees assessment.	✓
<b><i>Customisation</i></b>	TNAS can be customised as you can define your own required skills or training areas as the basis for the assessment.	✓
<b><i>Occupational and Individual Needs</i></b>	TNAS supports both Occupational assessment (position requirements) and Individual assessment.	✓
<b><i>Skills Library</i></b>	Over 700 skills classified into 50 categories, allow you to customise and build your exact skill sets for your organisation and departments.	✓
<b><i>Skills Gap</i></b>	TNAS identifies skills gap based on skill importance and current employees performance levels. The skills gap = position requirements - worker skills set.	✓
<b><i>Built-in Intelligence</i></b>	Because not all skills gaps have the same importance, TNAS built-in Intelligence calculates training priorities using a new innovative “Priority Index” parameter.	✓
<b><i>Detailed Reports</i></b>	TNAS generates a detailed reports with current skill levels analysis and proposed training plan.	✓
<b><i>Three Types of Reports</i></b>	Report for employees, report for managers/supervisors and report for HR or training managers.	✓
<b><i>Learning Dimension</i></b>	Each report includes a learning and education sections to educate the employees and improve their awareness on how to develop their performance.	✓
<b><i>Personal Development Plan</i></b>	TNAS helps employees to create their action plan based on needs, reflection and goal-setting within the context of a career, training & development and self-improvement.	✓

# Benefits of TNAS



*Benefits to Organisations*



*Benefits to HR and Training Managers*



*Benefits to Employees*

# Benefits to Organisations

---

- Increases and improves resources
- Helps manage training budgets effectively
- Produces high quality management information
- Keeps records of training and development



# Benefits to HR and Training Managers

- Helps identify knowledge and performance gaps
- Address these gaps with appropriate training
- Determines who needs training the most in order to perform well in the organisation
- It specifies the type of training required in terms of the skills, knowledge, abilities, and behaviour of the employee.
- Increases the effectiveness of training programs



# Benefits to Employees

---

- Benefits for employees
- Ensures that the right people get the right training
- Determines the importance of training for employees
- Promotes a culture of health guidance and counseling
- Increases employee motivation and satisfaction



# Individual or Group Training Needs

---

## ■ Individual training needs

- Employee performance appraisal by the manager
- Evaluation of an employee's performance by the employee himself
- Evaluation of employee performance by manager and employee (both)

## ■ Group training needs

- Evaluation of performance levels for each employee by the manager
- Self-assessment of employees' performance
- Evaluation of employee performance by manager and employee (both)

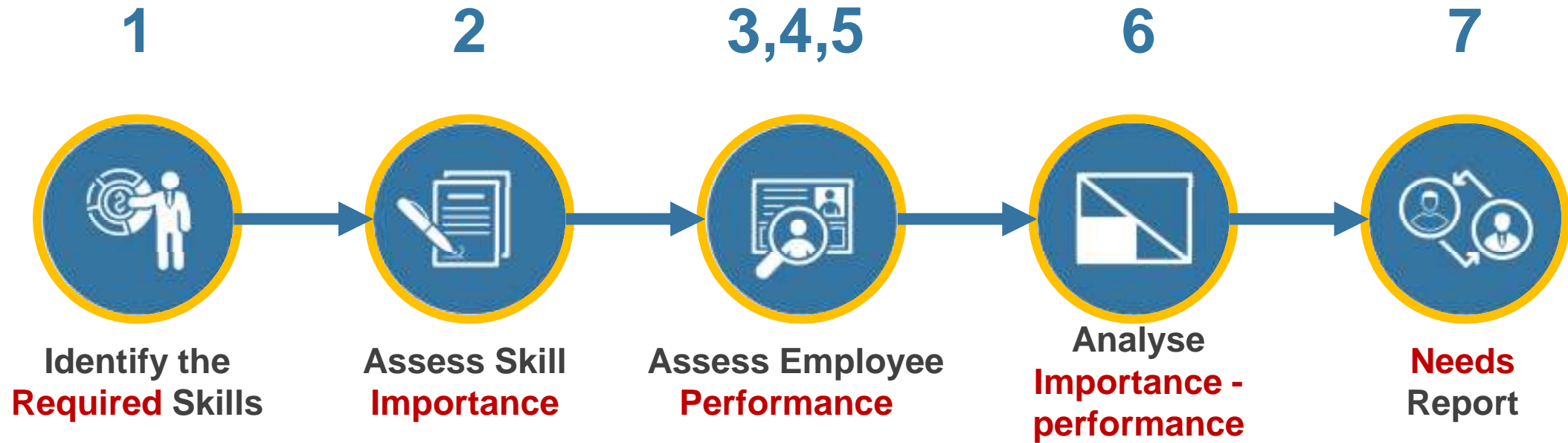
## ■ Performance Gaps and Training Needs

- performance gaps
- Training Priority Index

# Brief Example of TNAS Method

Digital transformation is a continuous process, in which modern technology integrates with all functions and areas of business, to improve the efficiency of operations, increase the effectiveness of people, add value to business, and build a new future for organisations.

# Steps in Training Needs Assessment System



# 1. Determine The Skill Set Required To Perform The Work

No	Skill ID	Skill Name
1	TNA100-S101	Problem Solving
2	TNA100-S102	Report Writing
3	TNA100-S103	Time Management
4	TNA100-S104	Stress Management
5	TNA100-S105	Team Building
6	TNA100-S106	Systemic Thinking
7	TNA100-S107	Understand Self
8	TNA100-S108	Business Ethics
9	TNA100-S109	Change Management



**Required  
Skill Set**

## 2. Assessment of Skills Importance by the Manager

No	Skill ID	Skill Name	Importance
1	TNA100-S101	Problem Solving	4
2	TNA100-S102	Report Writing	3
3	TNA100-S103	Time Management	2
4	TNA100-S104	Stress Management	3
5	TNA100-S105	Team Building	2
6	TNA100-S106	Systemic Thinking	1
7	TNA100-S107	Understand Self	5
8	TNA100-S108	Business Ethics	4
9	TNA100-S109	Change Management	2
		<b>Average</b>	2.9



**Assessment  
of Skills  
Importance**

## 2. Assessment of Skills Importance by the Manager



### 3. Assessment of the Employee's Performance by the Manager

Skill ID		Manager
TNA100-S101	Problem Solving	4
TNA100-S102	Report Writing	3
TNA100-S103	Time Management	2
TNA100-S104	Stress Management	3
TNA100-S105	Team Building	2
TNA100-S106	Systemic Thinking	1
TNA100-S107	Understand Self	5
TNA100-S108	Business Ethics	4
TNA100-S109	Change Management	2
	Average	2.9



**Assessment of  
the Employee's  
Performance**

## 4. Assessment of the Employee's Performance by the Employee Himself (Self-Assessment)

Skill ID		Self
TNA100-S101	Problem Solving	4
TNA100-S102	Report Writing	5
TNA100-S103	Time Management	3
TNA100-S104	Stress Management	4
TNA100-S105	Team Building	3
TNA100-S106	Systemic Thinking	2
TNA100-S107	Understand Self	4
TNA100-S108	Business Ethics	3
TNA100-S109	Change Management	1
	Average	



**Assessment of  
the Employee's  
Performance**

## 5. Assessment of the Employee's Performance by Manager and Self

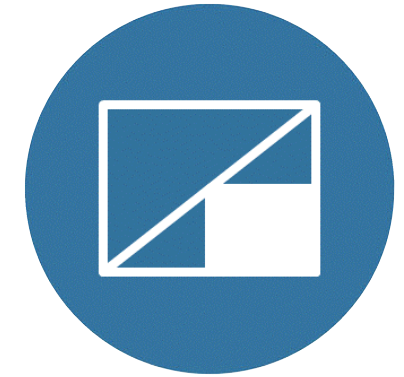
Skill ID		Manager	Self	C-Score
TNA100-S101	Problem Solving	4	4	80
TNA100-S102	Report Writing	3	5	72
TNA100-S103	Time Management	2	3	46
TNA100-S104	Stress Management	3	4	66
TNA100-S105	Team Building	2	3	46
TNA100-S106	Systemic Thinking	1	2	26
TNA100-S107	Understand Self	5	4	94
TNA100-S108	Business Ethics	4	3	74
TNA100-S109	Change Management	2	1	34
	Average			60



**Assessment of  
the Employee's  
Performance**

# Importance - Performance Analysis, Skills Gap Calculation and Priority Indicator

Skill ID	Skill Name	Skill Gap	Priority Index
TNA100-S104	Strategic Thinking	84%	52%
TNA100-S109	Business Ethics	83%	47%
TNA100-S107	Time Management	75%	40%
TNA100-S105	Stress Management	66%	35%
TNA100-S101	Problem Solving	77%	34%
TNA100-S110	Change Management	57%	20%
TNA100-S108	Understand Self	29%	12%
TNA100-S102	Report Writing	30%	4%
TNA100-S106	Systemic Thinking	25%	1%
	Average	57%	24%

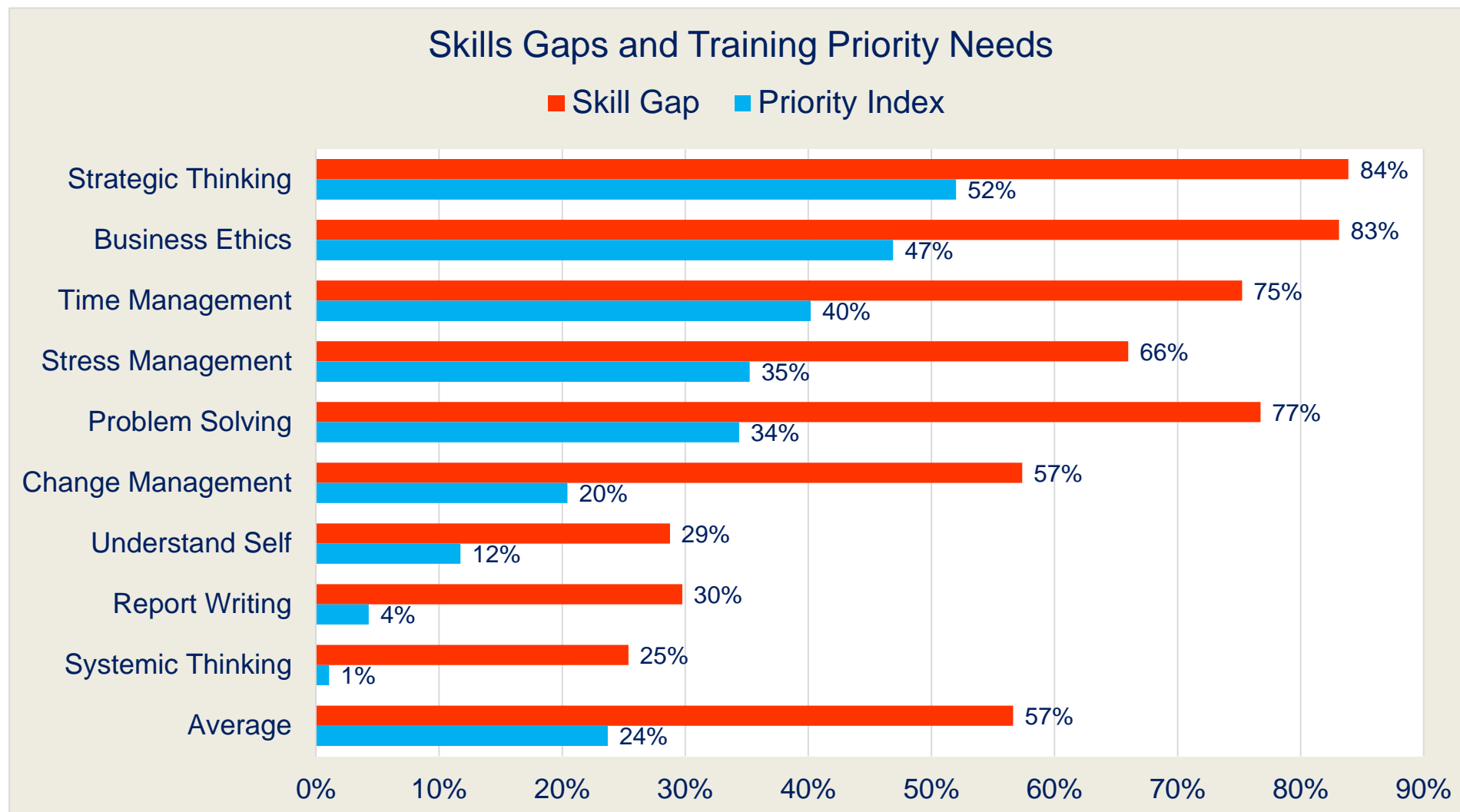


**IPA**

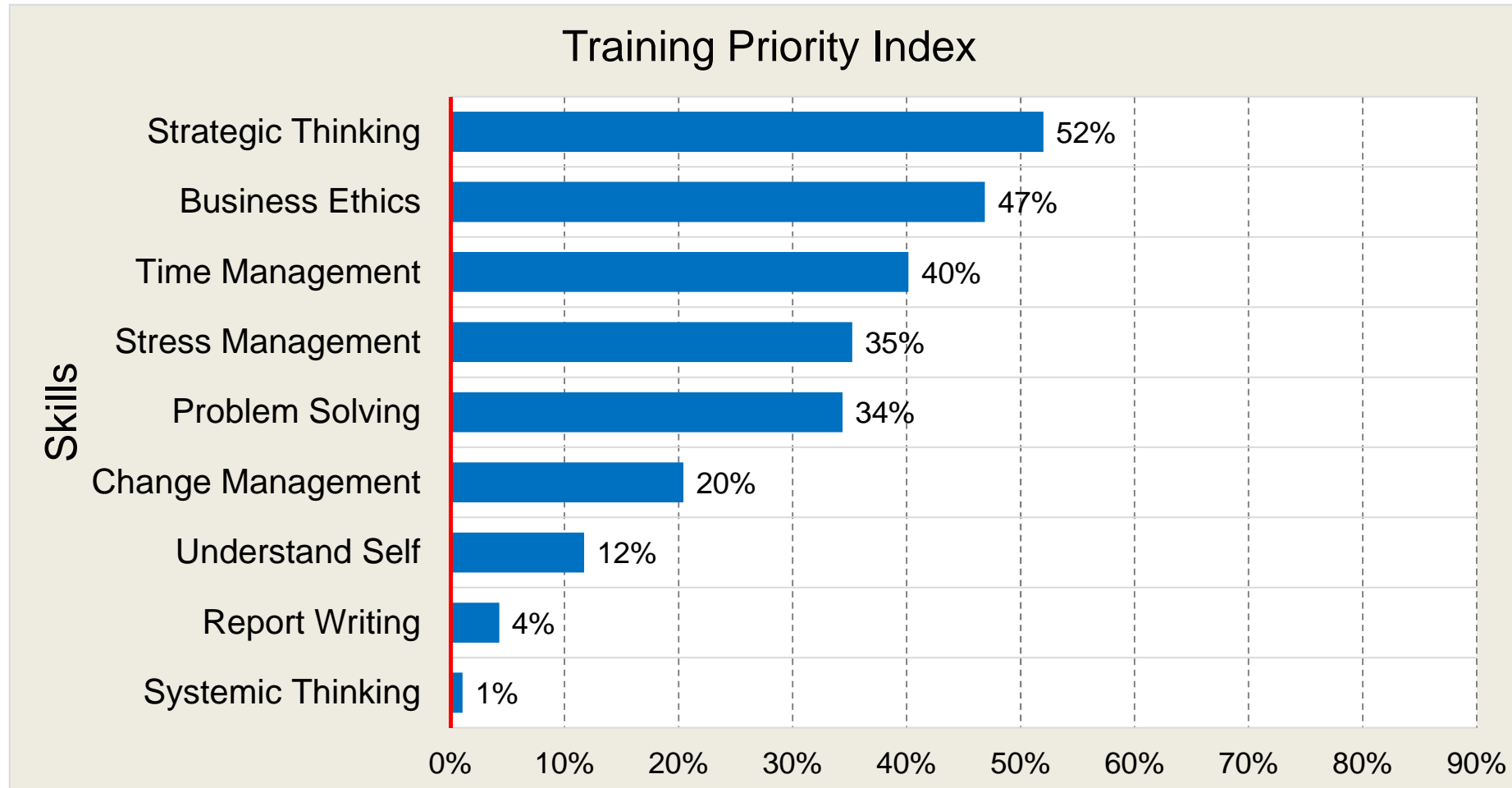
# Assessment of the Performance Levels of Groups

Emp ID	Employee Name	Skill 1	Skill 2	Skill 3	Skill 4	Skill 5	Skill 6	Skill 7	Skill 8	Skill 9	Average
	Employee 1	3	1	3	1	4	2	3	4	2	2.56
	Employee 2	3	1	3	3	2	4	2	4	2	2.67
	Employee 3	2	3	2	4	4	2	3	2	4	2.89
	Employee 4	3	4	1	3	2	3	2	3	3	2.67
	Employee 5	4	5	3	2	3	1	4	2	2	2.89
	Employee 6	5	2	3	2	2	2	1	3	1	2.33
	Employee 7	2	1	2	3	3	3	2	4	2	2.44
	Employee 8	1	3	2	1	4	5	3	2	3	2.67
	Employee 9	3	2	4	3	2	3	2	3	4	2.89
	Employee 10	2	4	5	2	3	2	3	2	5	3.11
	Employee 11	2	3	3	2	1	1	3	3	2	2.22
	Employee 12	3	2	2	3	3	2	4	2	3	2.67
	Average	2.57	2.71	2.57	2.43	2.79	2.57	2.64	2.79	2.64	

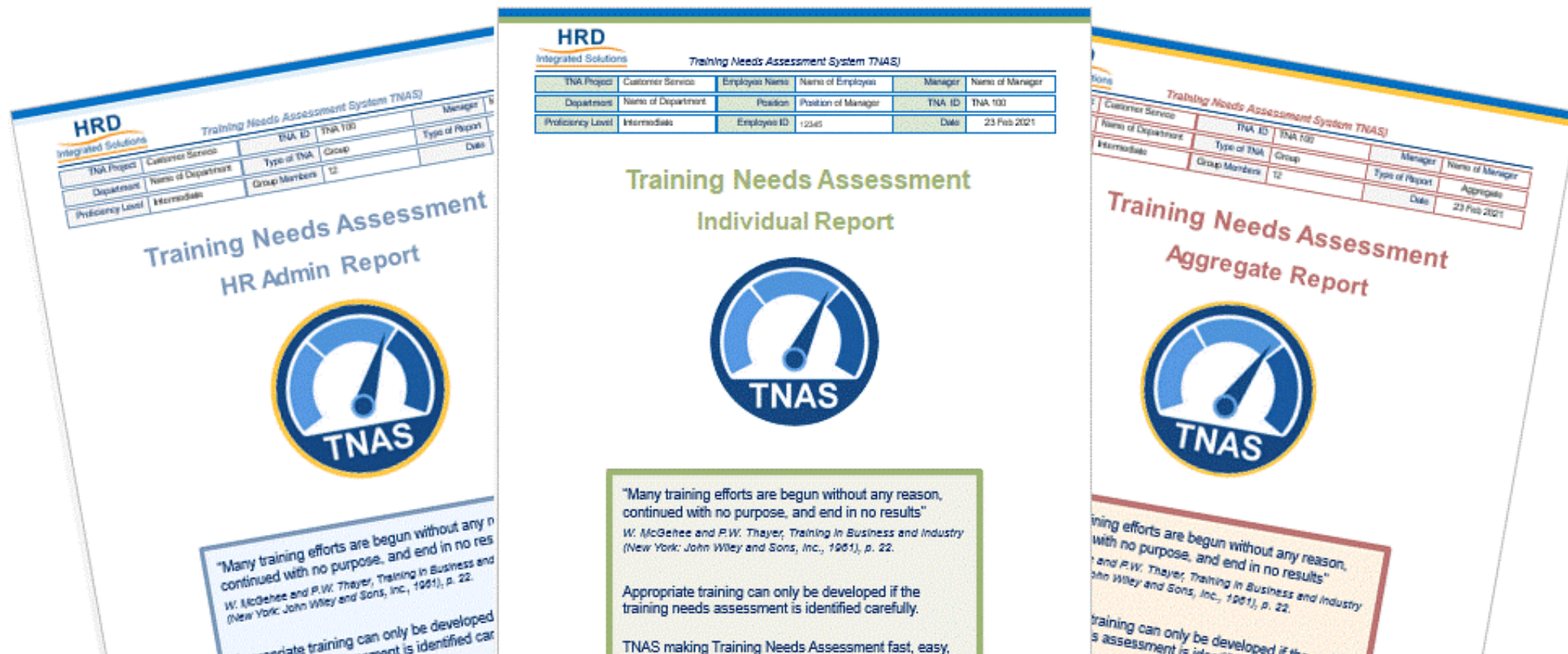
# Skills Gaps and Training Priority Index



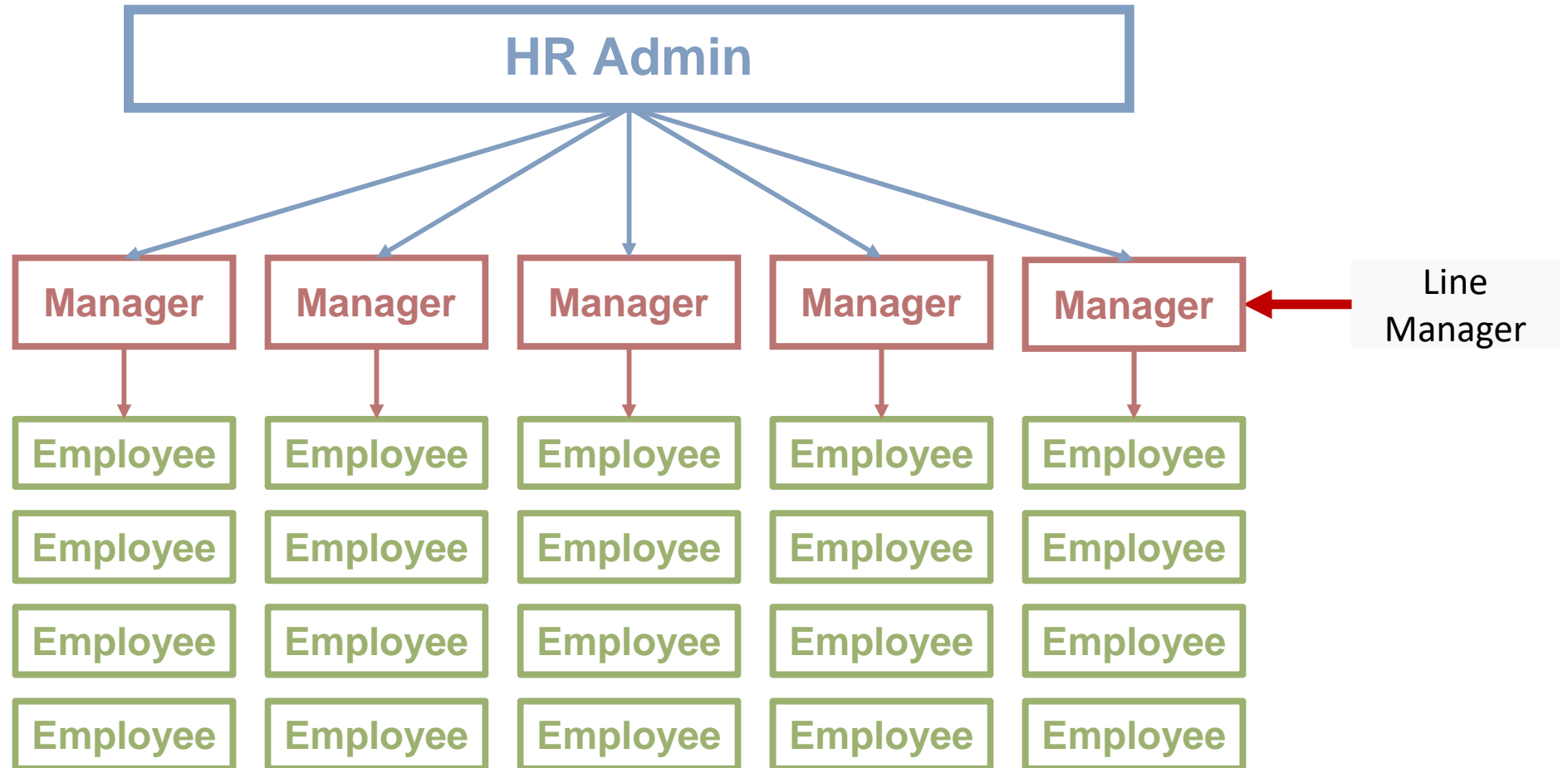
# Training Priority Index



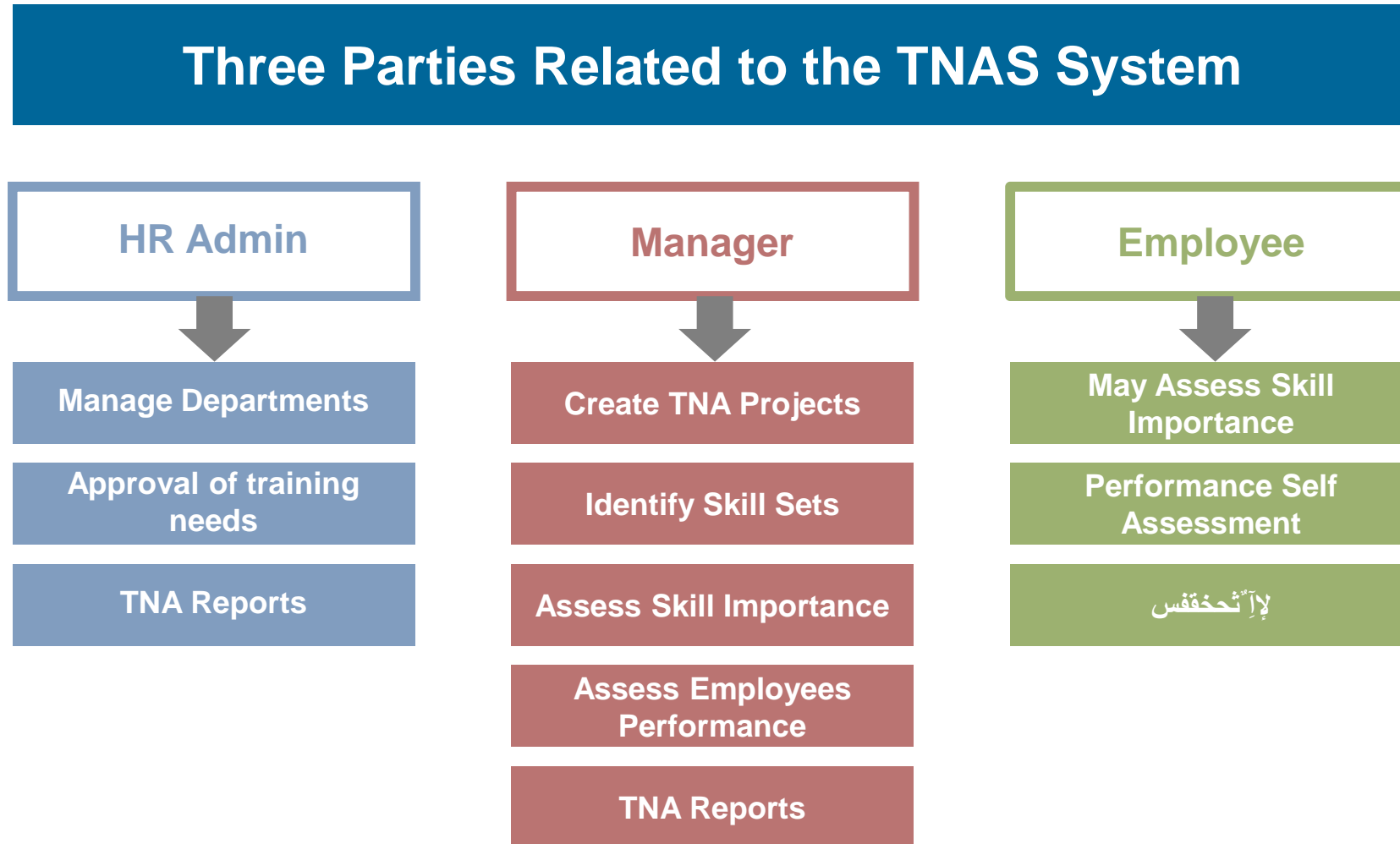
# Three Types Of Reports (for the Employee, the Manager, and the HR Department)



# TNAS Management Structure in Organisations

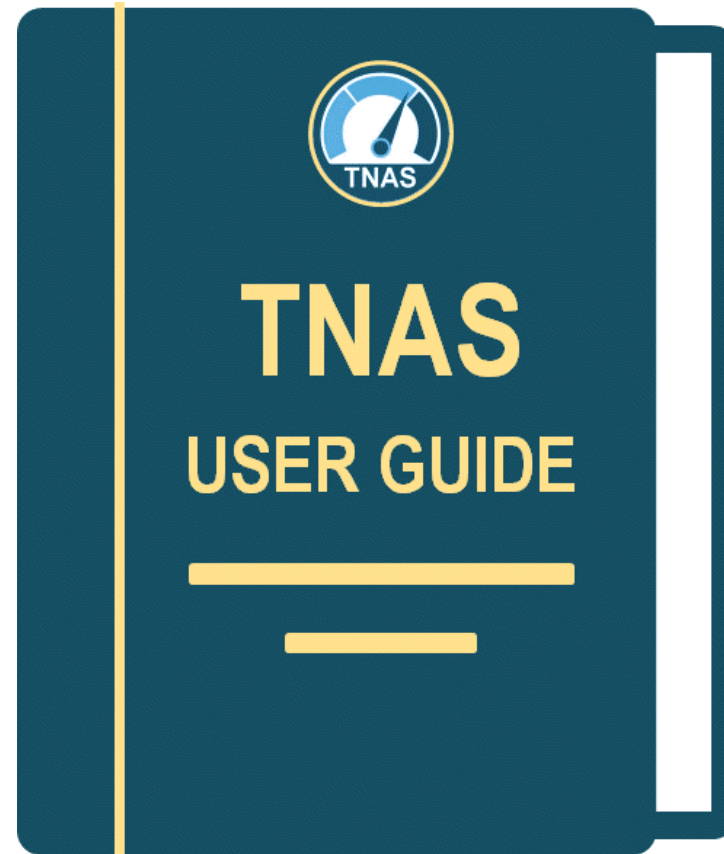


# Three Parties Related to the TNAS System



# TNAS User Guide

---



# End

# Contact Us

Telephone: +971 4 351 6993

Email: [mohamed@alphatraining.co.uk](mailto:mohamed@alphatraining.co.uk)

Mobile: +971 50 113 2335

