Media and Fidelity Analysis: Predicting Technological Training Requirements for Unidentified Future Vertical Lift Program

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ABSTRACT

The Navy seeks to adopt agile design strategies to rapidly transition training capabilities to the warfighter. In an effort to identify early training guidance for a pre-systems acquisition Future Vertical Lift program, a preliminary phased media and fidelity analysis (M/FA) was conducted in collaboration with the Army. This phased analysis provided an agile data driven approach to procurement of training capabilities. Data was leveraged from a previous front-end analysis (FEA) examining the Sikorsky CH-53K Sea Stallion and CMV-22B Osprey job duty task analysis (JDTA) to expand the KSA baseline analytics.

A total of 46 key learning objectives (LOs) were scoped down to provide the base of knowledge, skills, and attributes (KSAs) to be used in the M/FA. Sensory attributes were mapped out for LOs to understand what sensory elements are required for fulfilling a particular objective. Based on the identified sensory attributes, a media feasibility determination was conducted to assess current and upcoming technologies that can meet the necessary requirements to replicate the sensory and media attributes of each LO. Results from this analysis were used to create LO summary models. In order to be deemed an accurate replication to stakeholders, media options had to be able to replicate 90% of the attributes required to complete the task. However, stakeholders had hoped to see media option results closer to 99% replication. This led to combining media options together to for a comprehensive solution.

Each model provides preliminary recommendations on how to combine media options into a package and reach a higher model fit, or percentage of sensory and media requirements. These models provide data driven recommendations for choosing training technology prior to creating a training program. The foresight and preparedness of appropriate technology adoption for the upcoming FVL platform will aid return on investment (ROI) considerations to cut lifecycle costs and only adopt novel and higher cost technologies where needed.

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BACKGROUND

The Navy continues to pursue accelerated training solutions to deliver just-in-time training capabilities to warfighters in an effort to increase overall preparedness. Given this persistent goal, there is a broad need to understand training requirements as early in the acquisition pipeline as possible. Requirements for new training system capabilities are often not detailed until later in the acquisition process, sometimes resulting in suboptimal solutions. Agile design strategies can be leveraged in order to improve speed to fleet and manage stakeholders risk concerns early, and as a result, transition capabilities to the warfighter as quickly as possible. This includes iterative training requirement development as platforms are being designed, developed, and implemented. Developing training requirements and operational systems in tandem early in the acquisition process can reduce system lifecycle costs and training system rework by ensuring engineering tradeoffs for the operational system are accounted for in the training system.

It can understandably be challenging to develop training requirements for systems that are not yet fully developed, as all use cases, mission sets, and capabilities may not be fully realized. However, it is possible to conduct analyses that provide relevant information regarding knowledge, skills, and attitudes (KSAs) and training needs that assist with refining requirements for future consideration. A data-driven method could assist in making cost, schedule, and performance tradeoffs such as training mode delivery strategies to support future warfighting capabilities. This selection is a critical step in ensuring effectiveness of training technologies and providing integrated training solutions for comprehensive requirements. In order to explore such a data-driven process, maintenance training for a pre-systems acquisition Future Vertical Lift (FVL) capability set was selected as a prospective use case.

Future Vertical Lift

The FVL initiative aims to develop the next generation of military helicopter and other Vertical Take-Off and Landing (VTOL) technologies. FVL aircraft will support various mission sets, and provides an initial use case for developing a method to predict and identify technological training requirements. Some information has been released regarding the likely capability sets of FVL aircraft – including two variants – the Future Long Range Assault Aircraft (FLRAA) and the Future Attack Reconnaissance Aircraft (FARA). However, the capabilities and specifications, along with likely use cases, are still being developed. This presents a unique challenge as to how to best define maintenance training requirements. This is further complicated with modern systems that rely on advanced automation and autonomous systems that may not have existed in the predecessor aircraft as traditional training systems development methods often do not fully capture the complexity inherent to the operation and maintenance of such systems.

A novel three-phase collaborative effort with the Army sought to develop methods/processes for determining the right technology training modalities for a future capability. This approach included 1) an initial front-end analysis (FEA), 2) media and fidelity analysis (M/FA), and 3) validation of training requirements. An FEA is a detailed examination of a platform or system for the purposes of establishing requirements, describing ideal performance and instruction to meet requirements, and identifies acceptable alternatives. Given that this was conducted as an early-stage analysis, analogous platforms and transitions (i.e., similar next-generation platforms) were used to explore future considerations. Similarly, the M/FA leveraged components of established instructional systems design procedures and analytical methodologies while using analogous platforms to identify early stage training requirements prior to having a materiel solution.

Front-end Analysis

Establishing requirements early in the acquisition process required a modified approach to traditional instructional systems design as outlined in the *Department of Defense Handbook for Instructional Systems Development/Systems Approach To Training And Education (Part 2 of 5 Parts) MIL-HDBK-29612-2A* (AMSC, 2001). Rather than relying on existing instructional content or subject matter experts (SMEs), analyses leveraged analogous platforms provided data. The CH-53K and CMV-22B were targeted because of their potential overlap with known and expected FVL requirements and technologies as laid out by Forbes (Thompson, 2020). That is, these two platforms are advanced vertical lift platforms with similar systems and technology to carry out comparable mission sets that support preliminary identification of training requirements and areas for improvement. A recently conducted analogous system FEA, which provided a detailed examination of the CH-53K and CMV-22B, established initial requirements for ideal performance, course of instruction to meet training requirements, and acceptable alternative solutions. The benefits of analogous platforms FEA include using best-practices to avoid training gaps where there are known deficiencies in legacy training, which offers significant time and resource savings by evaluating what is known, where gaps exist, and therefore offering direction for next generation systems. Finally, while traditional methods require in-depth analysis of all existing instructional content and training methods, the M/FA detailed herein followed a novel method to define a set of "standout" KSAs given the lack of available platform data. These *standout KSAs* represent known gaps in training or areas where intermediate and advanced stages of training could be improved. This step was critical in refining the analysis scope and addressing data availability limitations.

MEDIA AND FIDELITY ANALYSIS METHOD

In order to make accurate recommendations on expected training media requirements, multiple processes were combined into a hybrid approach to produce objective data and aid future decision-making. There were three primary steps for the M/FA: 1) develop a methodology for identifying early training media guidance, 2) leverage FEAs on existing platforms with overlapping capabilities and mission sets for analysis, and 3) develop initial training implications and focus areas for FVL maintainers.

Training Gaps Analysis Methodology

The resulting methodology for early training media guidance followed a traditional M/FA for the development of training requirements with several noted differences. Traditionally analysts obtain transferable KSAs and legacy training mode data from existing platforms with overlapping mission sets to the future capability; however, two analogous platforms provided requisite baseline data including existing FEA and Job Duty Task Analysis (JDTA) data. Existing documentation resulted in thousands of learning objectives, derived KSAs, and training mode matrices for the current course of instruction. This data was supplemented by extensive reengagement with the subject matter experts (SMEs) from the end user community. Discussions focused on identification of specific knowledge and skillsets that maintainers lacked as they arrived at their first duty assignment, or *Standout KSAs* (see Table 1) that had a high probability of becoming training gaps for FVL maintainers based existing challenges and training gaps.

This analysis approach assumes that overlapping KSAs identified between analogous platforms can be recycled as baseline training requirements for FVL maintainers, and that *standout KSAs* require more in depth analysis to minimize or eliminate existing challenges or gaps. Then, through combining these overlapping and standout KSA analyses, a near complete solution of training systems/media and fidelity requirements for maintainers is generated for future FVL systems. Overall, this approach maximizes schedule and resources when compared to traditional approaches and allows analyses to commence prior to the development or fielding of an operational system.

Table 1. Standout KSAs

Knowledge
• Electrical Connection Schematic Understanding
Precision Skills
• Body composite repair • Body composite removal • Body composite installation • Engine maintenance • Landing gear maintenance • System(s) troubleshooting Trouble Shooting: • System interdependencies / interconnections

Sensory & Media Attributes Analysis

As a first step in the methodology, stakeholders and the research team reviewed task lists for CH-53K and CMV-22B maintainers to identify learning objectives (LOs) related to the eight *standout KSAs* (see Table 1). These LOs are the specific tasks associated with things like composite repair, engine maintenance, system(s) trouble shooting, etc. These meetings also served an opportunity to scope the list of LOs to higher priority tasks, identified as those most relevant to future FVL systems. While initial SME interactions resulted in a concise task list, tasks lacked sufficient detail for the research team to adequately perform the sensory and media attributes analyses. As a result, the team revisited the scoped list of tasks, SMEs surveys, and interviews, as well as an evaluation of archival information to incorporate necessary details related to performing the tasks. The outcome of this step included a total of 46 LOs and amplifying information for each task. Amplifying information provided comprehensive details regarding behaviors, cognitive processes and senses, and the context of task performance. These elements were crucial for the success of the next step of the methodology, a sensory attribute analysis.

During the sensory attribute analysis, researchers systematically outlined the degree with which sensory items (e.g., visual, auditory, tactile, olfactory, motion) are required to replicate the task. Specifically, trained research psychologists would rate each of the sensory components for each LO individually. Dyads of raters were formed after individual ratings were completed to reach a rating consensus for the sensory components of each LO. This is done to reduce subjectivity and increase comprehensiveness. Sensory attributes were rated on a 5-point scale with 1 as "not a consideration" and 5 as a "very important consideration." Attributes rated 3 or higher were considered a requirement for replicating the task, and those with a rating of 2 or lower were not considered as sensory requirements. For example, if *identifying corrosion* received a 4 for visual and a 1 for olfactory sensory attributes, visual sensory attributes would be considered a requirement, but olfactory would not be considered of high enough importance to be required for that particular LO.

This down-select process yielded a list of sensory requirements needed to replicate each LO. The results of the sensory attributes analysis completed the first step in developing a media selection model, which outline what media types fulfill all the sensory attribute requirements of an LO.

Media Feasibility Determination

Various media options – such as computer based trainer, part-task trainer, composite maintenance trainer, fine skills lab, virtual reality, augmented reality, and actual aircraft – can train identified tasks. The 2019 *Instructional Media Requirements Document* (IMRD) for CH-53K provided a scoped training system/device media pool and media selection model. Twelve media options for training were assessed on a variety of attributes including sensory, stimuli, fidelity, and input/output. This media selection model provided a framework for completing a media feasibility determination that highlighted the specific attributes present for each media option. Attributes were further broken down into subsets called capabilities, providing amplifying detail for appropriately recommending media options. This breakdown resulted in an analysis of 56 capabilities (see Table 2 for example).

Table 2. Media Selection Model General Attribute to Capability Breakdown

Selection Attribute	Attribute Class	Capability
Instructional Management	Control	Start, Stop, Pause, Replay
		State Resurrection (Undo)
		Record and Replay of Student Performance
		Fault / Malfunction Insertion
		Reset
		Selective Branching
		Instructor Monitoring of Student Performance/Display
	Content Access	Temporal Stacking (interactive menus)
		Modularity (interact/alter without affecting previous work - windows)

The media feasibility determination involved fine-grain analyses. Specifically, dyads of raters were formed to assess each capability in conjunction with each media option to determine if a given media option inherently possesses the capability or not. Additionally, this method allows raters to determine the pros and cons of each system and assess a variety of tradeoff factors (see Table 3).

Table 3. Media Option Tradeoff Factors

Tradeoff Factor	Description
Primary delivery	Instructional method
Stimuli	How you engage with the training
Control	How the training is operated
Interaction/Feedback	The types of interaction and feedback from the system
Fidelity	Fidelity capability of the media option
Main intent	Purpose of the media option in training
Average cost estimate	Expected level of cost ($, $$, $$$)

Each of the seven tradeoff factors provided vital guidance in making objective decisions between each of the media options. The first four tradeoff factors are related to how the user interacts with the system, method of engagement, and how information is presented to the user. *Primary delivery* refers to how students receive instruction. Numerous training methods can be provided such as an instructor lead, computer, tablet, select near-aircraft systems, virtual software, or hardware. *Stimuli* and *control methods* for the training were generated from the sensory attributes analysis. That is, the way one would engage the training, and control or operate within the training, is a derivative of the sensory components required for tasks. *Controls* such as switches, levers, and dials in

a simulated environment should be an exact replication of the operational setting to ensure there are no detriments to learning transfer. Similar to stimuli and control methods, the *interaction* between the user and system, as well as the *feedback* the system provides, should be an exact match to the operational setting. This ensures maintainers are obtaining hands on experience to minimize negative skill transfer.

Fidelity was assessed through four different factors: functional, physical, psychological, and contextual. Functional fidelity refers to the degree to which skills in the real task are captured in the simulated environment, and relates to how the simulator operates and the feedback it provides (Maran & Glavin, 2003). Physical fidelity refers to the physical layout of the operator's simulated environment and relates to how the simulator looks and feels (Hamstra et. al., 2014). Psychological fidelity refers to the extent the simulated training environment prompts the core underlying mental processes relevant to key performance learning objectives in the operational setting (Kozlowski & DeShon, 2004). Psychological fidelity looks to maximize transfer of learning through retention, and generalization of knowledge. Contextual fidelity refers to how closely a media option models the scenario seen in the operational setting (Sauer et. al., 2010). Essentially, the higher the contextual fidelity, the more closely a media option will replicate the setting and circumstances of an actual object.

Every training has a primary purpose, or set of targeted skills and behaviors that are the focus of development. Additionally, each training method provides a unique opportunity for hands-on practice, performance feedback, spatial cuing, practice, and demonstrations. The *main intent* factor describes the intent for what the training will provide the trainee (e.g., hands on practice, corrective feedback, demonstrations). This is a factor important for stakeholders that gets at the bottom line or "so what" to training applications.

The last factor on the list is the *average cost estimate*. The costs used for this analysis were leveraged from a previous 2018 CH-53K FEA. These historical estimates do not provide cost breakdown information related to acquisition, development, sustainment, or inflation. For this reason, raters used relative costs for preliminary tradeoff analyses. Traditionally the more advanced, integrated, and realistic the training, the more expensive the total lifecycle costs in support of advanced hardware and software capabilities.

Learning Objective Media Selection Model

The LO media selection model was created by combining the data from the media and sensory attributes analysis and media feasibility determination data. These models are a customized list of critical media and sensory attributes that were cross referenced with each of the 12 training media options (see Table 4). This step in the method determines the level with which each media option satisfies the media and sensory attribute requirements. Scores averaged for each training media option provided a model fit as a percentage. Resulting percentages are not an indication of how well a media option would provide complete training solution; rather, they inform decision makers as to how well a media option can replicate the sensory attributes associated with a specific LO.

The outcome of the LO media selection model was a list of media options that satisfied the most sensory attribute requirements for replicating an LO. If one media option did not satisfy all requirements, the model allowed for a comparison of alternatives to assess how media options complement one another, or address capability gaps between training media options. This level of flexibility allows stakeholders to package training media options to meet specific needs or address constraints. For example, top training media options can be paired with other specialized media options to fill or address trade-offs. Further determinations can be made by engaging with SMEs or comparing one of the seven known trade off factors.

Table 4. Training Media Options

Media Options	Primary Delivery	Interactive Feedback
Instructor/Computer led Training (ILT/CAI)	Instructor with media support (charts, objects, video)	Questions, exercised, verbal feedback
Interactive Courseware Level 1	Computer	None
Interactive Courseware Level 2	Computer	Questions, quizzes (T/F, matching, multiple choice) (click, drag/drop)
Interactive Courseware Level 3	Computer	Level 2 plus multi-branching, error response, enhanced corrective feedback, limited CMI
Interactive Courseware Level 4	Computer	Level 2 plus complex practice simulations, access to real operational or near-aircraft facsimile info sources
PC Simulation	Computer/Tablet	Level 2 plus complex system interaction, flow diagrams, animated schematics
Fine Skills Lab (FSL)	Instructor, Learner	Hands-on (haptic) practice, or learner self-directed practice
Part-Task Trainer (PTT)	Instructor, learner, select systems near-aircraft facsimile components/controls with some simulated monitor support	Hands-on (haptic) practice, instructor corrective feedback, system feedback
Composite Maintenance Trainer (CMT)	Instructor, learner, expanded systems near-aircraft facsimile components and controls	Hands-on (haptic) practice, instructor corrective feedback, system feedback
Virtual Reality (VR)	Virtual hands-on (haptic) practice, corrective feedback	Hands-on (haptic) practice, instructor corrective feedback
Augmented Reality (AR)	Virtual hands-on (haptic) practice, corrective feedback	Hands-on (haptic) practice, instructor corrective feedback
Actual Aircraft (AA)	Actual aircraft	Hands-on (haptic) practice, instructor corrective feedback, system feedback

Alternative Technology Opportunity Assessment

Several alternative technologies were considered during analyses that were not included in the existing FEA. The MIL-HDBK 29612 publication precedes the maturity of some of these technologies for use in training. Specifically, capabilities such as augmented reality (AR), haptics, and mixed reality (MR) are emerging for use in a number of training contexts. Such solutions may have a smaller footprint (e.g., space, availability, cost) when compared to full-scale simulators or actual aircraft. However, currently available commercial off-the-shelf (COTS) versions of these technologies fell short in meeting specific LOs in the present M/FA. Despite these limitations, the technology's rapid advancement requires continual evaluation of these capabilities.

Augmented Reality
The first alternative technology included in the analysis was AR. AR technology offers great flexibility in digitally displaying models, overlaying information on real world objects, and providing procedural tracking of tasks. One of the largest fields of interest in AR training is aviation maintenance (Dini & Mura, 2015), a training domain that has yielded promising results on enhancing human performance in carrying out technical maintenance tasks, improving maintenance operations, and supporting decision-making skills (Palmarini et al., 2018). Further, AR technology has demonstrated in previous studies an ability to increase time on task while reducing error rate, making it both an effective operational and training tool (Fiorentino et. al., 2014). However, despite the positive

results associated with AR training solutions, there remains limitations to using the technology that must be addressed to facilitate a successful and scalable transition to maintenance and military domains. While some current limitations are simply an artifact of the novelty of these training environments such as content and lack of open standards (Rivera, 2023), other are focused on the hardware limitations of current technology such as battery life, overheating of systems, and integration with military equipment (Wang, Lei, Liu, Li, Qu, & Qiu, 2020). Additional considerations that warrant further exploration is potential technology dependency – that is, the potential to lack proficiency in skills where heavy reliance on AR solutions extend beyond a training tool and into operational contexts (Kallbert, Beitelman, Mitsuoka, Pittman, Boyce, & Arnold, 2022). Finally, while not limited to AR technologies, some concerns are increased due to the *untethered* nature of AR technology. For example, considerations for access to the appropriate network resources and the security of data (Rivera, 2023), as well as introduction of appropriate policy for accreditation and use (National Security Technology Accelerator, 2023), currently remain pertinent considerations for transition and adoption of technology.

Haptics

The second alternative technology included in the analysis was haptic technology. Haptic technology addresses known gaps in the physical fidelity of AR and VR systems by providing a sense of physical touch and feel to the environment that is continually improving in its sense of realism. Therefore, haptic technology coupled with VR and AR technologies overcomes current technological limitations by providing a multimodal approach to training (Ferrise et. al., 2013). To increase the likelihood of successful implementation, haptic devices should be designed to guarantee dexterity (i.e., no motion constraints impairing extended use), human safety, and portability (i.e., robust, dependable, easily fitted and adjusted to be self-contained with wireless communications) considerations (Nappi et. al., 2009). However, at this time, there remain areas for further research and development to increase the maturity of technology and therefore feasibility to supporting training. For example, Lelevé, McDaniel, and Rossa (2020) discussed that while haptic training simulation offers an opportunity to extend training within military, manufacturing, and medical fields, there are several challenges that remain to enhance the performance of haptic training systems. Specifically, advances are necessary in biomechanical modeling, compact component technologies, and more efficient and effective integration to decrease system latency. Further, feasibility of transition is likely to experience logistics challenges such as sizing of devices such haptic gloves (Roaten, 2021).

Mixed Reality

The last alternative technology included in the analysis was MR, which synchronizes reality and 3D model constructions for simultaneous interaction with both modalities (Sadeghi et al., 2020). Users can remain in their natural environment, allowing for adaptation to the scale of digital objects and environments. MR provides a step up from AR by heightening the interactivity between physical and digital objects that coexist. For example, MR affords flexibility by allowing maintenance technicians to download fully interactive models, share content, and train other technicians around the globe in real-time. Aviation schools using physical units for training will soon replace physical training equipment with virtual 3D models that are highly interactive with built-in manuals, warnings, and tutorials (Siyaev & Jo, 2021). MR especially can help professional field technicians cope with high-degree worker-centered processes and a high degree of cognitive workload by aiding to visualize information, analyze critical documents easier, and lend support to user decision-making during operations (Kötter et al., 2018). Future research should focus on ways to allow ease of adoption of MR technology by considering the unique constraints found within a military maintenance environment such as connectivity, sustainability with particular emphasis on concurrency, and ruggedness of the technology.

DISCUSSION

Results from this analysis were used to create LO summary models. Each summary model provides preliminary recommendations for combining media options into a package that reaches a higher model fit. These models also provide information about expected tradeoffs, fidelity requirements, and an overview for the top three training media options able to meet the sensory attributes required to replicate the task. As a result, recommendations

highlight complimentary media packages that satisfy a high level of sensory and media requirements (>95%); however, these specific recommendations represent only a few of the potential packages that exist for each LO.

A few of our summary models achieved 100% model fit. A 100% model fit does not indicate that the chosen media package represents a complete training solution. Instead, model fit describes the level to which the media options fulfill the known sensory and media attribute requirements for replicating the LO. Final training media solutions should consider alternative tradeoff and learning component factors (e.g., performance evaluation and feedback) before deciding on a complete training solution. The trade-offs presented in each model should provide stakeholders with a basic understanding of factors that should be taken into consideration when selecting media options. In future analyses to refine these recommendations, SME input should be garnered to determine the level of impact each trade-off might have on training. Additional insight could help decision makers determine the criticality of known gaps in capabilities or fidelity, determine the level of importance for individual sensory and media components, and help identify how media options can fit within a training pipeline (e.g., time, space, and availability).

Each summary model also contains a media options overview table (see Table 5). This table highlights the top three media options, displays the percentage of requirements each option fulfills, and provides an overview of how well each option satisfies known fidelity requirements from the previous FEA. The fidelity portion of this table demonstrates whether the media option does not meet, meets, or exceeds the required fidelity levels of the LO. Stakeholders can use this information as an additional tradeoff factor when combining or selecting media options. For example, if a media option does not satisfy a fidelity requirement that is deemed essential, that option can either be removed from consideration, or combined with an additional media option to fill that gap. Alternatively, if a media option exceeds a fidelity requirement, it may be more suitable to choose an option that is less expensive and offers a better fidelity match. These models were developed to help aid decision makers and facilitate discussion on the most appropriate or best of breed solution to address specific needs within a training pipeline.

Table 5. Example Media Options Overview

Media Option	Fidelity				Sensory & Media Attribute
	Physical	**Functional**	**Psychological**	**Contextual**	
Fine Skills Lab	Exceeds	Exceeds	Meets	Meets	95% Coverage
Augmented Reality	Does not Meet	Meets	Does not Meet	Exceeds	95% Coverage
Part-Task Trainer	Exceeds	Meets	Meets	Meets	91% Coverage

FUTURE WORK

Through this approach to M/FA, top training media options were identified for 46 LOs. The analyses performed and decision aids developed during this effort should be further refined in future efforts as the platform details are solidified. For programs looking to adopt a similar method, it is likely that the data sources available for early M/FA will be largely dependent on the platform history and legacy system availability. For this reason, flexibility and creative decision-making on analogous systems or relevant data sources are imperative for initial recommendations, while seeking points to validate early recommendations through testing and evaluation are imperative for ultimate success. However, a dynamic and iterative approach to training requirements recommendations allows for new technologies, new mission sets, and new use cases to be considered in parallel with system development.

CONCLUSION

Over the course of this effort, we sought to implement an agile analysis process that would result in data driven recommendations for choosing training technology prior to creating a training program. Though this process typically occurs much later in the acquisition pipeline, our team sought to establish a process that could provide training technology recommendations prior to platform selection or training program creation. This was done so in a systematic way to limit subjectivity and ensure comprehensive recommendations to stakeholders. Reliance on this approach resulted in data driven models that will ensure decisions are not based on popular technology, but rather provide objective solutions that target critical *standout KSAs* and related LO's.

Establishing methods to develop cost effective solutions without sacrificing aspects of fidelity of training continues to be desired. As such, continual investment in the science and technology of component technologies (e.g., adaptive interfaces, hyper immersion, automated performance assessment) and novel, integrated training approaches serve to ensure longevity of the system, provide greater benefits of training transfer, and minimize or avoid costs and challenges associated with reengineering systems after they are deployment. Outcomes support agile decision making by providing multiple recommendations on training technologies that address critical KSA's and LO's, and return on investment (ROI).

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