

**Employee Footprint: 21<sup>st</sup> Century Approach  
Towards Employee Development**  
Final Report & Findings  
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## Collaborators

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The following researchers collaborated in this project:

- Prof. Caroline Ocasio, Inter American University of Puerto Rico  
Phone: (787) 645-3808, Email: cocasio@bayamon.inter.edu
- Dr. Krista Kecskemety, Ohio State University  
Phone: (614) 292-2427, Email: kecskemety.1@osu.edu
- Dr. James Witte, Auburn University  
Phone: (334)844-3054, Email: witteje@auburn.edu
- Prof. Leo Acosta Martinez, Inter American University  
Phone: (787) 306-2350, Email: lacosta@interbayamon.edu
- Dr. Terry D. Taylor, KeyBridge Technologies,  
Phone: (405) 319-6682, Email: terry.taylor@keybridgeti.com
- Mr. Simon Hsu, KeyBridge Technologies,  
Phone: (405) 213-1880, Email: simon.hsu@keybridgeti.net

FAA Technical Monitor for this project: David R. Smith, Phone: (703) 487-3947

## Value of Research

The Federal Aviation Administration (FAA), Flight Standards Service (FSS), is looking to transform current employee development training and practices. This future state will provide a cost-effective, 21st century technology approach to workforce evolution. It will focus on providing aviation safety, with an organizational culture that supports employee growth and job requirement advancement, to fulfill future aviation needs.

Employees of Flight Standards (FS), specifically Aviation Safety Inspectors must possess specific skills and information familiarity after decades of experience in previous jobs. Currently the system is designed where a generic training approach is utilized without providing options of a more versatile system that can take into consideration prior knowledge or expertise. This study will identify available 21st century Best Practices to implement in employee hiring and development. The study will take into consideration prior knowledge of work experience and/or identification of specific competencies tailored to each prospect and job classification. Pre-screening or pre-test results should be directly linked to the necessary competencies, eliminating the need to duplicate information or additional training time, thus saving the department money and productive time. The goal of this project is to identify Best Practices on the recruitment of new personnel and retain existing staff, and the ability to use technology that allows this customization and integration.

This project is directly aligned with the AJI Technical Training Strategy Roadmap issued January 2017, version 1.0 in three different areas:

1. Stakeholder Transparency: establishes clear lines of communication with stakeholders to understand their requirements and needs.
2. Evolve Technical Training Organization: routinely assesses business goals to verify organizational alignment, growth, staffing and development.
3. Technology: implements and integrates strategy for simulation platforms and other virtual technologies (Mobile and Web-based) to improve the learning environment and thus, professional development of employees.

## **Abstract**

In order to transform the FAA, Flight Standards Services current employee hiring, development, and retention practices it is necessary to understand the 21st century best practices that exist in this area. This study looks to identify these best practices and make recommendations of elements to incorporate.

## **Best Practices**

### ***Definition of Best Practices***

Beza (2016) defines best practices as “the application of an approach that transfers a highly regarded knowledge product developed in one setting to address a particular issue, and implements that product’s components in another to achieve a similar desired outcome.” It is the goal of this report to highlight best practices in hiring and employee development and training tracking and then use this to compare to the practices currently happening in the FAA to identify gaps and areas of growth.

### ***Hiring Best Practices***

Acquiring top tier talent in today’s job market can be difficult for any organization. The need is pressing with many of industry’s more experienced workers getting closer and closer to retirement and often organizations face a personnel crisis in trying to fill empty positions. Fortunately, there are many different approaches that can help an organization stand out as an employer that will attract the most qualified and highest performing candidates to fill its ranks.

A study that aimed to gain a competitive edge in recruiting high quality teachers found eight elements to be helpful (Lee, 2005).

1. To reduce bureaucracy in the selection process. An overly complex process can deter high quality applicants by making the organization seem clumsy and inefficient.

2. To make sure there is a single contact person that the applicant can reach out to and who is able to answer all questions the applicant may have,
3. To follow up with applicants at each stage of the selection process. Being kept in the loop during the process reduces the anxiety an applicant may feel toward the organization.
4. Everyone who interacts with the applicant should cause him or her to feel that they are being prioritized by the organization.
5. Make sure to give the applicant full attention during interviews. The presence of distractions or having an interviewer splitting his or attention between the applicant and another responsibility reflects poorly on the organization.
6. Make sure that each recruitment activity reflects the highest level of organization possible. A poorly organized job fair or conference will cause serious potential applicants to take the organization less seriously.
7. Specifically train all personnel who interact with the applicant in the specific functions they are supposed to perform.
8. Show all team members that participate in the selection process that what they are doing is an extremely valuable contribution to the organization. Minimizing the contributions of the selection team may cause them to act indifferent toward applicants, thus deterring high value talent.

Many candidates also wish to connect with organizational values. Social media advertising can help potential candidates connect with the culture of the organization. This is extremely helpful because many of today's job seekers seek a connection with the values of the organization that can be seen in the organizations social interactions (Phillips-Wren, Doran, & Merrill, 2016). Social media can also help promote the organization's brand in the marketplace. Organization branding promotes company recognition. This makes the company stand out to top tier talent (Teetz, 2013).

Hiring practices can also benefit from looking for talent in unexpected places. Talent may not be fixed but may be more contextual and having hiring teams that are extremely familiar with the

work tasks helps identify favorable characteristics that more rigid protocols such as surveys and resumes may not identify (McCord, 2018). Having selection criteria that focus more on job performance such as job specific tasks and cognitive ability tests can yield insights into an applicant's potential that may be hard to detect otherwise.

Often previous experience does not mean a candidate will be successful in the new position (Glazer, 2017). As a particular work force ages there may be limited transferability of skills due to ever evolving technologies. Having a positive attitude will often lead to more success than previous related work experience. Instruments that measure emotional intelligence have shown to be a significant predictor of future job performance due to their ability to measure these soft skills that are necessary in the workplace (Blank, 2008).

Psychometric testing can often give insight about an applicant that traditional hiring practices such as interviews may not be able to detect (Suddith & Dowden, 2012). Additionally, traditional face to face interviews are shown to be a less effective method of evaluation than task demonstration and cognitive testing (Moore, 2017). Due to the specific emphasis on safety personnel, The SynWin Multitasking Assessment can predict performance that will likely be beneficial due to its demonstrated success on pilot training and the benefit of overlapping skill sets between pilots and air safety personnel (Barron & Rose, 2017).

Based on the information above the following key practices for hiring are identified:

- When recruiting and interviewing, pay attention to the company image projected to the person applying and find ways to make it an efficient, clear, and positive process for everyone involved.
- The people involved in the hiring must be familiar with the job tasks to identify the best candidates that may otherwise be lost among resumes and certification lists.
- Use social media to communicate your organization's brand and values.
- Previous experience does not always translate to success in a position.

- The use of psychometric testing in addition to face to face interviews can be more effective than interviews alone.
- Maintain a strict hiring standard in accordance with the skills and attitudes required to maintain a safe responsible workforce.

### ***Employee or Career Development and Tracking Best Practices***

Professional development and employee training is an important task. However, the development that occurs is often not tracked. There are companies that are looking to address this with specific employee development tracking plans. Below is a description of some of these companies and how they approach employee development and tracking training efforts.

Summit Credit Union (Salopek, 2011) uses learning and development staff and HR staff in an integrated talent management approach. There are individual development plans for each employee and their performance reviews and learning histories are tracked throughout their employment. The company ties the development plans to business goals and strategic initiatives. The managers track progress of the employees and their training efforts and provide coaching as needed. Additionally training specialists often work with recruiters during the recruiting process.

Another example is the Fatima Fertilizer company (Castellano, 2017). At the Fatima Fertilizer Company the training is done from a bottom-up approach. The training coordinators and trainers work with the employees and managers on a daily basis. They are specifically assigned to each unit. The units have monthly training reports that are then reviewed at the unit, department, and executive levels. They also have a skills certification program for new employees and a job qualifying program which gives employees the chance to earn certifications that are linked to promotion.

At NIIT Technologies (Harris, 2012) the learners have the responsibility for their career development and training. They have a training system called TRACK where employees can

accumulate credits that can be used for promotion. The system is tied to company initiatives and business goals by aligning training to goals and offering higher credits to those trainings that align with company initiatives. Employees also have access to the Career Mobility Center which is an intranet portal to help with career growth and development. The personalized portal provides counseling mentoring, and coaching for each employee and offers a personalized mobility map.

The United States Army has developed a tool called the Army Career Tracker (“Army Career”, 2008; Helms, 2013) that is a web-based career management tool. This tracker is used with training, assignment history, and education for both Army military and civilian personnel and includes career maps for employees.

There have been a few research studies that have examined employee development practices. Hassler (2005) discusses a course for second year physical therapist assistant students that assessed student’s personal learning preference with the VARK learning style assessment tool. Based on the student score, the student was presented with learning strategies tailored for their specific learning preference and faculty received training on presenting material in a multitude of individualized learning styles.

A study by Badia et al. (1978), which involved 18 instructors teaching 18 introductory psychology courses each using the same assignments, grading policy, and test items found that students receiving personalized instruction tended to outperform students with lecture format instruction. And then a study from Johnson et al. (1982) examines the benefits of individualized Computer Managed Instruction (CMI) of an A-7E squadron--power plant maintenance technician, structures/hydraulics maintenance technician, and plane captain. This study suggests that many of the difficulties encountered during personnel training can be eliminated through individualized computer based approaches. Though initially expensive to implement, the long term savings associated with CMI’s outweigh costs. Training times were reduced from between 11%-62% while maintaining satisfactory jobsite performance

Based on the information from these companies the following key best practices in employee development and tracking are identified:

- Align training with strategic initiatives
- Involve all levels of the organization in training efforts. Managers/Supervisors should be involved in the employee development process.
- Have a personalized system to track training and assist in career management.

## **Software Systems**

### ***Overview (Directly from Technology Advice, 2018)***

Recruiting software is a category of human resources management (HRM) that handles the process of posting jobs and attracting top talent for vacant positions within a company. Recruiting streamlines the entire candidate search and hiring process to make it easier for organizations to add employees.

From posting jobs, to reviewing resumes and interviewing candidates, recruiting software streamlines and automates the entire candidate search and hiring process. By eliminating paperwork and offering powerful resume and candidate search functions, recruiting software makes it easier for organizations to find and hire employees.

However, nearly every HR software vendor offers recruiting features. With so many options available, choosing the best recruiting system is a daunting task. This report provides a review by industry experts on the best software available in 2018. It details the market leaders and differentiates key features in a number of recruiting software programs used in both large and small size organization. Table A provides links to the best recruiting software vendors by market size.

The best recruiting software technology can be a key aspect of a company's talent acquisition strategy. It provides a central location and database for all recruitment efforts. At the enterprise level, the functionality is often offered as a module of an HR suite or Human Capital Management (HCM) system.

An online database for recruiting makes it easier to narrow the number of applicants by searching for specific candidate criteria. Hiring managers can save information, customize their workflows, apply filters to searches, and ensure they are in compliance with federal employment and anti-discrimination laws.

Functionality is built around the following pillars:

- **Workforce Planning:** creating pools of internal and external candidates
- **Sourcing:** job posting management, advertising, social media promotion
- **Candidate Acquisition:** referrals, screening, assessments, and selection
- **Applicant Tracking:** interviewing, background checks, candidate communication
- **Onboarding:** meetings, orientation, training
- **Analytics:** reporting and metrics embedded throughout the system

A collaborative system that aligns with a company's internal hiring process, as well as leaves a positive experience for candidates is critical. Streamlining these functions increases efficiency by screening out unqualified applicants, reducing administrative burden, and providing analytics about the entire process (Technology Advice, 2018).

The first step to choosing the best recruiter software and finding the right provider is to identify your goals and the must-have features that will support them. Pinpointing the reasons you are seeking recruitment software will help you define your business goals and better navigate the market. Have a list of your must-have and "nice-to-have" features. This way, if you come across two comparable vendors that meet the mandatory criteria, you have a secondary elimination method. If you come across a software package missing one of your must-haves, then it's an automatic deal breaker. Secondly, be sure to examine vendor track records to find accreditations, case studies, and testimonials for customer service. These could be the determining factor between two similar vendors. Additionally, be sure to test drive each contender — via a demo or a free trial — before choosing a solution. You want to experience the software in action to make sure it suits your needs and isn't masking subpar functionality behind great interfaces (Technology Advice, 2018).

### ***Cloud and SaaS Solutions***

Most HR software vendors are moving away from on premise solutions, and recruiting solutions are no different. Companies are choosing to use cloud-based systems, rather than buy a one-time license and housing a system onsite. This Software-as-a-Service (SaaS) model means you pay a subscription fee (generally per month or year) in order to use the software.

The solutions in this guide are divided into three categories: enterprise, agency, and small-to-medium business (SMB). However, SaaS deployments make modern software more flexible and scalable than ever before. Keep in mind that many of the vendors compared below offer tiered solutions for businesses of any size or type.

### ***Integrations and Suites***

As you compare vendors, one of the most important considerations is integrations. Many recruiting tools are considered best-of-breed, which means they are designed as a standalone system. If your company has existing HR systems, such as payroll software or a learning management system (LMS), then it's important that any solution integrates with them. On the other hand, if you are looking for an all-in-one system that handles other HR processes in addition to recruiting functionality, then a vendor that offers a full HR suite will be required.

### ***Social Recruiting and Analytics***

One of the biggest trends in talent management is social recruiting. This means using social media platforms, such as LinkedIn, Facebook, and Twitter, for advertising, searching for passive candidates, and promoting job postings.

The entire hiring process is becoming more like marketing every day. Recruiters can post targeted ads, build custom hiring websites, and create company videos. These assets are not only used to attract top talent, but provide detailed tracking and analytics as well. This makes it easier for recruiters and hiring managers to assess what talent acquisition strategies are working and adjust accordingly.

### ***3 Tiers of Recruiting Software***

Though the core functions of all solutions in this niche are the same, there is additional functionality that different business sizes and types might look for. Below are some of those differentiators:

#### **I. Enterprise Recruiting Software**

For large organizations, a recruiting system that integrates with existing HR or ERP systems is critical. In-house recruiters also need strong collaboration features that facilitate sharing applicant data and receiving feedback from hiring managers. Enterprises may also prefer a solution that offers a branded careers page, application portal, and an internal job board. These features facilitate internal hiring and employee referral programs.

##### ***Market Leader:*** iCIMS Recruit

iCIMS is a leading provider of SaaS talent acquisition software. Founded in 1999, iCIMS is one of the fastest-growing companies in America. The New Jersey-based company now has offices on three continents and is used by the New York Public Library, GNC, Hertz, and Esurance.

iCIMS Recruit is the company's flagship product. It includes an applicant tracking system, mobile optimized recruiting portal, and robust communication and analytics tools. iCIMS offers unlimited job postings and enables candidates to apply through common social media platforms such as Facebook and LinkedIn. The software also supports employee referral programs, searching and reporting functions, and compliance with federal Equal Employment Opportunity standards.

#### **II. Agency Recruitment Systems**

Recruiting agencies require many of the same features as enterprise businesses. However, since agencies are tasked with filling positions for clients, they need additional

functionality. Agencies will need to store and search large amounts of data very easily. Advanced filtering options and email integration are both necessary. Furthermore, agencies require extra features to handle their client details, so customer relationship management (CRM) functionality should be present.

***Market Leader:*** SmartRecruiters

SmartRecruiters is a San Francisco-based company founded in 2010. They provide software for collaborative hiring and social recruiting. SmartRecruiters' mission is to make hiring easier and "to disrupt the entire industry." In 2014, SmartRecruiters was a gold winner for "Best Advance in Talent Acquisition Technology" in the annual Brandon Hall Group Excellence in Innovation Award program, outperforming competing solutions on product, unique differentiators, value proposition, and measurable results.

SmartRecruiters' cloud-based platform allows companies to quickly source, engage, and hire great people. The platform gives hiring managers and recruiter's tools to manage candidates, while simultaneously simplifying the application process for applicants. They offer a seamless solution with one click applications, social and mobile recruiting, Facebook hiring, and career websites. SmartRecruiters goes beyond standard recruiting systems by providing agent management specifically for recruiting agencies. This means companies can manage the recruitment process, their own recruiters, and their recruiters' performance— all from the same system.

**III. Small Business Recruiting Systems**

Though small businesses benefit from this technology in the same ways as their larger counterparts, they often need simpler and more economical systems. Integrating with existing systems is still important, but for growing companies, a scalable solution is necessary. For very small businesses, many vendors offer free versions with limited functionality.

***Market Leader:*** The Resumator

The Resumator is a leading recruiting platform that enables companies to find the best talent for your business and position. Founded in 2009, the platform helps automate and streamline the application and interview process at thousands of companies worldwide. The Resumator offers scalable workflows and real-time insights that companies can use to grow their talent.

The Resumator provides a single interface for editing multiple job postings on multiple sites. This simplifies job posting by eliminating inefficient duplicate data entry. The system provides an intuitive interface, simple up-and-down voting on candidates, quick survey generation, and custom dashboards for interviews and tracking hiring metrics. It also integrates with Microsoft Outlook, so HR departments and recruiters can easily move between systems. Their mobile-friendly site allows managers or applicants to log in, update information, or apply to jobs from any device, anywhere. The Resumator also supports social recruitment and employee referrals through common social media platform integrations.

### ***G2 Crowd's Top 10 Recruiting Software Platforms (Directly from Florentine, 2017)***

#### **1. UltiPro**

UltiPro is a talent management platform delivered as a SaaS offering that includes tools for talent acquisition, onboarding, payroll, benefits administration, reporting, performance reviews, time and attendance and succession planning. It's also designed to be scalable, so businesses of any size can benefit.

#### **2. iCIMS recruit**

iCIMS Recruit is an applicant tracking system (ATS) and database that allows businesses to move recruiting from paper-based systems to a streamlined digital solution. With automated communications, streamlined workflows and integration with social networks, it's a great option for businesses of any size. iCIMS also offers modules for

social media and branding connection (iCIMS Connect) and for new hire onboarding (iCIMS Onboard).

### 3. **LinkedIn Talent**

LinkedIn is far more than a professional social networking site. Its LinkedIn Talent service offers access to one of the world's largest talent networks. Tools like the LinkedIn Recruiter help with sourcing, the Jobs Network helps you target the right person for your opening, and the Career Pages helps you highlight your company's culture and improve brand awareness.

### 4. **SmartRecruiters**

SmartRecruiters is a full talent acquisition platform that includes the ability for full-featured recruitment marketing initiatives as well as collaborative hiring. The solution offers multi-channel recruitment marketing capabilities, full automation to promote jobs, screen candidates and roll out offers, as well as a mobile application that allows HR and recruiting pros to screen, engage and hire on the go.

### 5. **Jobvite**

Jobvite is a social recruiting and applicant tracking solution with several modules: Jobvite Refer, which taps into the social web to find candidates; Jobvite Engage, which helps build a talent bench of candidates; Jobvite Hire, to automate applicant tracking and processing; and Jobvite Video to allow for on-demand video interviewing.

### 6. **ClearCompany**

ClearCompany offers a talent management platform with applicant tracking, onboarding, performance management and goal-setting capabilities to streamline the process of moving talent from applicant to new hire to productive team member. ClearCompany allows HR and recruiting professionals' access to a full suite of tools to improve the quality of talent by linking performance reviews with hiring.

### 7. **Zoho Recruit**

Zoho Recruit is an all-in-one recruiting and staffing software platform that offers CRM, an ATS, the capability to post and manage available jobs, integration with Google Apps,

Microsoft Outlook and an integrated email function. The solution also includes a résumé parser and SMS capabilities, to better reach candidates in the manner they prefer.

**8. ADP Workforce Now**

Best known in enterprise circles as a compensation and payroll solutions company, ADP also offers a suite of recruiting and HR tools called ADP Workforce Now. From basic payroll and Affordable Care Act (ACA) compliance to managing international employees, it is a simple, powerful solution designed to help companies with 50 or more employees.

**9. SkillSurvey**

SkillSurvey's talent assessment software provides the most predictive candidate insight of all -- data on past job performance from managers, co-workers and direct reports. The Pre-Hire 360 assessments offer analytics-based insight to help clients reduce employee turnover, increase recruiting efficiency and cost effectiveness, as well as driving greater customer satisfaction.

**10. Greenhouse**

Greenhouse Recruiting offers a stellar candidate experience by optimizing the entire recruiting process from planning to sourcing, screening to interviewing and hiring, allowing HR and recruiting professionals the ability to conduct more focused interviews and access data-driven analysis. (Florentine, S., 2017)

***IDEAL Blog's Top 29 Recruiting Software Tools of 2018 (Directly from Min, 2018)***

**Job Aggregators**

Job boards and job aggregators are central to the recruiting ecosystem because direct applicants make up 48% of all hires.

1. Indeed, with its resume database of 100 million strong, is the biggest source of external hires by far. In 2017, it was credited with an incredible 72% of interviews and 65% of hires in the US.

2. CareerBuilder is the second biggest source of external hires according to industry surveys. Well-known for their recruiter and job seeker surveys, CareerBuilder was sold to a private equity firm this year. How this will affect, if at all, its business model remains to be seen.
3. Google For Jobs, designed to be a direct competitor to Indeed, may prove to be a game changer. It recently added four new features: accessing salary information, applying location filters, bookmarking saved jobs, and selecting which job board applicants job seekers want to use to apply.

### **Testing & Assessment**

According to Aberdeen, 57% of companies use pre-hire assessments to test the knowledge, skills, abilities, and other qualifications (KSAOs) of their candidates so vendors in this space are in high demand.

1. HackerRank creates coding and technical assessments to help recruiters assess the skills of developers and software engineers. It also offers an online interviewing tool.
2. pymetrics state they use bias-free algorithms to match candidates using game field neuroscience tests. Relatively new to the game, they're already making a name for themselves as a part of Unilever's overhauled digital recruitment process.
3. Self Management Group is one of the most science-based assessments on the market with over 35 years of data. Available in more than 40 languages, one of their strengths is the very hard-to-do accurate sales profiling.

### **AI & Automation**

With the competing demands of increased hiring volume and decreased recruiter headcount, AI and automation tools will continue to be a top recruiting software category in 2018.

1. Ideal uses AI to automate time-consuming recruiting tasks such as sourcing, screening, and interview scheduling. A bonus benefit is that it works within your existing ATS eliminating the need to learn a whole new software.

2. Textio tackles a problem that virtually everyone in recruiting agrees is a problem: badly written job postings. A main feature it promotes is the ability to identify biased language and then suggesting alternatives to use instead.
3. Zoom.ai wants to “improve and simplify the employee experience” through its automated assistant software. Its features include scheduling meetings, transcribing calls, and creating departmental knowledge bases.

### **Applicant Tracking Systems**

With 90% of large companies and 68% of SMBs estimated to use an ATS, applicant tracking systems is the biggest category of recruiting software.

1. Bullhorn, which functions as both an ATS and CRM, is software designed specifically for recruiting and staffing agencies.
2. Greenhouse, the fastest growing ATS by market share in 2017 according to Ongig, is known for its structured hiring and interviewing approach.
3. SAP SuccessFactors was born when SuccessFactors was acquired by SAP America in 2011. While technically a full human capital management (HCM) software, it's the 3rd most popular ATS among the Fortune 500.
4. iCIMS, the second biggest ATS by market share according to Datanyze, is a content generating machine. Fun fact: iCIMS is an acronym that stands for Internet Collaborative Information Management Systems.
5. Jobvite, another hybrid ATS and CRM, is #7 in market share and is known for its annual Recruiter Nation survey.
6. IBM Kenexa BrassRing is a result of Kenexa's acquisition of BrassRing in 2005 and IBM's acquisition of Kenexa in 2012. According to Talemetry, it's the second most popular ATS among the Fortune 500.
7. Lever, a San Francisco startup, is making a name for its focus on diversity and metric-based recruiting.

8. Taleo, acquired by Oracle for \$1.9 billion in 2012, is the leading recruiting software in the ATS category with 23% of market share according to Datanyze.

### **Recruitment CRMs**

With the rise of recruitment marketing, candidate relationship management (CRM) software has become central for attracting, engaging, and nurturing candidates.

1. SmashFly is one of the strongest CRMs in terms of content marketing. Its software helps companies maintain a consistent employer brand starting with a company's career site.
2. Yello received their latest round of funding to the tune of \$31 million in June 2017. Some of its features include schedule automation, video interviewing, employee referrals, and integrations with ATSs and HRISs.
3. PhenomPeople, named a 2017 Cool Vendor in Human Capital Management by Gartner, boosts some big name customers such as GE and L'Oreal. One of their intriguing features is using artificial intelligence to "deliver hyper-personalized experiences".

### **Video Interviewing**

With a recent survey finding 63% of HR managers having conducted an online interview, video interviewing software is becoming an important part of the recruiting tech stack.

1. ConveyIQ, in addition to video interviews, includes features such as email, text messaging, and interview scheduling. Its notable customers include The New York Times, Airbnb, and Zappos.
2. HireVue has received an eye-opening \$93 million in funding to date. One of its differentiators is incorporating Industrial-Organizational Psychology in its pre-hire assessments and interview analyses.
3. Spark Hire is a popular video interviewing software with over 2000 customers. It touts its affordable solution that scales from sole proprietors to enterprises.

4. Wepow offers features such as mobile and online interviewing, white-label employer branding, multiple languages, and 24/7 customer support. Its customers include The Golden State Warriors, Adidas, and Heineken.

### **Human Capital Management Software**

1. BambooHR offers a self-service portal for new employees. As an HCM geared towards SMBs, its other offerings include an ATS, payroll, and performance management.
2. Ultimate Software is rated the #3 talent management software according to Capterra. Some of its features include a mobile app and using AI to suggest personalized actions.
3. Workday was named the leading vendor in Gartner's 2017 Magic Quadrant for Cloud HCM Suites Midmarket and Large Enterprises. According to Ongig, it was the fastest growing ATS by % growth in 2017. (Min, J. 2018)

## **Adult Education**

The field of Adult Education is continuously evolving. In its present form, there are two main considerations: Teacher centered learning and student-centered learning. Teacher centered is most familiar in that it emphasizes that the teacher as the provider of knowledge and skill and will present those factors, evaluated what the student has learned and decide when the student can move on in the learning path. Teacher centered learning is mostly associated with school-based learning, particularly when it involves the teaching of children.

Learner centered instruction is more complex. Malcolm Knowles, the father of Adult Education describes the attributes of the adult learner in the following terms:

1. Self – Concept: As learners mature, they move from being dependent solely on the teacher to being more self-directed.

2. Experience: The adult learner brings life experience in to the learning environment. Experience becomes a resource for further learning.
3. Readiness to Learn: The mature person who seeks a learning experience does so to gain or enhance specific skills and knowledge typically related to work, career or other roles we have in life.
4. Orientation to Learning: There is a shift in perspective from “I will learn it now because I may need this information in the future” to a perspective of “I will need this information in the future”. This brings a natural shift from subject-centered learning that is just learning about things to a more problem centered learning orientation. A simple problem may be wanting to gain better employment, get better at a current job or just improve the quality of life.
5. The mature learner also brings a quality of internal motivation. Failure to recognize the internally motivated learner may result in the instructor actually being an impediment to the learner’s progress.

The final set of descriptors for Adult Education can be seen in the application and recognition of the adult learner attributes in the actual learning process.

1. The adult learner expects an explanation for things being taught. The need to understand “why” is a critical component of adult learning. When this need is met, the learner will acquire skills and knowledge at a faster rate and retain the information for a longer period of time.
2. Instruction should be task oriented with a minimum of memorization.
3. Instruction should reflect the instructors understanding of the wide variety of student’s background and experience. E.g., Students will vary, sometimes greatly, in their reading ability, the ability to learn from lecture or gaining value from a hands-on learning experience.
4. Lastly, keeping in mind the learner’s self-directedness, it is important for the adult learner to be engaged in the learning process. Let the learner discover new information and share with the instructor and the other students. During engagement, a learner will frequently make a mistake. Stress that, for the most part,

classroom mistakes can be corrected. Each correction reduces the possibility of making the same mistake in the workplace.

Applying adult education principles in the learning setting is not a panacea that solves all the problems in a classroom. It is simple a mind-set that, when understood by both the teacher and the learner, will strengthen the overall teaching-learning process.

### **Adaptive and Personalized Training**

Hiring and developing employees professionally is not an easy task. Once potential candidates comply with basic required skills and education for a specific position, what differentiates one individual from the next? Most managers may argue that they are looking for something extra, uniqueness or the right fit for the company. All these are commendable and realistic expectations of any job because they bring diversity in the workplace. But if we are looking distinctiveness in candidates during the hiring process, then why are they treated as one more when it is time to train them?

Diversity is not just about race, ethnicity, religious beliefs, gender, sexual orientation, socioeconomic backgrounds; it is also about bringing candidates to the company who have different training backgrounds, experiences and unique views on how to perform best. Prospects should be considered having a unique wealth of knowledge or experience that can complement the company and where they can be welcome as an asset.

Therefore, why is current training not recognizing these differences? Why companies continue to use a one-size fits all training for all? And most importantly, why what makes each individual unique is not being recognized when it comes to training needs? One solution to improving training development for employees is to consider adapting training to each individual. By creating personalized training, the company recognizes the unique skills and factors in experience each candidate brings to the new position. This is called adaptive training.

In the article *Personalizing the Learning Experience through Adaptive Training* by Peoppelman, Lobene and Nikki (2015), they write “adaptive training, also referred to as accelerated learning

or personalized learning, is a generic term for a family of approaches that alter the events or content presented during training based on learner needs (Durlach & Ray, 2011; Oskorus, Meyer, Andre, & Moore, 2010). These training approaches use individual difference variables (e.g., knowledge) to personalize the training experience through a highly realistic reflection of the work, culture, and job requirements (Bauer, Brusso, & Orvis, 2012).”

The question one must evaluate before designing any type of training course as part of a career path is, what each individual learner brings to the company? What do learners know, and what must they learn? What is the difference between one individual’s learning style and the next person? Why somebody needs to learn in a classical classroom style versus another person that rather learn using a specific guideline or electronic micro modules. Is it correct to assume everyone must learn the same information, or should individuals be evaluated on what and how they learn, before identifying a correct learning course and style?

If we look closer at the questions or statements above, it can be questioned why companies continue utilizing the same learning system, when previous studies show that each person learns at their own pace and might already have key knowledge from their previous trainings. By referring to personal information, adaptive learning systems can either present personalized content for individual students or guide them to learn by providing a personalized path (Brusilovsky, 2001). Previous studies have reported that student’s learning performance could be improved if proper learning style dimensions could be taken into consideration when developing adaptive learning systems (Filippidis & Tsoukalas, 2009, Graf Liu

Understanding that training is designed to meet the needs of the individuals, not groups, then why are the majority of the training courses developed for groups? (Marsick, V.J., 1988).

On the article *Learning on the Fly* (2017), Sarah Fister Gale writes about how McGraw-Hill is adapting traditional classroom courses to the adaptive learning of micro-learning. In this article the author talks about the importance of customization and the benefit to the company. On a test program they ran, converting a five-hour online course into an adaptive learning format. The average time spent in the course was three-hours with some learners finishing it in 40 minutes. They also measured final test and adaptive learners scored 25% higher than traditional learners.

Adaptive learning, however, is much more than going through courses faster. It also identifies learner's strengths and weaknesses in the way they learn. By understanding what each learner needs and how to better present it to them, the company can benefit of the uniqueness of each employee to improve success rate not only in training but also on the job performance.

An interesting and successful approach to adaptive learning especially with professionals who must be on the move and in the field is micro learning. Instead of having to sit through long and boring courses, learning takes place in small chunks of information, so learning is more adamant to not only remembering the information, but to keeping the learner interested and motivated. Since adaptive learning provides for tools that identifies best approaches to learning, micro learning can be very specialized and challenging to the learner. Constant feedback can be received, and managers can feed key information the training must teach, according to the level of career development.

The methods of micro learning are in line with the way that the learner's brain naturally takes in information, so that the body does not get stressed-out. One of the salient features of micro learning is that it allows the user to find exactly what he or she is looking for. (Jomah, Masoud, Kishore, Aurelia, 2016).

## **Description of current FAA employee hiring and developing system for Aviation Safety Inspectors (ASI)**

What is an Aviation Safety Inspector?

To learn more about the specifics of the job, the team identified a key document that provided a clear understanding of what the FAA is looking for. The following information was extracted from Ferguson (2010):

The duties of an aviation safety inspector generally include making sure that aircraft are airworthy, that the facilities and equipment surrounding aircrafts are safe, and that the personnel working on or flying aircraft complete their work safely and correctly. The specific duties of aviation safety inspectors depend on the area in which they specialize.

An aviation inspector might work in one of the following three areas: Operations, manufacturing or airworthiness.

Definitions of Aviation Safety Inspector as defined by the *Model Guidelines for the Hiring and Training of Inspectors of the Flight Standards Directorate* document (September 1, 2016):

Aviation Safety Inspector – **Airworthiness**. A properly credentialed individual who bears the authority, under the national laws and regulations, to certify, surveil, and investigate air operators and aviation maintenance and repair activities on behalf of the national aviation safety authority. Will also handle maintenance licensing and training responsibilities if the national aviation safety authority does not use the category of Personnel Licensing Inspector.

Aviation Safety Inspector – **Operations**. A properly credentialed individual who bears the authority, under the national laws and regulations, to certify, surveil, and investigate air operators on behalf of the national aviation safety authority. Will also handle flight crew and operational licensing and training responsibilities if the national aviation safety authority does not use the category of Personnel Licensing Inspector.

Aviation Safety Inspector – **Personnel Licensing (PEL)**. A properly credentialed individual who bears the authority, under the national laws and regulations, to certify, surveil, and investigate aviation personnel and approved training organizations involved in safety functions on behalf of the national aviation safety authority.

The FAA has identified and defined eight different types of aviation safety inspectors in the following areas: general aviation avionics inspectors, general aviation maintenance inspectors, general aviation operations inspectors, air carrier avionics inspectors, air carrier maintenance inspectors, air carrier operations inspectors, manufacturing inspectors, and cabin safety inspectors. These inspectors all administer and enforce safety regulations and uphold set standards. The differences are in the general areas that the inspectors regulate and/or the size of the aircraft they inspect.

Basic requirements for the job are: high school diploma, post- secondary training, certification or licensing and other requirements.

***Findings:***

**According to GAO's 2005 report:**

*Within the context of an overall system safety approach, GAO recommends that FAA take several actions, including systematically assessing inspectors' technical training needs.*

**Employee Profile:**

After researching the necessary competencies, skills, requirements for an aviation safety inspector or airman position we identified the following:

1. Previous experience as an aviation safety inspector (1825)
2. Number of incidents involving FAR violations in the last 5 years
3. Unexpired Flight Instructor Certificate (single or multi-engine)
4. Number of flight instruction hours
5. Flying skills with Commercial Pilot Certificate with instrument rating
6. ATP certificate
7. Commercial Pilot Certificate with instrument airplane rating
8. Number of hours logged in last 3 years
9. Total flight hours
10. Single or multi-engine land airplane ratings
11. Flying accidents in the last 5 years due to candidate's pilot error
12. Valid FAA medical Certificate? If so, what type?

**Employee requirements:**

1. No competency exam
  - i. Identification of team work or ability to function as a team member is required
2. Extensive application process
3. Documentation of technical training and experience
4. Matrix construction to determine if minimum qualifications are met (HR)
5. If qualified, applications are sent to a centralized processing office where referral lists for operations, maintenance, and avionics inspectors are generated.

**Current Hiring System:**

After identification of need, the process begins. Current hiring practices begin by publishing the position at a website where the general public can see it. (FAA.gov, USA Jobs or any other.)

- Step 1: Job posted
- Step 2: Application completed by candidate
- Step 3: Application received at the FAA
- Step 4: Evaluation of application
- Step 5: Qualifications determination
- Step 6: Application sent to Central Processing
- Step 7: Referral List generated
- Step 8: Top candidates selected

Step 9: Interview process

**Developing Employees:**

The following information was extracted from the 2016 AVS Workforce Plan provided by the FAA:

*WORKFORCE DEVELOPMENT PLAN*

*Training Goals*

*AVS develops its workforce by providing employees with necessary training to ensure they have the knowledge and skills needed to respond to aviation safety challenges and assume roles of increasing responsibility. AVS training leverages a combination of innovative training, including synchronous mobile learning (student and instructor present at the same time), asynchronous mobile learning, and traditional classroom-style instruction.*

*Although AFS, AIR, AAM, and AOV maintain their own training organizations, their efforts align with and support AVS's overarching workforce development program, which focuses on the development, delivery, and evaluation of specialized technical training. AVS workforce development goals include:*

- Identifying training needs and requirements for inspectors, engineers, and other safety critical occupations*
- Providing training and professional development opportunities to fill any skill or competency gap and to enhance current performance*
- Continuing to use technology for training delivery as appropriate (e.g. Blackboard, Adobe Connect, virtual training, and mobile learning)*
- Implementing FAA Compliance Philosophy in curriculum where applicable*
- Reinforcing AVS curriculum with Risk-Based Decision Making concepts*

*Specific AVS corporate activities include:*

- Providing an AVS 101 Webinar to all new hires*
- Implementing standards for an AVS On-Boarding Program and supporting the establishment of an FAA-wide On-Boarding Program*

- Continuing to deliver diversity and inclusion concepts through the AVS Overview Course for new hires and the Leading & Leveraging Diversity Course for managers
- Developing follow-on training for AVS leadership courses to enhance transference of skills and concepts
- Incorporating standard messages and concepts on AVS programs (e.g., Quality Management System [QMS], SMS, and NextGen) into services/offices-specific training
- Embedding short training clips into technical orders

### *Initial Technical Training*

*Definition of initial training as established by the FAA in Model Guidelines for the Hiring and Training of Inspectors of the Flight Standards Directorate (2016):*

*Initial Training. Also referred to as “new hire” or “indoctrination” training. Initial qualification training for the position assigned.*

*Recurring Training. Training taken by inspectors for the purpose of refreshing or updating materials previously provided in an earlier course.*

*Qualification Standards. A description of the minimum requirements necessary to perform work of a particular occupation successfully and safely. These minimum requirements may include specific job-related work experience, education, medical or physical standards, training, security, and/or licensure. They are not designed to rank candidates, identify the best qualified for a particular position, or substitute for an analysis of an applicant's knowledge, skills, and abilities/competencies.*

*NOTE:* Deleted as it last sentence is part of definition of Qualification Standards.

*Specialty Training. Training after indoctrination that is required to perform aviation safety oversight tasks as part of the inspector's defined specialty (e.g. air operator, airworthiness, personnel licensing, etc.)*

### *Initial Technical Training*

*Training provided to new safety critical staff varies across the different services/offices and ranges from one to fifteen weeks depending on a new hire's specialty. For most employees, initial technical training is provided within the first 12 months of employment. AVS uses a blended*

*training delivery model, with some components delivered through online courses and others delivered in the classroom.*

*AFS has six main areas of technical specialization:*

- *General Aviation Operations*
- *General Aviation Avionics*
- *General Aviation Maintenance*
- *Air Carrier Operations*
- *Air Carrier Avionics*
- *Air Carrier Maintenance*

*Each of the six areas listed above require a series of initial courses called “string training”.*

*AIR requires a series of initial courses for all Safety Critical Operational Staff and is currently developing a new required course intended for all other staff to promote alignment of the AIR workforce to organizational goals. The Safety Critical Staff also take required job function training in their area of specialization, which includes:*

*Aerospace Engineering (Airframe, Propulsion, Systems, and Software)*

*Aviation Safety Inspection-Manufacturing Employees with other technical specialties in AVS (such as Drug Abatement Inspectors, Air Traffic Safety Inspectors, and Rulemaking staff) receive structured initial technical training specific to their field of expertise. Employees involved in rulemaking activities are provided detailed training on the rulemaking and exemption processes.*

**Additional/Recurrent Technical Training:**

*After employees complete the initial technical courses, AVS identifies additional training needs during annual calls for training requirements. These requirements are role-based and focused on competency. Supervisors work with their employees to determine what kind of training employees need and when they need it. They also evaluate the skill sets represented in their offices to determine if employees require additional skills. Inspectors, designee advisors, and flight test pilots are required to receive initial and recurrent training tailored to their particular job*

*responsibilities. Supervisors and their employees continuously review training requirements in order to keep pace with changes in the aviation industry.*

*In FY 2014, AVS implemented the Consolidated Management Resource Information System (CMRIS), a new “call for training” tool for AFS that provides greater flexibility to monitor and revise training needs throughout the year. AIR implemented CMRIS in FY 2015, and will extend the system to other services/offices in the future.*

*AVS directly supports FAA’s Compliance Philosophy Order by developing, implementing, and monitoring completion rates of AVS employees through the Compliance Philosophy Briefing training. The Compliance Philosophy class is designed to be delivered online through the e-Learning Management System (eLMS). AVS achieved a training completion rate of 98 percent of all AVS employees in 2015. In addition to this e-training, AVS integrated the Compliance Philosophy into the AVS 101 webinar and the AVS Overview course.*

#### **Managerial/Leadership Training:**

*In FY 2015, AVS continued to review leadership development opportunities in collaboration with the FAA Office of Learning and Development and other FAA lines of business, particularly the FAA Leadership and Learning Institute (FLLI). The assessment identified gaps between the Agency-level program and AVS requirements. AVS continues to assess the best way to meet those requirements, at the corporate and the services/offices level.*

*AQS continued to train AVS managers in effective communications via the Crucial Accountability (CA) course. The CA course has reached all eight services/offices. AVS continues to conduct the AVS Overview course, which includes a panel session with senior AVS leadership.*

*AFS continues to use its Curriculum Oversight Team (COT) to oversee the curriculum for managers, implement content that focuses on leadership and communication skills, and streamline content across various mandatory training courses. In addition, the COT oversees the common curriculum requirements that impact multiple courses and provides corporate leadership on strategies and policies that impact the training required by managers. The AFS approach is a blend of activities related to organizational health, coaching, mentoring, and training. AVS continues to monitor the AFS initiatives to consider expanding AFS management and leadership activities across all services/offices.*

**Hiring & Staffing:**

*By leveraging a combination of innovative mobile learning and traditional Classroom-Based Instruction (CBI), AVS is preparing its workforce to meet future demands of a dynamic aviation environment.*

**Succession Planning:**

*AVS remains focused on building and maintaining a pipeline of skilled employees who are prepared to take on roles of increasing responsibility within the organization. The specialized nature of the Aviation Safety Inspector positions lends way to a more mature candidate pool for AVS to select from. However, there is no mandatory retirement in AVS as there is for Air Traffic Controllers.*

**2016 Staffing:**

*AVS continues to recruit, hire, and retain highly qualified safety professionals who have the necessary technical and analytical skills to meet the safety mission. In Fiscal Year (FY) 2015, the enacted staffing level for AVS was 7,238 positions. AVS ended FY 2015 with a staffing level of 7,196, marginally below the staffing target of 7,238 employees by 42 positions. The FY 2016 staffing level for AVS is 7,406 positions.*

**Attrition:**

*The FY 2015 attrition rate for AVS was approximately 6.0 percent, very close to previously forecasted out-year projections.*

**DESIGNEES AND DELEGATED PROGRAMS**

*Designees and delegated organizations are the private persons and organizations to which AVS assigns the limited authority of performing functions on behalf of the Administrator. Through risk management, designees and delegated organizations enable the FAA to expand its coverage and better leverage federal resources to focus on efforts that cannot be delegated.*

*The Flight Standards Service (AFS), Aircraft Certification Service (AIR), and Office of Aerospace Medicine (AAM) combined oversee nearly 10,000 designees or delegated organizations.*

*As the current aviation industry grows, the FAA will enhance the numbers and types of designees to keep up with increased workload. By doing so, the Aviation Safety Inspector (ASI) and Aviation Safety Engineer (ASE) roles will be further transformed to monitor the performance of designees who perform the certification activities rather than performing those activities themselves. It is*

*important for the FAA to have the data, evaluative processes, and a well-trained staff to monitor the designee program effectively to ensure that goals are met and a positive impact on safety and efficiency is attained.*

## **AVS SERVICES AND OFFICES**

*AVS serves the aviation community by promoting safety and providing a breadth of services from setting regulations and standards to issuing various certifications. The AVS workforce includes seven services/offices located domestically and abroad. The population distribution charts shown in the following section represent the FY 2015 workforce.*

### *Services*

- Flight Standards (AFS)*
- Aircraft Certification (AIR)*
- Air Traffic Safety Oversight (AOV)*

### *Offices*

- Aerospace Medicine (AAM)*
- Accident Investigation & Prevention (AVP)*
- Rulemaking (ARM)*
- Quality, Integration & Executive Services (AQS)*
- UAS Integration Office (AUS)*

## **RECRUITMENT PLAN**

*To operate successfully in a more collaborative and technologically advanced SMS and NextGen environment, AVS must continue to build a workforce adept at risk-based, data-driven decision making, as well as systematic, critical thinking. AVS must compete with the private industry and other government agencies to recruit the best candidates from a specialized talent pool.*

*This is especially true in the field of aerospace engineering. As the number of people entering specialized technical aviation fields continues to decrease, the competition to hire them continues*

*to increase. It has become particularly difficult for AVS to recruit engineers, which has resulted in a significant workforce challenge.*

*The primary recruitment and hiring vehicle AVS uses to hire its workforce is the Automated Vacancy Information Access Tool for Online Referral (AVIATOR) an automated hiring system used by applicants, managers, and human resource professionals to facilitate the overall application and selection process for positions.*

*AVIATOR is integrated into the Office of Personnel Management's (OPM) automated hiring system, USAJOBS. This integration has allowed AVS to reach a wider pool of candidates for all of its positions.*

*AVS continues to use the FAA's Managerial and Employee Leadership Competency Profiles to correlate and define interpersonal and business competencies when recruiting for positions.*

*This "core" competency model, is used to meet the hiring needs anticipated in the future aviation environment by describing a baseline-mastery level of core business and interpersonal competencies, as well as specific technical competencies required across the organization.*

*This competency model allows the competencies of individual employees to be compared against the requirements of individual positions across AVS. As a result, competencies enable individuals to:*

*-Better understand how their individual and group job functions to support the AVS mission*

*-Identify how their individual competency profiles compare to the competencies required across AVS*

*Use of assessment tools allows AVS to fill safety critical positions with individuals who possess the needed skills to support the implementation of SMS and NextGen. Specifically, the competency model provides a systematic approach of looking at the entire lifecycle of any existing position to determine what is required for the incumbent to successfully perform the duties assigned.*

*AVS also continues to use core interpersonal and business competencies as a part of the Knowledge, Skills, and Abilities (KSA) when creating many of its vacancy announcements. AVS has adopted an agency-wide hiring practice of conducting a thorough job analysis on all of its positions to ensure that an accurate and timely assessment of the duties to be performed and competencies required are identified prior to recruiting and filling positions.*

## **RETENTION PLAN**

*Employee Engagement*

*Once AVS has hired an employee, the focus shifts to retention. To increase employee satisfaction and engagement levels, AVS continues to strive to become a workplace of choice by ensuring:*

- Employees have a professional, open, transparent, and safe work culture that encourages innovation, empowerment, and growth*
- Training stays current with agency strategic challenges and strengthens leadership and technical competencies*
- Employees have the opportunity to participate in development programs to strengthen leadership skills*

*Senior leaders take an active role in communicating with and engaging employees by:*

- Using Town Hall meetings to update AVS employees on current activities and accomplishments*
- Conducting site visits to offices throughout the country*
- Encouraging participation in the U.S. Department of Transportation's (DOT) IdeaHub, a DOT wide online collaborative tool used to create ideas and help shape solutions for improving the FAA's workplace*
- Distributing the AVS Flyer, an internal communications resource emailed to all AVS employees biweekly*
- Holding various meetings and conferences to provide managers and other employees the resources and skills needed to better support day-to-day operations*
- Participating in panel discussions at the Aviation Safety Overview*
- Using the Federal Air Surgeon Bulletin to communicate with AAM employees*

*Compensation Incentives to better compete with private industry recruitment practices, AVS offers a limited number of incentives, such as leave enhancements, new-hire pay flexibilities, telework, and degree completion programs. Additional hiring incentives are being reviewed, i.e., Recruitment, Relocation, and Retention.*

***The following information was provided by the FAA and has been extracted from Document 2016 through 2025 Aviation Safety Workforce Plan:***

## **WORKFORCE DEVELOPMENT PLAN**

### *Training Goals*

*AVS develops its workforce by providing employees with necessary training to ensure they have the knowledge and skills needed to respond to aviation safety challenges and assume roles of increasing responsibility.*

*AVS training leverages a combination of innovative training, including synchronous mobile learning (student and instructor present at the same time), asynchronous mobile learning, and traditional classroom-style instruction.*

*Although AFS, AIR, AAM, and AOV maintain their own training organizations, their efforts align with and support AVS's overarching workforce development program, which focuses on the development, delivery, and evaluation of specialized technical training.*

*AVS workforce development goals include:*

- Identifying training needs and requirements for inspectors, engineers, and other safety critical occupations*
- Providing training and professional development opportunities to fill any skill or competency gap and to enhance current performance*
- Continuing to use technology for training delivery as appropriate (e.g. Blackboard, Adobe Connect, virtual training, and mobile learning)*
- Implementing FAA Compliance Philosophy in curriculum where applicable*
- Reinforcing AVS curriculum with Risk-Based Decision Making concepts*

### **Gap Identification**

The team has identified the following gaps or areas of opportunity:

- Require friendly, easy to use, and smart information identification hiring system. This will promote more participation and avoid excluding potential candidates to the pool.
- Customization of information captured in the hiring process should create personal profile.

- Once the personal profile is created a customized training path should be developed. It is recommended to do this once an initial competency and training pre-assessment is done.
- Consider administering a learning-style exam to identify what kind of training tools will work best for the employee. This will help minimize the amount of time spent in training and will maximize the ability to learn.
- There are many systems the FAA utilize for workforce development related missions. These systems are effective at various levels and to different degrees. Integration of systems and processes and collaboration among various elements/offices of the FAA is vital to the successful and effective development of workforce for FSS.

## **Recommendations**

Based on our literature review we recommend the FAA implement the following practices:

### ***Hiring***

- FAA Aviation Safety Inspectors conduct highly technical work and occupy authoritative positions as representatives of the FAA and in some cases, the United States of America. It is essential that newly applicants for new positions meet the highest standards of competence and integrity in order to fulfill their duties and responsibilities as an Aviation Safety Inspector. Managers and/or principal inspectors that are subject matter experts in their ASI specialty should be trained in the recruitment, selection and initial training process to ensure the best possible candidates are selected for ASI positions.
- Include in the hiring practices elements that make the process efficient, clear and positive for the applicants and also for FAA employees involved in the hiring and interviewing process.
- Include people in the hiring process that are extremely familiar with the job tasks to help identify best candidates.
- Use social media to communicate your organization's brand and values.
- Introduce psychometric testing into the hiring process.

- Administer an existing (if one exists) or develop and administer an aviation safety attitudes questionnaire as a method of ensuring candidates selected have values that are congruent with FAA core values relating to safety.
- Maintain a strict hiring standard in accordance with the skills and attitudes required to maintain a safe responsible workforce.
- Consider integration of an intelligent system that can be user friendly to potential candidates and stakeholders within the FAA. The system should facilitate the hiring process, avoiding good candidates being discouraged by the system.
- Open and continuous communication and collaboration of the various offices and elements of the FAA involved in the life cycle of workforce, talent and career development for Aviation Safety Inspectors could be improved by a common process using an integrated system.
- Identify the organizational interface for recruiting, hiring, onboarding, training and career development. Develop a software solution that can interface with USAJobs, Aviator and the FAA Academy and Technical Training, and the Learning Management Systems (ELMS) and provide real time ASI workforce footprint data the leadership can use for organizational planning and development purposes in support of its missions and strategic plans.

### ***Employee Development and Tracking***

- Align training with strategic initiatives.
- Involve all levels of the organization in training efforts. Managers/supervisors should be involved in the employee development process.
- Create a personalized system to track training and assist in career management. This should include short, midterm and long-range goals.
- Consider integrating adaptive learning, personalized learning and micro learning as part of the learning / training curriculum. Maximize training by integrating more interactive tools.

- Assess learning-style of employees before beginning training to maximize time and better results. Employees learn better when information is presented in a way they can best comprehend.
- Personalization of training works best. Employees might have similar backgrounds, but their experiences and uniqueness are an asset to the company.

### **Conclusion and Next Steps**

Based on the recommendations above, this team recommends a more agile/easy to use intelligent hiring system that will present the information to managers and supervisors in an easy to use way, while facilitating entering the information in a friendlier platform to new prospects. It should automatically create an electronic employee profile of each candidate, where managers and supervisors can interact. The employee profile should also capture training information, competencies and skills, while delineating the career path to each employee. For this, it is recommended to perform a needs survey to learn more about the current system and identify specific needs that can improve interaction between working groups managing the hiring and development of personnel. Eventually a better system can be developed to promote interaction and integration of information.

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