

The Swarm Training Programme

Business Improvement Specialist

Level 5



Business Improvement Specialists are responsible for leading the deployment of improvement strategy, for training others and for providing broad and deep technical expertise in advanced and complex Lean and Six Sigma, Project and Change Management. This apprenticeship develops the skills and competences for Business Improvement Specialists

The Programme

Business Improvement Specialists typically report to Business Improvement Leaders who develop the improvement strategy and governance processes, and who provide technical guidance on advanced analysis. Business Improvement Specialists manage (directly and/or matrix) Business Improvement Practitioners who lead smaller improvement projects aligned to the improvement strategy. A typical ratio of Business Improvement Specialists to Business Improvement Practitioners in an organisation could be 1:10.

In comparison with the work of an Business Improvement Practitioner, Business Improvement Specialists draw on their advanced knowledge and skills in applying Improvement principles and tools across a range of programmes/ projects/areas to build the capability of others. They also swiftly visualise processes, problems and opportunities and use both graphical and statistical analysis to deliver improvements.

The training element will typically take up to 16 months to complete with 20% off the job learning.

Level: Level 5.

Duration: 14—16 months of learning plus up to 12 weeks of End Point Assessment Process

Apprentices without level 2 English and Maths will need to achieve this level prior to taking the end-point assessment.

Delivery Model:

- Hybrid of classroom workshops/remote webinars (depending on number of learners).
- Monthly individual mentoring and tutoring sessions to support in application of knowledge, skills and behaviours.

The Standard

Apprenticeship Standards are based on occupational standards. An occupational standard is a short and concise document that describes what someone who is competent in the occupation normally does – ‘duties’, and the ‘knowledge, skills and behaviours’ (KSBs) required to carry out these duties competently; along with any qualifications that must be taken and alignment with professional recognition if applicable.

Knowledge

Leading improvement teams: Personality types, team development stages, motivational techniques, situational leadership, learning styles, mentoring models.

Project planning: Multi-element business case, financial plan, benefits realisation plan, risk management plan, project plan.

Project reviews & coaching: Coaching models, Maslow’s hierarchy of needs.

Change planning: Change management methods, impact/readiness, influencing strategies.

Commercial environment: Business and economic risks including changes in legislation, government regulation or trading conditions that can impact all aspects of improvement from Project Selection through to selection/implementation of improvements.

Principles & methods for Improvement: How to apply Improvement Methods (eg. Practical Problem Solving, Define-Measure-Analyse-Improve-Control, 8-Disciplines, Identify-Define-Optimise-Verify) across all functions, policy deployment principles, Lean culture.

Voice of the customer: Interviewing and focus groups, Quality Function Deployment principles and how to build a House of Quality.

Process mapping & analysis: Activity network diagrams, design structure matrix, process modelling, key function diagrams and analysis.

Data acquisition planning: Stratification, rational sub-groups, power and sample size.

Statistics & measures: Probability distributions and how to test for fit of probability distributions to data. Confidence intervals, central limit theorem.

How to test data for stability and normality and strategies for dealing with non-stable or non-normal data.

Lean concepts and tools: Principles of Lean Thinking and Lean tools including origins and cultural aspects critical to successful application within an organisation.

Measurement system analysis: Repeatability & Reproducibility analysis. Long term measurement error.

Process capability: Data transformation, life data analysis and prediction.

Root cause analysis: Matrix plots, multi-vari charts, hypothesis testing principles and methods, correlation and regression principles and methods.

Experimentation: Principles of full and fractional designed experiments including replicates, repeats, randomisation, blocking and centre points, resolution and confounding. Planning and analysis using residuals, main effects & interaction plots, hierarchy of terms, Response Surface Method, Split plots, Analysis of variance (ANOVA). Approaches for model optimisation.

Identification & prioritisation: Creativity tools e.g. theory of inventive problem solving (TRIZ), Pugh matrix.

Failure mode avoidance: System state flow, boundary diagram, interface analysis tables, fault tree analysis, robustness checklist, tolerance design and analysis. Principles and links between Failure Modes and Effects analysis for concepts, designs, processes.

Sustainability & control: Control and reaction plans. Prevention controls.

Skills

Leading improvement teams: Holding team members/stakeholders to account for delivering agreed actions within an improvement project and building/maintaining appropriate stakeholder relationships inside and outside the organisation to deliver improvement project objectives.

Strategic Deployment of Continuous Improvement: Contribute to deployment of improvement strategy, participating as an active member of the improvement community.

Communication: Prepare and present concise proposals and plans. Capture and share progress through effective formats and channels. Use and handle questions effectively. Build rapport with others.

Capability Development: Train, facilitate and critique the application of tools used by improvement practitioners including tool-selection, links between tools, how they are used within a structured method, analysis of results and presentation of recommendations.

Project planning: Plan and manage finances, multi-stakeholder delivery and benefits realisation.

Change planning: Design reinforcement, engagement and communication strategies.

Principles and Methods for Improvement: Guide others on the selection of appropriate methods (eg. Practical Problem Solving, Define-Measure-Analyse-Improve-Control, 8-Disciplines, Identify-Define-Optimise-Verify) to deliver improvements. Conduct gateway assessments to ensure suitability of projects to progress.

Project selection & scope: Guides others on the selection and scoping of improvement projects and the initial response to product/process performance issues. Identify, scope and prioritise improvement opportunities that map to high-level organisation objectives and key value-streams.

Process mapping & analysis: Guide others on the selection of appropriate process mapping and analysis tools. Critique improved state.

Lean tools: Identify and analyse value-streams using appropriate methods and tools to optimise flow to customer. Develop a plan for Lean deployment within the organisation including effective and relevant performance metrics.

Measurement: Guide others on the planning, analysis and interpretation of data collection & measurement studies including the design of tests to recreate failures & steps to diagnose/reduce short & long-term measurement variation.

Statistics & measures: Confirm data and fit for a range distribution models. Establish predictions. Calculate confidence intervals.

Data analysis-statistical methods: Model random behaviour and make inferences with levels of confidence. Calculate/recommend sample size. Test hypotheses for all data types. Assess input/output correlation. Generate, analyse and interpret simple and multiple predictive relationship models.

Process capability & performance: Identify data stability/distribution issues and apply appropriate strategies to enable robust Capability Analysis. Analyse life data to establish rates and patterns.

Root cause analysis: Make appropriate use of data to assess contribution of critical inputs/root cause(s) to product/process performance using appropriate graphical and statistical tools to draw and communicate conclusions.

Experimentation & optimisation: Guide others on the planning, analysis and interpretation of experiments. Plan, conduct, analyse and optimise both full & fractional experiments.

Data analysis – Statistical Process Control: Monitor and assess ongoing process variation and changes through chart-selection, control-limit setting, sample sizing/frequency and control-rules.

Behaviours

Benchmarking: Guide others on benchmarking to support all stages of improvement projects including future-state design.

Failure mode avoidance: Decompose complex systems in order to define main functions. Analyse system interactions. Cascade knowledge through fault tree analysis. Create and assess design rules, standards & verification methods. Complete robustness studies to select appropriate control strategies and detection methods.

Sustainability & control: Guide others on control and sustainability planning including methods and tools to maintain benefits, extraction of learning, replication, sharing and consolidation of new knowledge into organisational learning.

Drive for results: Co-ordinates and delivers sustained improvement across the business by engaging with, and inspiring stakeholders; adopting a can-do attitude.

Team-working: Leads cross functional project teams proactively, regularly supports others and replicates learning.

Professionalism: Exemplifies high standard of professional integrity, ethics and trust within the organisation, whilst maintaining flexibility to the needs of the business.

Process Thinking: Drives process-thinking and customer-focused, data-driven decision making.

Continuous development: Identifies & models opportunities for development of self & others.

Safe working: Adopts a proactive approach to safety, encouraging others and suggesting compliance improvements.

Delivery Timeline

Phase 1: On Programme Training and Learning (Month 1-13)

Developing the Knowledge

The knowledge training is primarily delivered via classroom workshops & webinars (numbers dependent) or 121 via tuition. The content of this is based on the main knowledge outcomes that provide a depth of understanding for the skills.

Employer collaboration/involvement is key to supporting some of the workshops/content as many will need to be bespoke to meet the employer specifics.

Skills Development and Portfolio Building

Evidence to demonstrate the performance of knowledge, skills and behaviours will be supported via 121 tuition and mentoring with evidence collected via our E portfolio system.

The development of the 13 skills aims will be done throughout the programme and evidence of performance will be gathered to create a showcase portfolio required by the End Point Assessment.

Reviews

Every twelve weeks the tutor will conduct a progress review with the learner and line manager to support in keeping the progress on track, identify any issues and plan the next phase of collaborative learning.

English & Maths

Apprentices without level 2 English and maths will need to achieve this level prior to taking the End-Point Assessment. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

Phase 2: Gateway and End Point Assessment (Month 14+)

Gateway

When all learning has been completed and evidence in the portfolio has been gathered, the next process is to conduct the Gateway review. The gateway review is when the learner, employer and provider agree the learners readiness to progress to End-Point Assessment.

The End-Point Assessment Process

EPA Gateway requirements:

- Completion of the off-the job learning components of the programme.
- Confirmation from the employer that the apprentice is ready. It is recommended that the training provider is consulted by the employer to inform the decision.
- Apprentices without Level 2 English and Maths will need to achieve this level prior to taking end-point assessment. For those with an education, health and care plan or a legacy statement the apprenticeships English and maths minimum requirement is Entry Level 3 and a British Sign Language qualification is an alternative to English qualifications for those whom this is their primary language.

The EPA consists of three distinct assessment methods:

- Completion of a portfolio of evidence.
- Professional discussion, underpinned by portfolio of evidence.
- Examination, based on mini case-studies

The EPA must be completed within a 20-week period, after the apprentice has met the EPA gateway requirements. Assessment methods can be completed in any order, allowing EPAOs flexibility in scheduling and cost-effective allocation of resources. EPAOs must ensure that each assessment method is scheduled for an apprentice within their maximum 20-week EPA period. It is recommended that the professional discussion and examination components be completed on the same day however this is not a requirement.

The full details of the end assessment plan can be found on institute of apprenticeships website.

Employer Support

- Dedicated Senior Account Manager
- Quarterly Cohort Reviews with Senior Account Manager
- Employer Showcase in Swarm media and news
- Access to view Learners progress via our E-portfolio

Costs

Full Apprenticeship Cost Per Learner:
£9000 (Maximum Funding Band)

For more information please don't hesitate to contact us.

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