STRATEGIC EMPLOYEE DEVELOPMENT IN THE GOVERNMENT SECTOR

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ABSTRACT

As with many other U.S. agencies, succession planning is becoming a critical need for NASA. The primary drivers include (a) NASA's higher-than-average aged workforce with approximately 50% of employees eligible for retirement within 5 years; and (b) employees who need better developmental conversations to increase morale and retention. This problem is particularly concerning for Safety & Mission Assurance (S&MA) organizations since they traditionally rely on more experienced engineers and specialists to perform their organizations' functions.

In response to this challenge, the Kennedy Space Center (KSC) S&MA organization created the Strategic Employee Development (SED) program. The SED program's goal is to provide a proactive method to counter the primary drivers by creating a deeper "bench strength" and providing a more comprehensive developmental feedback experience for the employee. The SED is a new succession planning framework that enables customization to any organization, and in this case, specifically for an S&MA organization. This is accomplished via the identification of key positions, the corresponding critical competencies, and a process to help managers have relevant and meaningful development conversations with the workforce.

As a result of the SED, several tools and products were created that allows management to make better strategic workforce decisions. Although there are opportunities for improvement for the SED program, the most important impact has been on the quality of developmental discussions for employees.

1. ISSUE/OBJECTIVE

The issue of an aging workforce is felt throughout NASA and other Federal agencies, especially at the higher leadership positions [1]. The average age of Federal civilian non-postal employees is 47.4, with 14.8% eligible for retirement as of September 2016 [2]. At KSC, the average age is 47, with 15% eligible for retirement

today and 34% eligible for retirement within 5 years. In comparison, the S&MA organization at KSC (i.e., a subset of KSC) has an average age of 49, with 25% eligible for retirement today and 43% eligible for retirement within 5 years (Figure 1).

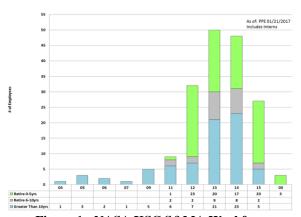


Figure 1: NASA KSC S&MA Workforce Retirement Eligibility Timeframe

A problem arises when so much of the workforce leaves in a short timeframe, taking with them highly-specialized skills and deep knowledge without allowing the organization enough time to train competent successors.

A separate but also relevant issue is the quality of conversation between the supervisor and employee on personal development. In the Federal government, the Office of Personnel Management administers a yearly Federal Employee Viewpoint Survey (FEVS) to assess employees' experiences in the workplace. Some of the questions included in the survey measure employees' perception of training and development (Table 1). Although the responses are quantitative, interpretation can be highly subjective. The issue is not whether the results are low or high; the point is the evaluation scores for S&MA can be increased, and that is an opportunity for improvement. Given that NASA S&MA has an aging workforce and many of them are leaving, it is more important than ever to retain the remaining workforce while preparing them for higher-level positions.

Table 1: Federal Employee Viewpoint Survey Items Related to Employee Development

Questions	SA 2016	KSC 2016
My training needs are assessed	74.0%	74.1%
My supervisor/ team leader provides me with constructive suggestions to improve my job performance	66.8%	74.9%
Supervisors/ team leaders in my work unit support employee development	67.2%	82.3%
How satisfied are you with the training you receive for your present job?	73.3%	68.7%

In response to these concerns, the KSC S&MA organization created the Strategic Employee Development (SED) program. SED program's goal is to provide a proactive method to counter the primary drivers of this issue by creating a deeper "bench strength" and providing a more comprehensive developmental feedback experience for the employee. The SED is a new framework succession planning that enables customization to any organization, and in this case, specifically for an S&MA organization. This is accomplished via the identification of key positions, the corresponding critical competencies, and a process to help managers have relevant and meaningful development conversations with the workforce.

The objectives of the Strategic Employee Development (SED) program are primarily to address and improve the above two primary issues. Additionally, there are numerous secondary objectives, including:

- Develop a succession plan (not a replacement plan that adheres to human resources policies and best practices) [3]
- Provide additional tools for supervisors in developmental discussion with their employees
- Increase awareness of employees' career goals across the entire management team

2. DESIGN/METHOD/APPROACH

2.1 Team Composition

The planning team that develops the overall succession planning strategy, products and materials needed, and change management requires certain skills and authority. Our team consisted of the following:

- Deputy Director, KSC S&MA: Authority and technical knowledge of the organization to lead major changes and indicates management buy-in
- Organizational Development Specialist: Expert advice on change management, succession planning theory, and facilitating conversations
- Human Resources Specialist: Expert on human resources policies and requirements
- Workforce Planner: Expert on providing detailed analysis of the organization's skills and demographics

2.2 Communication & Change Management Plan

The overarching communication and change management plan is a key tool developed at the very beginning of the SED process that should be constantly revisited and adjusted (Figure 2 and 3). This plan outlines the overall timeline to communicate with the various stakeholders (employees, supervisors, other interested organizations), purpose of communication (informational, solicitation for input, decisional), who should do the communication (senior manager, supervisor, human resources), and when to communicate.

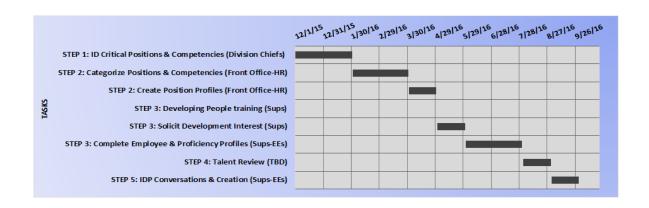


Figure 2: SED Program Schedule

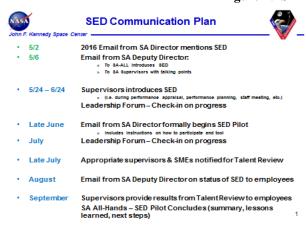


Figure 3: SED Communication Plan

2.3 Process Map

The team developed an overarching process map to guide the sequence of events (Figure 4). This outlines the major steps from start to finish. The process map provides a visual guide to the supervisors and participants regarding the overall process for the SED.



Figure 4: Strategic Employee Development Process Map

2.4 Identifying the Critical Positions

Depending on the size of the organization, perhaps all critical positions or only the most urgent positions should be considered as part of the SED. For our initial effort, we limited it to eight critical positions because it was our first run through of the process. We utilized a tool called Litmus Test for Identifying Key Positions which asks a series of questions to filter which positions should be deemed "critical."

2.5 Identifying the Key Competencies

For each of the critical positions, we engaged the current person in the position to help identify approximately ten key competencies in order to perform that position successfully and subdivided them into technical competencies and leadership competencies. We define key competency as a conceptual representation of a body of knowledge.

2.6 Employee Profiles

Once the management team identified and agreed upon critical positions and key competencies, we began the step to engage the entire workforce to voluntarily participate in the SED program through the completion of an employee profile. Profiles like these are typically used during succession management efforts to identify candidates' development needs [4]. It was important to communicate this was a voluntary program, and not participating would not adversely affect anyone's career opportunities. Conversely, by participating in this program, they would benefit from more detailed and specific personal development feedback, but the normal process for promotions and other opportunities would not be affected.

SED employee participants completed a profile identifying critical positions they were interested in and were asked to self-assess their key competencies. It is important to understand this is not a performance review that evaluates the employee to the skills they should have now in their current position. This is their own assessment of how ready they are to assume a different position in the organization. They are not expected to meet all the key competencies.

2.7 Brainstorming Developmental Ideas with Subject Matter Experts

Since the SED process will eventually involve discussing with each employee their career aspirations toward critical positions, we proactively brainstormed with the Subject Matter Experts (SME) currently in the critical positions to obtain their advice and suggestions on what skills and opportunities would be beneficial to prepare someone for their position. We compiled the information and turned it into a development reference tool for use with the supervisor and employee. Development reference tools are commonly used by organizations to include targeted tips and suggestions for developing specific competencies and skills [5]. See Figure 5 for a sample development reference tool.

 Leadership development programs: LEAD, STEP, LION, MLLP Oral and written communication skills Problem Solving Conflict Manager Team Building Negotiation/Persuasion/Influence •LTI, MIP, PPBE Supervisory Training Lead a significant role in a highly visible project Lead team with diverse group of individuals Lead conflict resolution in teams, with contractors, etc Shadow other branch chiefs Lead a struggling team/project to success Network with other leaders •COR meetings/relationship Project/Integration experience (1 year) •Mentor an intern (6-9 months) Evaluate the performance of others, identify performance gaps, develop improvement plan
•SEB, SEP/LSTO participation Volunteer to be acting manager
 Oral communication - Toastmasters •Maintain effective relationships Volunteer with PX in outreach/mentoring programs (schools, careers, colleges, Work at another Center or NASA HO or in another discipline so you get a broader Seek opportunities to expand your knowledge of other divisions
 Develop other employees •i360, identify areas for improvement, develop a plan, work on those areas Project management Coach/Mentor - Work on accountability responsibility Obtain feedback from peers, supervisors, mentor. Identify areas for improve and work on those areas.

Development Options
SED Critical Positions

Figure 5: Sample Development Reference Tool for Branch Chief Position

2.8 Training for Supervisors on how to Deliver Feedback

Critical to the success of SED, and perhaps the most important step, is the successful delivery of personal development feedback to motivate the employee and to articulate clearly what the employee can do to prepare for advancement. Therefore, we conducted several workshops with our Organizational Development Specialist to discuss effective feedback delivery, and we procured a one-day training class called *Developing People* for all our supervisors to attend.

2.9 Review for Reconciliation and Readiness Level

Once the employees completed their employee profile, it was submitted to their supervisor. The supervisor then performed their own assessment of the employee per the same key competencies. The purpose of this step is to reveal any differences in assessments to discuss with the employee. For example, if an employee believes he/she is currently an expert in quality assurance engineering, but the supervisor believes the employee is at a journeyman level, there is a gap in perceived skill-level that will need to be discussed between the employee and supervisor at the end of the SED program. The supervisor

will also make an initial recommendation on the employee's readiness level, which is defined as:

- Ready Now: Employee has the adequate proficiency level in all competencies to perform the position.
 Employee can hit the ground running now.
- Ready Later: Employee has some level of proficiency to perform the position but development is needed in some areas.

2.10 Talent Review

The Talent Review involves a senior management team meeting to discuss each of the key positions and the employees who self-identified an interest in them. Using the employee profiles, the supervisor's assessment, developmental ideas from SMEs, and an open conversation on how best to develop the employee, senior management is able to accomplish a few objectives:

- Common understanding among the management team on the readiness of the employee for certain critical positions
- An organizational-level perspective on the depth and readiness of the bench-strength
- A set of developmental feedback and suggestions specific to the individual participants that will aid them in developing for future opportunities

2.11 SED Employee Feedback Session

In this last step of the SED process, the employees who participated receive from their immediate supervisor the personalized feedback specific to the critical position they elected. Typically done one-on-one, this includes use of the products generated from the SED, such as the key competencies identified for the critical positions, the development brainstorming results with the SMEs, and the comprehensive feedback from the Talent Review.

3. EXECUTION

In executing the SED for KSC S&MA, there were 44 participants out of 170 possible employees, representing 26% participation. The official SED program took 5 months to execute. The planning phase took 5 months but should be significantly reduced for each successive year SED is implemented.

The SED resulted in the Bench Strength Table, a management tool that enables a holistic view of the organization for the critical positions identified in this SED (Figure 6). It captures the retirement eligibility of the person currently in the position, the number of employees who participated in the program that management deems ready now or ready later, and a brief description of the organization's strategy for the future. In other words, this tool captures management's strategy going forward regarding succession for these positions.

Positions	Retirement Eligibility	Ready Soon	Recruitment & Development Strategies	Overall Health	Progress
Agency Metrology/Calibration	5 or more	1	Look for external candidates Develop internal pool		
LSP CSO	Within 2 years	6	Continue to develop internal pool		
GSDO CSO	Within 2 years	4	Continue to develop internal pool		
Branch Chief	Within 2 years	9	Continue to develop internal pool (focus on leadership skills)		
Quality Engineer	Within 2 years	2	Re-direct/emphasize development of internal pool		
KSC Explosive Safety	2 to 5 years	1	Continue to develop and widen internal pool		
Lead Quality Assurance Specialist	5 or more	1	Continue to develop internal pool (focus on leadership skills)		
Administrative Officer	5 or more	1	Develop internal pool KSC pool available		

Overall Health Legend	
	Small bench strength relative to projected attrition and uniqueness of skill
	Moderate bench strength relative to projected attrition and uniqueness of skill
	Strong bench strength relative to projected attrition and uniqueness of skill

Figure 6: Bench Strength Table

For example, a supervisor position became vacant and management had a choice between directly reassigning someone to that vacancy or announcing a job vacancy. Management decided to choose the latter due to the Bench Strength Table indicating a deep talent pool for potential supervisors.

Training themes for our organization are another outcome of the SED. Based on information obtained from SED participants and the feedback coming out of the Talent Review, management was able to identify themes on the type of training from which the employees would benefit. This type of information allows organizations to focus training dollars toward on the most beneficial training. The training themes identified for NASA KSC S&MA are Assertiveness, Innovation, Business Acumen, Crucial Conversations, and Leadership.

4. COMPARISON TO TRADITIONAL SUCCESSION PLANNING METHODS

Compared to other traditional succession planning methods, the Strategic Employee Development initiative attempts to circumvent a major issue in government succession planning: pre-selection. In private companies, succession planning for critical positions involves selecting candidates with high potential and focusing company's resources and time to develop these candidates into even better performers and better candidates. In the government, very strict rules prohibit the employer from giving unequal opportunities for development or training to a group of employees. To avoid the issue of pre-selection, we put out a call to all employees to fill out an employee profile form that reflects their interest in critical positions. With this

information, management is able to discuss development opportunities for those employees who are committed to growing and supporting the organization. Since the call went out to all employees, pre-selection was addressed.

Traditional succession planning methods are typically one-for-one. This means the organization is only planning on a per position level. The difference that SED brings is, although critical positions are identified, the discussion of the employee and their development feedback is not specific to that position. Rather, the feedback is to develop the skills necessary in order to perform in any like-position and is therefore not as limiting. Traditional succession planning is also usually done secretly, where management discusses potential successors without their knowledge, and sometimes this feedback gets back to the person. The SED process brings transparency to succession planning where participants opt-in to the program. The biggest drawback for a voluntary program like SED is that high potential employees may not participate giving management a less comprehensive understanding organization's bench strength.

5. FINDINGS

5.1 Post Focus Groups Results and Opportunities for Improvement

- Directorate culture
 - Having full support from the top is pivotal
 - Ensure buy-in from supervisors from the beginning
 - o Involve all supervisors throughout initiative

Execution

- Consider having broader areas of work (e.g., technical vs management track) rather than specific critical positions
- Emphasize a similar approach across supervisors so that the quality of the employee experience is consistent
- Ensure there is clear development feedback and options for each employee at the talent review, and get agreement on expected communication to the employee after talent review

Change management

- Identify supervisors who are implementing best practices and leverage their experience
- Over communicate at every level. Intent can be lost in translation
- Have a forum to share ideas on how to have critical conversations

5.2 Research Limitations/Implications

- Dependent on number of participants in the program.
 With more participants, the higher the fidelity of organizational data and more impact on the organization. With fewer participants, the organization will get skewed results.
- Duration of program requires significant preparation and may take several months to complete
- Requires some manual upkeep after program to continue reaping benefits of the SED

5.3 Practical Implications (i.e., Benefits of SED)

- SED can assist organizations with aging workforces
- Scalable to size of organization
- Framework applicable to almost any industry
- Customized for S&MA, with opportunity to add more S&MA specific data for increased impact
- Increases supervisor competency
- Increases employee morale
- Alignment of management team on workforce strategy
- Strategic insight into organization's training needs

5.4 Originality/Value

- Bench strength concept versus traditional one-forone backfill
- Linking the "identify key competencies" to "brainstorming for developmental ideas" to "personalized individual feedback"
- Complies to HR policies (i.e., opt-in) while enabling management to have honest developmental conversations regarding their employees
- Leverages the SME that currently occupies the critical positions for developmental ideas on how

people can develop the skills required and to the appropriate level

6. Conclusion and Recommendations for Further Research

Management always views succession planning as important, but it is usually only performed when the need for it becomes critical. Even then, it is usually conducted privately without the knowledge of the employees being considered for one-to-one backfills.

The SED process is holistic, where employees opt-in, and it gives management a continual method to reap the benefits of succession planning. The SED addresses the aging workforce issues that many organizations face, as well as improving morale by demonstrating management is actively involved in the employee's long-term career goals and in providing more substantial developmental feedback. The SED process can be customized for any organization just as it was customized and performed for the NASA Kennedy Space Center Safety & Mission Assurance organization. Although participation was at 26%, the process still yielded management tools and strategy, substantial employee development feedback, and an overall improvement on survey feedback regarding employee development and morale.

As a final note, the following are recommendations for further enhancements or research:

- Align the SED with the organization's natural performance feedback timeline
- Over-communicate with management and employees on the steps and benefits of the SED to ensure alignment of expectations
- Research industry trends to identify any "new skills" that do not currently exist in the organization but may be needed to stay competitive

7. REFERENCES

- Preparing for an Aging Workforce. Retrieved from the Society for Human Resource Management (SHRM) website. https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/Preparing for an Aging Workforce-Government_Industry_Report.pdf
- U.S. Office of Personnel Management (OPM). (September 30, 2016). Data, Analysis & Documentation, Federal Employee Reports, Profile of Federal Civilian Non-Postal Employees. Retrieved September 20, 2017, from https://www.opm.gov/policy-data-oversight/data-analysis-documentation/federal-employment-reports/reports-publications/profile-of-federal-civilian-non-postal-employees/

- 3. Ellehuus, C., Rowen, T., Connolly, N., Martin-Weinstein, J., Schmidt, C., Freire, P. (2007). *High Impact Succession Management: From Succession Planning to Strategic Executive Talent Management*. Washington D.C: U.S. Corporate Leadership Council.
- Corportate Leadership Council (2009). *Identify and Prepare Your Next Generation of Leaders*.
 Washington D.C: U.S. Corporate Leadership Council.
- 5. GoEbase. (2005). *Building a Development Resource Guide*. www.goebase.com.