
TESTADVANCE TRAINING-DESIGN SERVICES (TTD)

This document describes testadvance's Training-Design services and process

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Assessment

Training Requirements

- **Further productivity**
- **Reduce costs**

- Help staff reach their full potential and productivity
- Further job-satisfaction and motivation
- Improve alignment between staff-development, work, operations and timelines
- Reduce Non-Recurrent Engineering, Work In Progress, re-work and 'fire-fighting'
- Increase utilisation of engineering work, learning, knowledge, assets and investments

Training Configuration

Training Delivery - Design

- **Accelerate life-cycles**
- **Improve ROI/ROA**

Testadvance Training services help engineers and managers further themselves, their work and department by improving and accelerating the development, allocation and application of competence.

1 Deliverables

Training Plan Document (TPD)

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| <ol style="list-style-type: none"> 1. Scope of Engagement <ul style="list-style-type: none"> ◦ Needs, objectives and constraints ◦ Learning outcomes 2. Training Requirements <ul style="list-style-type: none"> ◦ Work/skills analysis ◦ Gap-analysis ◦ Areas of Improvement/Opportunity | <ol style="list-style-type: none"> 3. Training Configuration <ul style="list-style-type: none"> ◦ Subject Matter/Methods ◦ Evaluation/Learning Outcomes 4. Training Delivery- Design <ul style="list-style-type: none"> ◦ Planning & Logistics ◦ Program management & evaluation |
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Training-Design delivers a Training Plan for engineers and managers in electronics, RF/Wireless and Test & Measurement. Training Design is based on the Instructional Design Process.

2 Training-Design Process (TTDP)

Training-Design uses a structured, systems-thinking approach to competence in operations.

Competence	Product/Service	Engineering Department	Operations
Management	Engineering-Management Practices		
Ongoing development	New Technologies and Practices	Maintaining & Improving Advanced Test-/Engineering Test-/Engineering Practices	Production Delivery Development
Test-/Engineer Development	Testing/Deploying the Product/Service	Optimising Operation/System Deployment, ramp-up and stabilisation Designing Functional-Plans/-Routines Integrating and Verifying Systems Designing System-Architecture Designing Solution-Concepts Developing Specifications	Test/Engineering in Operations
Foundation	Technology	Understanding Requirements Fundamentals of Test/Systems and Test-Plans/Operation Principles of Test-/Engineering and Project Delivery Fundamentals	Test/Engineering in Operations Projects & Delivery
Personal skills	Self-managed work & team-work in Engineering Collaboration & communication in Engineering		

Figure 1 Basic systems-approach to developing competence in Test & Engineering

The Training-Design process comprises Assessment, Requirements Analysis, Training Configuration and Delivery Design. While the complete process described here includes all possible work-elements, individual engagements only include those elements needed. Indeed, a full execution of all analyses represents the 'worst-case' scenario.

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| <ul style="list-style-type: none">i. Assessment<ul style="list-style-type: none">i. Define Scope of Engagementii. Training Requirements<ul style="list-style-type: none">i. Work/job analysisii. Gap-analysisiii. Areas of Improvement (AoI)iv. Areas of Opportunity (AoO) | <ul style="list-style-type: none">iii. Training Configuration<ul style="list-style-type: none">i. Subjects & Methodsii. Outcomes & Evaluationiv. Training Delivery - Design<ul style="list-style-type: none">i. Planning/schedulingii. Management/evaluation |
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Table 1 TTDP Process Overview

2.1 Assessment

The Assessment establishes the client's training needs and objectives, stakeholders and constraints et al. The Scope of Engagement (SoE) provides a clear description of the areas to address, proposes solutions and sets the focus and extent of the TTD. Assessment provides the opportunity to discuss concerns, ideas and objectives with experienced and independent experts – prior to a commitment. Clients receive a clear and quantified understanding of how the training-design applies to their specific staff-development and department. The SoE is documented as section 1 of the Training Plan Document (TPD). It also forms the basis of the Statement of Work (SOW) and is provided prior to a financial commitment from the client.

2.2 Training Requirements Analysis

The Requirements Analysis determines the specific knowledge, skills and abilities required. The analysis follows the Instructional Design Process (IDP) and includes a work-assessment, student-assessment and a gap-analysis. Analysis is executed to the detail and extent defined in the SoE. A complete and structured description including readiness, skills/levels, work/job-requirements, applicable schedules and the 'available' competence vs. required proficiency is provided and documented in section 2 of the TPD. The results are organised in areas requiring improvement, Areas of Improvement (AoI), and areas where performance is within expectation, yet where improvements can be made, Areas of Opportunity (AoO).

2.3 Training Configuration

Training Configuration provides the subject matter, level, methods and evaluations. Configuration follows the Instructional Design Process and is executed to the extent defined in the SoE, the results of the Requirements Analysis and the agreed objectives, outcomes and milestones. Training may be configured as a short-course(s), a curriculum or a comprehensive training program. Configuration includes structure, individual sections/topics, as feasible practices, levels and tracks, subject matter and methods and any applicable evaluations or prerequisites. It can accommodate client programs and third-party trainings. Cost/benefit is assessed and reviewed. Training Configuration is documented in section 3 of the Training Plan Document.

2.4 Training Delivery – Design

Training Delivery-Design provides the planning and scheduling, integration and alignment of the execution of the Training Plan. Delivery integrates with client schedules, operations, projects or programs. Delivery design provides logistics, schedule and budget and is developed with input from the client and their HR. It provides change-management procedures and defines a program evaluation as part of the Acceptance of the Training-Plan. Delivery-design details as required pre-training assessments, preparatory assignments and studies etc. Available client resources and work can be incorporated. Training Delivery-Design is documented in section 4 of the Training Plan Document.

3 Appendix – TTDP Flowcharts



