Organisational Training Needs Analysis

Creating a Training Needs Analysis (TNA) tool for research organisations involves multiple layers of assessment to identify the skills gap, organisational needs, and external factors influencing training requirements. Below is a structured guide on how to develop this TNA tool using SWOT, PESTLE, and other relevant tools and concepts.

Step One: Establish the Objective

- Purpose: *Identify the skills, knowledge, and competencies required by research managers to effectively manage research projects, teams, and operations in a research/higher education setting.*
- Scope: *Focus on research management within research organisations/higher education institutions, considering both current needs and future trends.*

Step Two: Stakeholder Identification and Engagement

- Who? *Include research managers, senior leadership, HR, and relevant academic staff.*
- How: *Conduct interviews, surveys, and focus group discussions to gather insights on current competencies and perceived gaps.*

Step Three: Organisational Context Analysis

SWOT Analysis:

- Strengths: *Identify internal strengths related to research management (e.g., experienced staff, robust research culture).*
- Weaknesses: *Identify internal weaknesses that may hinder effective research management (e.g., lack of training in project management or funding acquisition).*
- Opportunities: *Identify external opportunities (e.g., new funding opportunities, collaborations, technological advancements).*
- Threats: *Identify external threats (e.g., changes in funding policies, increasing competition for grants).*

PESTLE Analysis:

- Political: *Assess the impact of government policies, regulations, and funding on research management.*
- Economic: Consider budget constraints, economic conditions, and funding availability.
- Social: *Evaluate demographic changes, cultural factors, and societal expectations affecting research.*

- Technological: *Assess the impact of new technologies, digital tools, and platforms used in research management.*
- Legal: *Consider compliance requirements, intellectual property laws, and ethical standards.*
- Environmental: *Understand sustainability practices, environmental policies, and green research initiatives.*

Step Four: Skills and Competency Gap Analysis

Current Competency Mapping:

- Assess the existing skills and knowledge of research managers using competency frameworks.
- Identify competencies in areas like research ethics, project management, funding acquisition, team leadership, and communication.

*See the self-assessment tool

Future Competency Needs:

- Identify emerging skills required due to changes in the research landscape, such as data analytics, digital literacy, and interdisciplinary collaboration and AI.

Competency Gap Assessment:

- Compare current competencies against future needs to identify gaps.
    - Use self-assessment tools
    - 360-degree feedback
    - Performance reviews
    - Mentoring

Step Five: Training Prioritization Matrix

Urgency vs. Importance:

Prioritise training needs based on their impact on organisational goals and the urgency of addressing these gaps.

- High urgency, high importance: Immediate training required.
- High urgency, low importance: Short-term solutions or quick fixes.
- Low urgency, high importance: Long-term training programs.
- Low urgency, low importance: Monitor for future needs.

Budget and Resource Consideration:

- Assess available resources for training (budget, time, external trainers).
- Prioritise training programs that offer a high return on investment.

Step Six: Design and Implementation of Training Programs

Tailored Training Programs:

- Develop (where feasible) specific training programs (e.g., workshops on grant writing, leadership development programs) to address identified gaps.

Learning Modes:

- *Consider a mix of in-person workshops, online courses, mentoring, and on-the-job training.*

Customization:

- Tailor training content to the specific needs of research managers, incorporating case studies and examples relevant to higher education research management.

Step Seven: Evaluation and Feedback Mechanisms

Kirkpatrick's Four Levels of Evaluation:

Level 1 Reaction: Gather participant feedback on training satisfaction.

Level 2 Learning: Assess knowledge and skills gained through pre- and post-training tests.

Level 3 Behaviour: Observe changes in behaviour or application of skills in the workplace.

Level 4 Results: Measure the impact of training on organisational goals (e.g., improved grant success rates).

Continuous Improvement:

Use feedback and evaluation results to continuously refine and update the TNA tool.

Regularly review and adjust training to address evolving needs.

Step Eight: Integration with Organisational Strategy

- Alignment with Strategic Goals:
    - Ensure that training programs align with the organisation's overall strategic goals.
    - Link training outcomes to key performance indicators (KPIs) such as research output, publication quality, and successful funding applications.

- Sustainability and Long-term Planning:
    - Develop a long-term training and development plan to ensure sustained competency development.
    - Incorporate leadership development and succession planning for research managers.

Step Nine: Documentation and Reporting

Comprehensive Reporting

- ✓ Document the entire TNA process, findings, and recommended training programs.
- ✓ Provide clear recommendations for implementation, with timelines and resource requirements.

Regular Updates:

- ✓ Schedule periodic reviews and updates of the TNA tool to adapt to organisational and external environment changes.

Step 10: Implementation Plan

- Action Plan: Develop an implementation plan with timelines, responsibilities, and resource allocation.
- Pilot Testing: Conduct a pilot of the TNA tool with a small group of research managers and refine it based on feedback.

Resources/Tools and Templates

SWOT and PESTLE Templates

Template 1: Swot Analysis

Instructions:

1. Identify Internal Strengths and Weaknesses: Assess your organisation's internal environment, including resources, capabilities, processes, and cultural factors.
2. Identify External Opportunities and Threats: Examine the external environment to identify opportunities and threats that could impact the organisation.

Example:

Internal Factors	Strengths	Weaknesses
Resources		
Capabilities		
Processes		
Cultural Factors		

External Factors	Opportunities	Threats
Market Threats		
Technological Advances		
Regulatory Environment		
Economic Environment		

Template 1:

Internal Factors	Strengths	Weaknesses

External Factors	Opportunities	Threats

Template 2: PESTLE Analysis

PESTLE Analysis Template

Instructions:

1. Assess Each PESTLE Factor: Consider the elements that could affect research management within your organisation.
2. Evaluate the Impact: Determine how each factor influences the organisation and prioritize them based on their significance.

Example:

Factors	Description	Impact on Organisation
Political		
Economic		
Social		
Technological		
Legal		
Environmental		

Template 2:

Factors	Description	Impact on Organisation
Political		
Economic		
Social		
Technological		
Legal		
Environmental		

Training Needs Prioritization Matrix

Instructions:

1. List Training Needs: Identify the various training needs of research managers.
2. Assess Importance: Evaluate the importance of each need based on its impact on organisational goals.
3. Assess Urgency: Determine the urgency of addressing each need.
4. Prioritise: Use the matrix to prioritise training needs, focusing on those that are both high importance and high urgency.

Prioritization Matrix Template

Example 3

Urgency	High	Low
Importance	High	Immediate Priority
	- [Training Need 1]	- [Training Need 2]
	Low	Short-Term Focus
	- [Training Need 3]	- [Training Need 4]

Template 3

Urgency	High	Low
Importance	High	
	Low	

Evaluation Tools for Kirkpatrick's Model

Instructions:

- Customise the Surveys and Assessments: Modify the content to reflect the specific training objectives and organisational context.
- Implement Across All Levels: Use the tools systematically after each training program to gather comprehensive evaluation data.

Level 1: Reaction (Satisfaction Survey)

Survey Questions:

1. How satisfied were you with the training content?
   Very Satisfied ☐

   Satisfied ☐

   Neutral ☐

   Unsatisfied ☐

   Very Unsatisfied ☐
2. How relevant was the training course to your job?
   Highly Relevant ☐

   Relevant ☐

   Somewhat Relevant ☐

   Not Relevant ☐
3. What did you like most about the training?

4. What could be improved?

Level 2: Learning (Knowledge Assessment)

Pre- and Post-Training Quiz:

- Question 1: Describe the key steps in securing a research grant.

- Question 2: Explain the importance of research ethics in project management.

- Scoring: Compare pre-training and post-training responses to measure knowledge gained.

Level 3: Behavior (Behavioral Change Assessment)

Behavioral Observation Checklist:

- Criteria:
    - Demonstrates improved project planning skills ☐
    - Applies ethical considerations in decision-making. ☐
    - Effectively communicates with research team members. ☐
- Rating Scale:
    - Not Observed ☐
    - Rarely Observed ☐
    - Sometimes Observed ☐
    - Often Observed ☐
    - Always Observed ☐

Level 4: Results (Impact on Organisational Goals)

Key Performance Indicators (KPIs):

- Metric 1: (e.g., *Increase in successful grant applications*.)

- Metric 2: (e.g., Improvement in research project outcomes (e.g., timely completion).

- Metric 3: (e.g., Reduction in compliance issues or ethical violations.)

Data Collection Method:

- Compare organisational performance data before and after training implementation to evaluate the impact on these KPIs.