

D A S A

DEVOPS AGILE
SKILLS ASSOCIATION

DASA DEVOPS LEADER

Syllabus

Version 1.0.0

October 2020

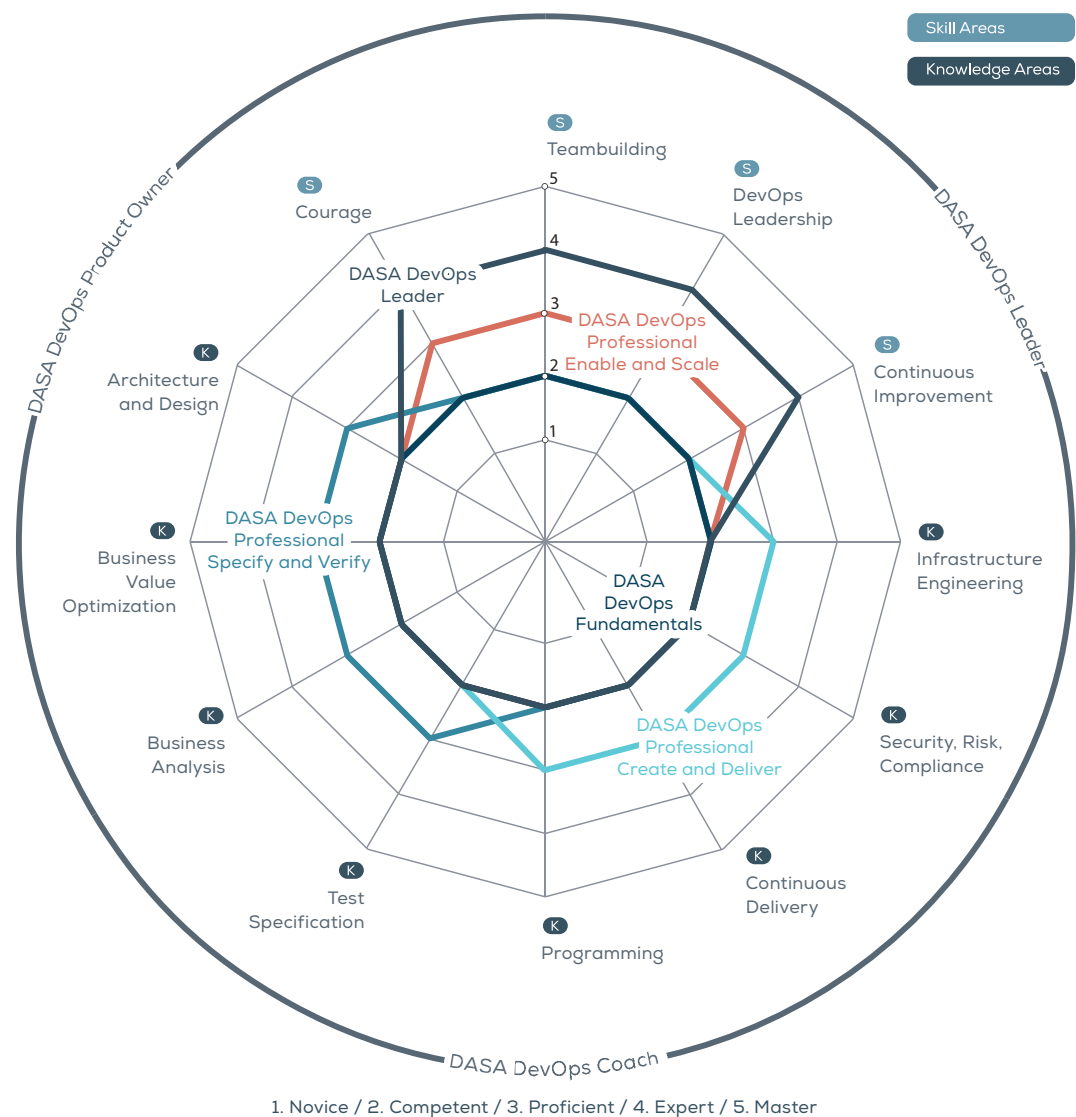
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Current	1.0.0	October 2020
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SCOPE AND PURPOSE OF THIS DOCUMENT

The purpose of this document is to inform all parties interested in the DASA DevOps Leader course of the areas covered in the course.

THE DASA DEVOPS COMPETENCE MODEL

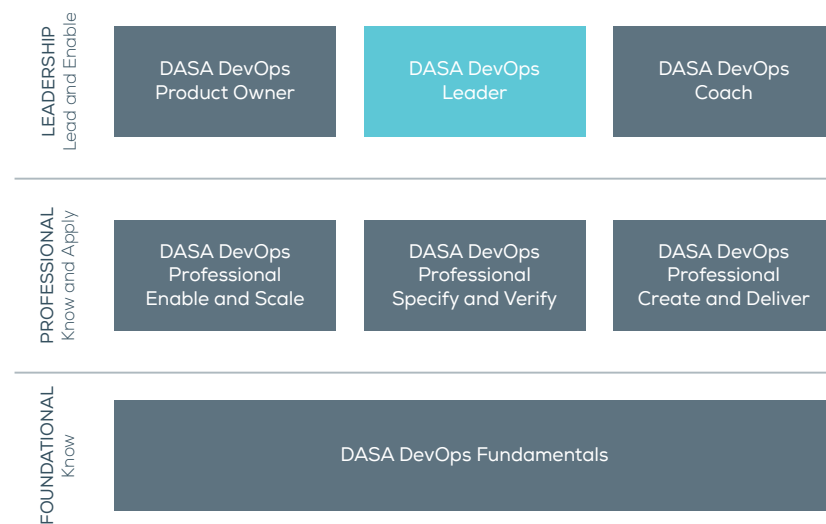
The DevOps Agile Skills Association (DASA) competence framework identifies 8 knowledge areas and 4 skills that are relevant to any DevOps transformation and team, as shown in the following figure.



Every individual operating in a DevOps team requires to be competent at all 8 knowledge areas and proficient at the 4 skill levels. For an organization to truly benefit from

DevOps principles and practices, DevOps teams require to be at the highest possible level (preferably Expert level) in all the 12 areas. Individual team members can specialize in specific areas to achieve these capabilities. Moreover, the organization needs to enable and create the right conditions for a high-performance culture, which means investing in DevOps leadership.

DASA DEVOPS LEADER



DASA DevOps Certification Scheme

DevOps Leaders are accountable for creating high-performance digital organizations. Being responsible for leading the DevOps transformation, and creating the framework for teams to scale and achieve maximum business value, they should know how to establish successful leadership teams, management structures, and governance models. By applying essential leadership practices, they need to grow the right type of culture to attract and retain the right people. They also focus on eliminating old corporate management philosophies and practices that usually slow down the business impact of Agile/DevOps.

The DASA DevOps Leader course focuses on how to lead, drive, or support a successful DevOps transformation in practice. With lots of best practices, patterns, and antipatterns from organizational culture, change management, leadership, people, process, and technology points of view, learners will be able to understand the importance of (informal and formal) leadership to create high-performance digital organizations. More importantly, they will be able to apply all available leadership best practices to transform their organizations and develop themselves as a modern and digital-savvy leader.

QUALIFICATION OBJECTIVES

When you have acquired the required knowledge from this certification program, you will be able to:

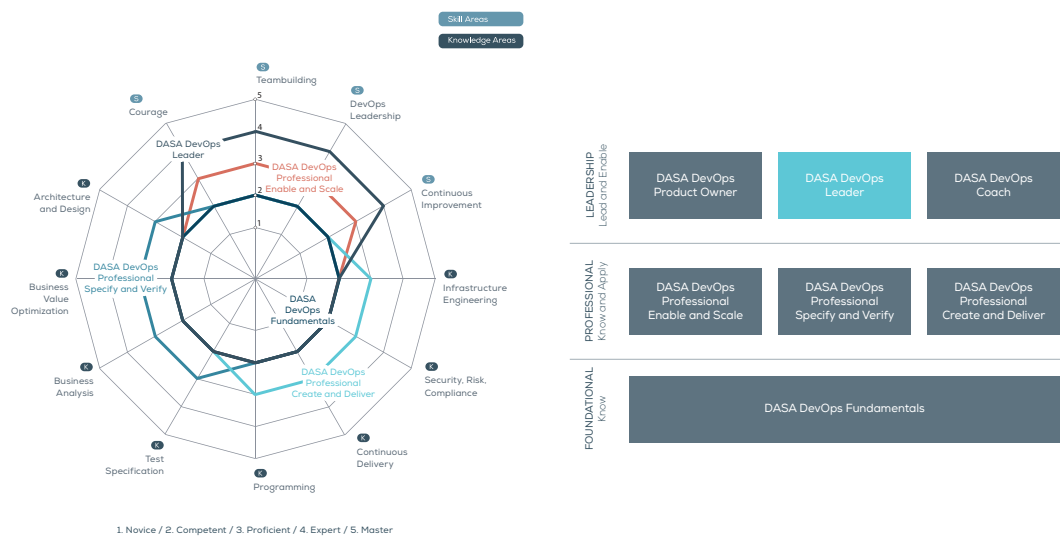
- Recollect key drivers for digital disruption, and understand the role DevOps plays in digital transformations, and the role DevOps Leaders can play in leading these transformations.
- Distinguish contemporary leadership styles and practices and their pros and cons in a DevOps environment, and apply these to your organization and/or transformation.
- Apply learnings to create a value case, 'why,' and scope of your DevOps transformations.
- Understand key ingredients that organizations and leaders need to invest in for creating the right “smell of the place,” attracting and retaining talented employees, and developing a high-performance culture in your organization.

- Analyze how to change traditional “Business vs. IT” operating models and governance structures to DevOps-supporting ones.
- Analyze how best to optimize between team autonomy and ownership on the one hand, and architectural, technical, and organizational constraints on the other hand to manage quality, IT risk, and compliance in a DevOps organization.
- Compare and contrast personal and organizational leadership patterns and anti-patterns in the various stages of a DevOps transformation and from various perspectives, such as people, process, and technology.
- Lead a transformation within your organizational context with a focus on the key DASA DevOps principles, values, and practices.
- Own your digital leadership journey throughout the transformation by continuously reflecting, learning, and (re)defining your leadership style.

HOW DOES DASA DEVOPS LEADER FIT INTO THE DASA COMPETENCE FRAMEWORK?

Although no prior certification is necessary for DASA DevOps Leader, the course does build on the foundational-level principles and concepts covered in the DASA DevOps Fundamentals course and the professional-level knowledge and skills covered in the DASA DevOps Enable and Scale course. Like Enable and Scale, DASA DevOps Leader emphasizes the Skills part of the DASA Competence framework, leaders require these skills more compared to the (raw) knowledge alone.

After completing the DASA DevOps Leader course, you will cover the area marked shaded in the following figure of the DASA qualification scheme. As a result, you will reach the 'Expert' level at the four skills areas of the DASA competence framework.



TARGET AUDIENCE

The DASA DevOps Leader qualification is primarily aimed at (prospective) managers and leaders who have working experience or interest in taking a (formal or informal) leadership role to help teams and organizations to grow, accelerate, increase their performance and get more business value out of IT. Some of the roles include:

- (senior) Business/IT managers
- Executives
- Team leaders
- Project managers
- Program managers

- Consultants
- Change agents
- Coaches
- Organizational development specialists
- Product owners
- Product managers

COURSE REQUIREMENTS

Basic familiarity with Agile, Scrum, and DevOps is beneficial. The course aims at (prospective) managers and leaders who have working experience or interest in taking a (formal or informal) leadership role to help teams and organizations to transform—grow, accelerate, increase their performance, and get more business value out of IT.

CERTIFICATION REQUIREMENTS

You will receive the required certification from DASA on the successful completion of the DASA DevOps Leader assessment.

EXAM DETAILS

The DASA DevOps Leader assessment will include an examination of theoretical concepts but is also grounded in the experimental learning and activity-based-learning philosophies, focused on learning through reflection on doing (for example, learners writing a position paper or working on and documenting a case study).

LEARNING OUTCOMES

A classification widely used when designing assessments for certification and education is Bloom's Taxonomy of Educational Objectives. This classifies learning objectives into six ascending learning levels, each defining a higher degree of competencies and skills. (Bloom et al, 1956, Taxonomy of Educational Objectives).

This structured approach helps to ensure:

- A clear delineation in learning level content between different qualification levels
- Learning outcomes are documented consistently across different areas of the guidance
- Exam questions and papers are consistent and are created to a similar level of difficulty.

The DASA DevOps Leader qualification examines learning outcomes at the first four levels, as listed in the following table.

DASA DEVOPS LEADER - LEARNING OUTCOMES				
	1. Knowledge	2. Comprehension	3. Application	4. Analysis
Generic Definition from Learning Outcomes	Know key facts, terms, and concepts relating to the syllabus area.	Understand key concepts relating to the syllabus area	Be able to apply key concepts relating to the syllabus area for a given scenario.	Be able to analyze and distinguish between appropriate and inappropriate use of the method/ guidance for a given scenario/ situation.

DASA DEVOPS LEADER - LEARNING OUTCOMES				
	1. Knowledge	2. Comprehension	3. Application	4. Analysis
Qualification Learning Outcomes	Know facts, including terms, concepts, principles, tools, and techniques relating to the syllabus area.	Understand the concepts, principles, and dimensions of DevOps and can explain how these are applied.	Shows that candidates have the ability to make use of information in a context different from the one in which it was learned.	Shows that candidates have the ability to examine and break information into parts by identifying motives or causes, make inferences and find evidence to support generalizations.

SYLLABUS

The following tables describe the key aspects of the DASA DevOps Leader Syllabus.

Module 1: Analyzing the Role of DevOps in Digital Transformation

The module emphasizes the core concepts of DevOps, change management, and the role leaders play in leading DevOps transformation. This knowledge will enable you to analyze existing market trends in digital disruption, discuss the impact of these trends on a typical organization, and understand the urgency for digital transformation for organizations to remain competitive.

TOPIC	Subtopic	Objectives
Characteristics of Organizational Failure	<ul style="list-style-type: none"> Drivers for Digital Disruption (such as increasing Volatility, Uncertainty, Complexity and Ambiguity (VUCA)) 	<ul style="list-style-type: none"> Analyze what changes, opportunities, and risks (such as market trends and digitization trends) exist in a VUCA world and its impact on most organizations
Need for Digital Transformation	<ul style="list-style-type: none"> Characteristics of High-Performance Digital Organizations (HPDO) The Urgency for Digital Investment Tailoring the Digital Transformation for your type of company 	<ul style="list-style-type: none"> Distinguish hypes and trends from facts, proven methods, and practices, and reflect upon what leads to tangible value for an organization
Role of DevOps	<ul style="list-style-type: none"> DASA DevOps Principles Who is DASA? DASA Competence Framework Key DevOps Practices 	<ul style="list-style-type: none"> Understand the key DASA concepts, principles, and practices Appraise the benefits of applying DevOps to an organization
Role of DevOps Leaders	<ul style="list-style-type: none"> Need for Change Management Role of Leadership Transition vs. Transformation Different types of leaders in a DevOps organization 	<ul style="list-style-type: none"> Analyze core concepts of change management Understand the role leadership plays to implement a DevOps culture

Module 2: Working on Personal Leadership in a DevOps Organization

The module emphasizes contemporary leadership and management styles and practices. This knowledge will enable you to examine, evaluate, and adopt the best leadership styles and practices during a DevOps transformation. In other words, the module will empower you to start acting as a DevOps Leader.

TOPIC	Subtopic	Objectives
Contemporary Leadership Styles and Practices	<ul style="list-style-type: none">• Servant Leadership• Secure-based Leadership• Facilitative Leadership• Transformational Leadership	Examine contemporary management and leadership schools of thought, such as 'facilitative leadership, servant leadership, secure-based leadership, and transformational leadership
Leadership Styles for DevOps Transformations	<ul style="list-style-type: none">• Cultural implications of embracing the 6 DASA DevOps principles• Role of Managers and Leaders in a DevOps Environment	<ul style="list-style-type: none">• Compare and contrast the pros and cons of various personal leadership styles under different situations• Analyze preconditions required from a personal leadership perspective to increase the chance of success of a DevOps transformation

Module 3: Creating a Climate for Change

The module emphasizes defining the 'Why' of the DevOps transformation and explains various approaches to define the objectives, value, and scope of this transformation. This knowledge will enable you to create an effective change story for the DevOps transformation. The story that you would like to lead and create the required climate in your organization for the upcoming change.

TOPIC	Subtopic	Objectives
The 'Why' Behind a Digital Transformation Journey	<ul style="list-style-type: none"> Digital Strategy execution Stakeholder-specific change narratives 	Sketch and reflect on the need and urgency for your organization's digital transformation
Digital Transformation - The Definition and the Scope	<ul style="list-style-type: none"> Building a transformation project/program Different types of value metrics and KPIs 	Sketch and reflect on the objectives and scope of your organization's digital transformation
Digital Transformation - The Value Case	<ul style="list-style-type: none"> Theory of constraints Value management 	Create a value case for a digital transformation to turn an organization into an HPDO
Digital Transformation - The Change Story	<ul style="list-style-type: none"> Storytelling Visualization 	<ul style="list-style-type: none"> Compare and contrast change management storytelling techniques to build a powerful change story for the transformation Argue for and defend the change story to various stakeholders (from board level to IT specialists)

Module 4: Creating Conditions for Success – People First

The module emphasizes creating specific conditions from the people's perspective to increase the success of the DevOps transformation. It highlights key characteristics of a culture in which individuals thrive (or grow) and contribute to becoming a High-Performance Digital Organization. This knowledge will enable you to determine what talent management strategies and leadership practices you should adopt for your DevOps transformation to be most effective.

TOPIC	Subtopic	Objectives
Right "Smell of the Place"	<ul style="list-style-type: none"> • People Development Strategies • Importance of Autonomy, Mastery, and Purpose 	Understand the key ingredients of an organization from the investment perspective to enable employees to thrive
Talent Management Strategies for DevOps Transformations	<ul style="list-style-type: none"> • DevOps Knowledge and Skills at Scale • DevOps Teaching and Inspiring Strategies for Specialists and Managers 	<ul style="list-style-type: none"> • Examine the state-of-the-art and state-of-the-practice for creating a high-performance culture and workforce • Compare and contrast approaches to implement organization-wide DevOps talent management practices for both IT and non-IT employees
Leadership Patterns and Anti-Patterns		Analyze and discuss available leadership tactics and practices to determine what works well in specific circumstances

Module 5: Creating Conditions for Success - Processes and Governance

The module emphasizes creating specific conditions from the process and governance perspective to increase the success of the DevOps transformation. It highlights key characteristics of how to set up an organization thriving on autonomous, end-to-end responsible product teams for generating as much business value for the organization as possible. Business-IT barriers, complex or bureaucratic governance structures, or other constraints that slow down the flow of work do not exist in such organizations and their processes. This knowledge will enable you to create the right structure and way of working for your High-Performance Digital organization based on proven DevOps practices.

TOPIC	Subtopic	Objectives
End-to-End Responsible Product Teams at Scale	<ul style="list-style-type: none"> From Business vs IT to a new operating model The role of Agile and DevOps frameworks when scaling agile/DevOps successfully Synchronization of planning cycles with multiple DevOps teams 	<ul style="list-style-type: none"> Analyze ways to change traditional 'Business vs IT' operating models to DevOps-supporting forms Compare and contrast popular Agile and organizational frameworks and determine elements that fit best under different circumstances and maturity stages of an organization
Continuous Improvement of Team Performance		<ul style="list-style-type: none"> Analyze the pros and cons of various team setups or topologies that support the DevOps way of working

TOPIC	Subtopic	Objectives
Budgeting in an Agile/DevOps Organization	Prioritization on strategic / portfolio level" with techniques such as WSJF	<ul style="list-style-type: none"> Analyze how existing governance, financial management, and compliance methods and processes should be adapted to work best in a DevOps environment
Leadership Patterns and Anti-Patterns		<ul style="list-style-type: none"> Analyze and discuss available leadership tactics and practices and determine what works well in specific circumstances

Module 6: Creating Conditions for Success - Architecture and Technology

The module emphasizes creating specific conditions from the IT architecture and technology perspective to increase the success of the DevOps transformation. It highlights key characteristics of how organizations benefit from modern IT infrastructure, continuous delivery, and scalable modern software architectures. The module also explains how best to optimize between autonomy at the (DevOps) team level and at the centralized governance, rules, and regulations level to ensure high-quality solutions. This knowledge will enable you to find a balance in your DevOps organization for leveraging state-of-the-art technology and ways of working on the one hand, and proven metrics, governance systems, and built-in quality controls on the other hand.

TOPIC	Subtopic	Objectives
Ways to Accelerate DevOps Transformation	<ul style="list-style-type: none"> • State of the Art • Automation Practices • Infrastructure Practices • Technology Practices 	<ul style="list-style-type: none"> • Understand key technology and automation areas to invest in performance acceleration • Examine key performance indicators to monitor the quality of the DevOps organization from the technology and architecture perspectives
Enterprise and Software Architecture	<ul style="list-style-type: none"> • DevOps-Specific Modern architecture Approaches 	<ul style="list-style-type: none"> • Analyze how best to optimize between team autonomy and ownership on the one hand, and architectural and organizational constraints on the other hand to manage quality, IT risk, and compliance in a DevOps organization • Compare and contrast different approaches and governance models for enterprise and software architecture in a DevOps environment
Governance, Risk, and Compliance (GRC) in DevOps organizations	<ul style="list-style-type: none"> • IT Risk Management • Governance and Compliance • Information Security 	<ul style="list-style-type: none"> • Reflect on how to best implement IT risk, information security, and compliance in a DevOps organization
Leadership Patterns and Anti-Patterns		<ul style="list-style-type: none"> • Analyze and discuss available leadership tactics and practices and determine what works well in specific circumstances

Module 7: Leading and Bootstrapping the Transformation

The module emphasizes creating key organizational culture preconditions for a successful DevOps Transformation and following the required steps to effectively bootstrap this transformation. Insights into the organization's status quo (in relationship to the goals and ambitions of the transformation) is equally important as building an effective transformation team. This knowledge will enable you to successfully get a DevOps transformation off the ground by adopting proven change management and leadership practices.

TOPIC	Subtopic	Objectives
Learning and Adaptive Organizations	<ul style="list-style-type: none"> Organizational Theory Holacracy Humanology 	Examine modern organizational theory to create high-performance organizations
Maturity and Status Quo Assessment		Analyze practices to obtain a proper understanding of an organization's status quo (starting point of the transformation) from a culture, governance, processes, people, and technology perspective
Change Management theory for Building Transformation Teams	Visual Management Techniques (such as Obeya Rooms)	Analyze good practices for planning, designing, and executing DevOps transformations Reflect on the power of being data-driven and invest in visual management during transformations
Leadership Patterns and Anti-Patterns		Analyze and discuss available leadership tactics and practices and determine what works well in specific circumstances

Module 8: Embracing the Change and Lessons Learned

The module emphasizes what leaders should do during their DevOps transformation to deal with change management and conduct proper stakeholder management.

Transformations often result in unforeseen responses from people, and everybody responds differently to change.

This knowledge will enable you to understand what makes people tick and how best to communicate and collaborate with them to drive a DevOps transformation successfully.

TOPIC	Subtopic	Objectives
Stakeholder Management and Communication Strategies	3F method (Find the Pain, Feel the options, Follow the energy)	Compare and contrast personal and organizational leadership practices for stakeholder management and communication during transformations
Embracing change and learning from failures	3 challenges of change	Analyze and deal with different types of resistance during DevOps transformations
Leadership Lessons Learned		Reflect on the role and importance of (DevOps) coaches, consultants, and informal leadership during a transformation

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