

Primary Recommendation C2 Acquisition Workforce Training

<i>Line of Effort</i>	Create new paths for digital talent (especially internal talent).		
<i>Recommendation</i>	Expand the use of (specialized) training programs for CIOs, SAEs, PEOs, and PMs that provide (hands-on) insight into modern software development (e.g., Agile, DevOps, DevSecOps) and the authorities available to enable rapid acquisition of software.		
<i>Stakeholders</i>	USD(A&S), DoD CIO, SAE, Service CIO		
<i>Background</i>	Acquisition professionals have been trained and had success in the current model, which has produced the world's best military, but this model is not serving well for software. New methodologies and approaches introduce unknown risks, and acquisition professionals are often not incentivized to make use of the authorities available to implement modern software methods. At the same time, senior leaders in DoD need to be more knowledgeable about modern software development practices so they can recognize, encourage, and champion efforts to implement modern approaches to software program management.		
<i>Desired State</i>	Senior leaders, middle management, and organic and contractor-based software developers are aligned in their view of how modern software is procured and developed. Acquisition professionals are aware of all of the authorities available for software programs and use them to provide flexibility and rapid delivery of capability to the field. Program leaders are able to assess the status of software (and software-intensive) programs and spot problems early in the development process, as well as provide continuous insight to senior leadership and Congress. Highly specialized requirements are scrutinized to avoid developing custom software when commercial offerings are available that are less expensive and more capable.		
<i>Role of Congress</i>	Prioritize experience with modern software development environments in approval of senior acquisition leaders.		
Draft Implementation Plan		Lead Stakeholders	Target Date
C2.1	Leverage existing training venues to add content about modern software development practices.	USD(A&S), SAEs with DAU	Q4 FY19
C2.2	Create and provide training opportunities via boot camps and rotations for acquisition professionals to obtain hands-on experience in DevSecOps programs.	A&S with SAEs, USD(P&R)	FY20 (MVP) ² FY21 (scale)
C2.3	Develop additional training opportunities for key leaders about modern software development practices.	USD(A&S), SAE, DAU	Q2 FY20
C2.4	Create software continuing education programs and requirements for CIOs, SAEs, PEOs, and PMs, modeled after MCLE (Minimum Continuing Legal Education) for lawyers.	A&S, DAU	Q3 FY20

² Minimum viable product (first useful iteration)

SWAP working group inputs (reflected in Appendix F) related to this recommendation

Con	Provide training to KOs, PMs, and leadership to understand the value and methods associated with Agile and modular implementation.
Wkf	Create a software acquisition workforce fund (similar to the existing Defense Acquisition Workforce Development Fund (DAWDF)) ... to hire and train a cadre of modern software acquisition experts.
Wkf	Pilot development programs that provide comprehensive training for all software acquisition professionals, developers, and associated functions.
Con	Provide training to KOs, PMs, and leadership to understand the value and methods associated with Agile and modular implementation.
Con	Educate PMs and KOs on Open Source, proprietary, and government-funded code.

Related recommendations from previous studies

DSB09	All CIOs should approve IT acquisition program manager training and certification and advise the personnel selection process.
DSB09	The USD(AT&L) shall direct the Defense Acquisition University, in coordination with the Information Resources Management College, to integrate the new acquisition model into their curriculum.
DSB18	USD(A&S) should task the PMs of programs that have transitioned successfully to modern software development practices to brief best practices and lessons learned across the Services.
DSB18	Rec 5d: The USD(A&S) and the USD(R&E) should direct the Defense Acquisition University (DAU) to establish curricula addressing modern software practices leveraging expertise from the DDS, the FFRDCs, and the University Affiliated Research Centers (UARCs).
DSB18	Rec 5g: DoD career functional Integrated Product Team (IPT) leads should immediately establish a special software acquisition workforce fund modeled after the Defense Acquisition Workforce Development Fund (DAWDF), the purpose of which is to hire and train a cadre of modern software acquisition experts across the Services.
DSB18	Rec 5h: PMs should create an iterative development IPT with associated training. The Service Chiefs should delegate the role of Product Manager to these IPTs.
DSB18	Rec 5b: The Service Acquisition Career Managers should develop a training curriculum to create and train [a] cadre [of] software-informed PMs, sustainers, and software acquisition specialists.
Sec809	Rec 27: Improve resourcing, allocation, and management of the Defense Acquisition Workforce Development Fund (DAWDF).
Sec809	Rec. 59: Revise the Defense Acquisition Workforce Improvement Act to focus more on building professional qualifications.