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4QD STRATEGY CONSULTING LLC

THE FUTURE OF THE AIRPORT WORKFORCE

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INTRODUCTION

Ever since the World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020, the pace of workforce change across all sectors of the global economy has accelerated to levels that have never been experienced in our lifetimes.

During the pandemic, airports had unique and often urgent demands on staff to continue to deliver safe and secure transport. While airports pivoted to a remote workplace environment for some employees, the nature of the business required a 'hands-on' workplace presence for many frontline operational, public safety, and customer service staff.

Throughout the past two years, the world of work has changed in substantial and unforeseen ways. And yet many of the workforce changes the airport industry experienced were set into motion over the previous 20 years.

As Elizabeth Mygatt, Partner, McKinsey & Company (McKinsey), states, "what we have seen is that COVID-19 has accelerated changes that were already under way. So for example, people were already seeking greater flexibility in their work. Automation and new technologies were already changing the way we worked and the skills we needed. We were stressed and overwhelmed to start with. And we were already experiencing meaningfully different shifts in Millennials and Gen Zers."



Airports will be dealing with an uncertain and rapidly **unfolding future** across a variety of fronts.

THE LANDSCAPE IS CHANGING

Due to the COVID-19 pandemic, U.S. and Canadian airports will face a changing industry over the coming decade, including potential disruptions to previously successful business models. In addition, airports will encounter challenges in adapting to new workforce demands and will face stiff competition from other industries for qualified talent.

As bestselling author Daniel Pink aptly put it, "talented people need organizations less than organizations need talented people." This fundamental shift is prompting discussions about talent around four core issues:

- How work gets done
- When and where it gets done
- With whom it gets done
- What new technologies and tools are used to get it done (IE University)

IMPLICATIONS FOR THE AIRPORT BUSINESS

This report will describe a number of factors that will shape the future of the airport workforce well beyond the immediacy of the pandemic. The impacts of these trends will require that airports “prepare people for the jobs of the future by ensuring that they are equipped with the right type of skills to successfully navigate through an ever-changing, technology-rich work environment, and give all workers the opportunity to continuously maintain their skills, upskill and/or reskill throughout their working lives.” (Organization for Economic Cooperation and Development/OECD)

Furthermore, the airport industry must compete for awareness of career opportunities at an earlier age than previously practiced. Consequently, airports should be intentional in preparing their workforces for the future and should respond now to the workforce changes already taking place. This includes engaging with school children as young as the elementary school level. If the airport demonstrates its dynamic role to the surrounding region, it can encourage the next generation to appreciate the vital role of employment in aviation in general and airports in particular.

By investing in cultivating the key skills, capabilities, and competencies of their workforces, airports can ensure that:

- Employee capabilities remain current in an environment where the usefulness of existing skills is deteriorating ever more quickly
- They prepare and equip emerging leaders to preside over a changing operational and business environment
- Employees at all levels are continually renewing their skills sets and maintaining a posture of “ongoing learner” throughout their careers
- They successfully vie for well-rounded and multi-skilled talent against other equally dynamic industries in a highly competitive employment market
- Their organization will not fall behind because of an under-qualified or under-skilled workforce



The time is right for increasing investment in talent. According to PricewaterhouseCoopers (PwC), 74% of the workforce is ready to learn new skills or re-train to remain employable in the future.

VALUE AND BENEFIT TO THE AIRPORT INDUSTRY

This report aims to guide U.S. and Canadian airports in preparing their workforces for the future. As such, this guidance is designed to provide insight applicable to all airport sizes, geographies, and governance structures and covers two primary areas:

- Identifying the key workforce skills that will be required of employees and most job profiles in the future
- Providing a high-level roadmap that addresses, and collectively plans for, future workforce challenges



***“Employees** are a company's greatest asset – they're your competitive advantage. You want to **attract** and **retain the best**; provide them with encouragement, stimulus, and make them feel that they are an integral part of the company's mission.” – Anne Mulcahy, former CEO, Xerox*

FACTORS THAT WILL SHAPE THE FUTURE AIRPORT WORKFORCE

To understand which skills the airport industry must prioritize, we must first examine the long-term trends that are fundamentally reshaping the world of work. Some of these trends, such as the more intensive use of technology and digitization, existed prior to the pandemic and have accelerated due to the pandemic's impacts. Other trends, such as hybrid and remote work, have greatly expanded because of the pandemic.

TREND : EXPANSION OF THE FOURTH INDUSTRIAL REVOLUTION

Klaus Schwab, Founder of the World Economic Forum, first coined the term "Fourth Industrial Revolution" in 2016. This revolution "is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. The speed of current breakthroughs has no historical precedent." (World Economic Forum)

COVID-19 has highlighted the exponential pace of this current wave of change. "The emergence of dynamic new technologies, coupled with megatrends like greater mobility and connectedness, globalization, resource scarcity, and fundamental changes to the makeup of the human population means change is to be found everywhere, occurring simultaneously (thus, this is a 'revolution' and no mere 'transformation')." (GetSmarter)

Airports are already being disrupted by this revolution and have experienced impacts on their operations, customer expectations, and management approach. These impacts will lead to significant competition for capable employees that is driven by a shortfall or a mismatch in the skills needed to perform future roles.

TREND : DEMOGRAPHICS AND GENERATIONAL SHIFT

Throughout the coming decade, airports will have to navigate a steady and predictable demographic shift. Over the past 15 years, both the U.S. and Canada have experienced a gradual reduction in the proportion of the workforce that is of working age (15-64). Combined with slowing birth rates and increases in the elderly population, airports will be pressed to compete even more for talent in the future. Furthermore, the final group of Baby Boomer retirements means that airports will, on average, have less experienced staff filling essential airport roles.



*"Demographics is destiny." – **Auguste Comte, French philosopher***

The generational shift towards Millennials and Gen Z, defined as those born between 1981-1996 and 1997-2012, respectively, will reach its peak in the coming decade. According to published insights by Korn Ferry and Gallup:

- Millennials comprise the largest generation currently in the workforce
- Millennials and Gen Z will represent 1/2 of the workforce by 2025
- Millennials are the most college-educated generation ever
- Gen Z is almost 50% of multiracial background
- Gen Z has experienced remote work for their entire careers

These two youngest generations in the workforce are more globally-oriented, technologically-savvy, and represent an unprecedented diversity in workers. However, there are differing expectations of the work environment arising from this generational shift, including:

- Seeking higher levels of openness and transparency from organizational leadership
- Demanding greater flexibility in where and how work is performed
- Placing a greater emphasis on people, diversity, and culture over processes and policies

TREND : AN EMPHASIS ON INDIVIDUAL AND COLLECTIVE PURPOSE

The COVID-19 pandemic has exposed the discontent and dissatisfaction that many people have had with their work. Many employees realized that the company, job, and/or people they worked with were out of sync with what they wanted to do with their life or the personal values they held.

As a result, workers are reevaluating their priorities and have responded by quitting their jobs in astounding numbers, especially in areas related to the travel industry. Transportation, trade, retail, leisure/hospitality, accommodations, and food services have experienced the highest quit rates of all business sectors. (U.S. Bureau of Labor Statistics)

According to McKinsey, one-third of people who have left their jobs during the Great Resignation have done so because of uncaring leaders, unsustainable work performance expectations, and lack of career development – providing evidence that much of today's workforce has a low tolerance for poor working environments.

While the trend may subside over the coming years, workers want to feel connections to, and engagement with, their work and will continue to:

- Prioritize finding purpose and meaning in their work and career
- Emphasize improving their quality of life and fulfillment in their work, without sacrificing their personal life values

- Seek employment with organizations that support them professionally and don't treat them as transactions
- Focus on scheduling work around the cadence of their life and not the other way around
- Value their own and their family's mental well-being

TREND : INCLUSIVENESS AS A CORE EXPECTATION

Expectations of inclusiveness in the workforce have risen in prominence over the past few years. Employees want to work in an environment that is welcoming to them and celebrates their unique perspective, contribution, creativity, and individuality. For some workers, feeling valued and having a sense of belonging can be of more importance than compensation or the job's task requirements.

As James Burnette, Senior Director, Global Sales, LinkedIn Solutions, states, "top talent is going to continue to demand that organizations are building environments where they can show up and do their best work, but also be themselves."

Many employees now have a foundational requirement that their employer will address issues of fairness and inequality in all aspects of policy and decision-making. As workers gain a greater voice in shaping the work environment, they will expect more opportunities to participate in and influence the strategic vision and daily affairs of the organization. This is especially true for traditionally underrepresented groups. (OECD)

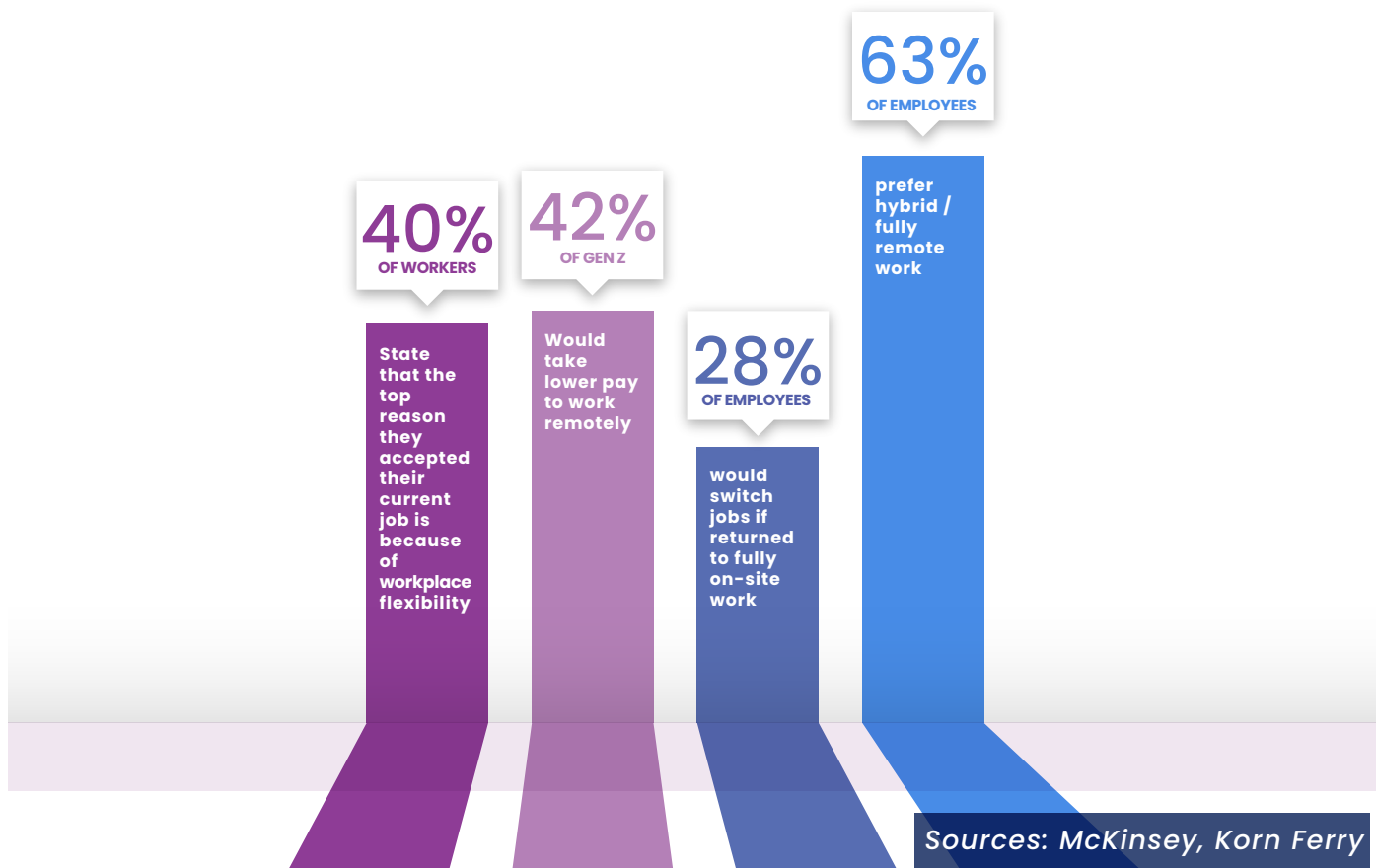
TREND : HYBRID AND REMOTE WORK ARE HERE TO STAY

Physical location is no longer the limiting factor in searching for qualified and exceptional talent. "Management guru Peter Drucker argued in 1993 that commuting to the office would one day become 'obsolete', and it may be the pandemic that ultimately proves him right." (GetSmarter)

Most employees, especially Millennials and Gen Zers, overwhelmingly endorse remote work, at least some of the time. As hybrid work becomes more the norm, airports should expect several years of adjusting to the blending of physical, in-person work with virtual work.

Airports will have to navigate this new world by explaining the "whys" to their employees. Why is it important for the employee to be physically present at the worksite? Why are certain tasks and roles better suited for virtual work? Why do the spaces we have designed provide the best work experience versus being at home?

Airports should be mindful of the balance of remote work vs. on-site work. While there is no single solution that works for all airports, “data shows that in a hybrid world, women and people of color prefer to work from home compared to white men. Given that [fact], without intervention, gender wage gaps will widen and the degree of diversity within leadership benches will weaken. Without greater intentionality, underrepresented talent could be excluded from critical conversations, career opportunities and other networks that drive career growth.” (Harvard Business Review/HBR)



TREND : ACCELERATED ROLE OF TECHNOLOGY

A more intensive use of technology in all facets of the airport business will endure beyond the immediacy of the pandemic. The accelerated role and importance of technology at the airport will influence workforce changes as a result of:

- More data-intensive systems
- Improved artificial intelligence (AI), machine learning, and automated decision-making, especially in systems that monitor terminals, infrastructure, and defensive cybersecurity capabilities

- Greater use of robots in supply chains and logistics (e.g., movement of cargo)
- Wider use of autonomous mobility and transportation systems
- Proven collaborative technologies that allow employees to work-from-anywhere

Airports, with their extensive array of technology systems, are also faced with significant cybersecurity challenges, including heightened cybersecurity risks given geopolitical events and “bad actors” taking advantage of such circumstances. According to McKinsey, the global cost related to cybercrime is expected to reach \$10.5 trillion by 2025.



*Airports can expect that **innovation** and **technology** change will consistently outpace regulatory frameworks, further complicating legal, financial, and safety risks.*

TREND : SOCIAL RESPONSIBILITY IN ALL THINGS

Employees expect that their employer will embrace responsibility towards the greater good, beyond the direct airport business and operations. They will insist that airports be accountable to a wider range of stakeholders and customers, forge stronger ties with their local community, adopt and/or take up social causes, and treat the environment conscientiously.

With growing attention to such matters, there are concerns, especially by younger generations, about the carbon emissions of flying, particularly for international travel. Robin Hayes, CEO of JetBlue Airways, believes that Americans will seek out more environmentally friendly alternatives to commercial air travel. (L.A. Times) This concern will likely influence the level of travel and preferred destinations over time. In Europe, particularly the UK and Sweden, there has occurred a good deal of “flight shaming”, which encourages families to take carbon-friendly staycations rather than using air transport.



“Today’s environmentally focused 22-year-old is tomorrow’s 35-year-old frequent business traveler.” –
**Henry Harteveldt, Principal,
Atmosphere Research Group**



FUTURE EMPLOYMENT PROJECTIONS

COVID-19 has shifted the employment projections for a number of industries, as consumers have altered their behavior, in some cases permanently, since the start of the pandemic. For example, the U.S. Bureau of Labor Statistics’ (BLS) 10-year employment predictions show negative impacts when compared to 2019 on sectors closely related to the airport business, including:

- Air transportation
- Transit and ground transportation
- Bricks and mortar retail
- Traveler accommodations
- Food and beverage services
- Leisure, hospitality, recreation, and entertainment
- Non-residential construction

While employment is expected to increase in these areas through 2030, it will be at a reduced rate compared with pre-pandemic projections. Similar trends are expected in Canada, though they will be more strongly felt due to the prolonged pandemic impacts on the Canadian aviation industry.

These projections may be exacerbated by additional trends that include:

- Reduced pipeline and greater “opt-out” of women and people of color in the workforce
- Skilled trades labor shortages in several high-growth markets
- Declining college enrollment
- Frontline and essential workers shifting to other careers

POTENTIAL DISRUPTIONS TO THE AIRPORT BUSINESS MODEL

COVID-19 is not anticipated to be the only substantial disruption that airports will face in the coming years. Potential disruptions and risks to the airport business model will almost certainly affect the workforce and how/when they perform their jobs.

Disruptions can take a number of forms and have varying levels of impact on the airport's business model. Examples of such disruptions may include:

A permanently lower level of business travelers. “Jarrod Castle of UBS, a [global] bank, notes that 40% of business trips are to meet clients and another 40% involve internal meetings. Conferences, exhibitions, and the like make up the rest. He reckons that perhaps half of the intra-company jaunts, especially for training or get-togethers between non- c-suite executives, are expendable. That means a fifth fewer trips overall.” (Economist)

Travelers who forgo air travel due to concerns about climate change. “According to Cool Climate, flying 100,000 miles a year (as some frequent flyers do) produces a stunning 43 extra tons of CO2. If jet-set households were to cut their travel sharply, they would have a disproportionate effect on emissions.” (Economist) Travelers may also reduce their air travel to lower their personal carbon footprint.

More frequent human and natural-cause disasters. Disasters, whatever their cause, can have serious and widespread effects on the airport business. The type and severity of the disaster could



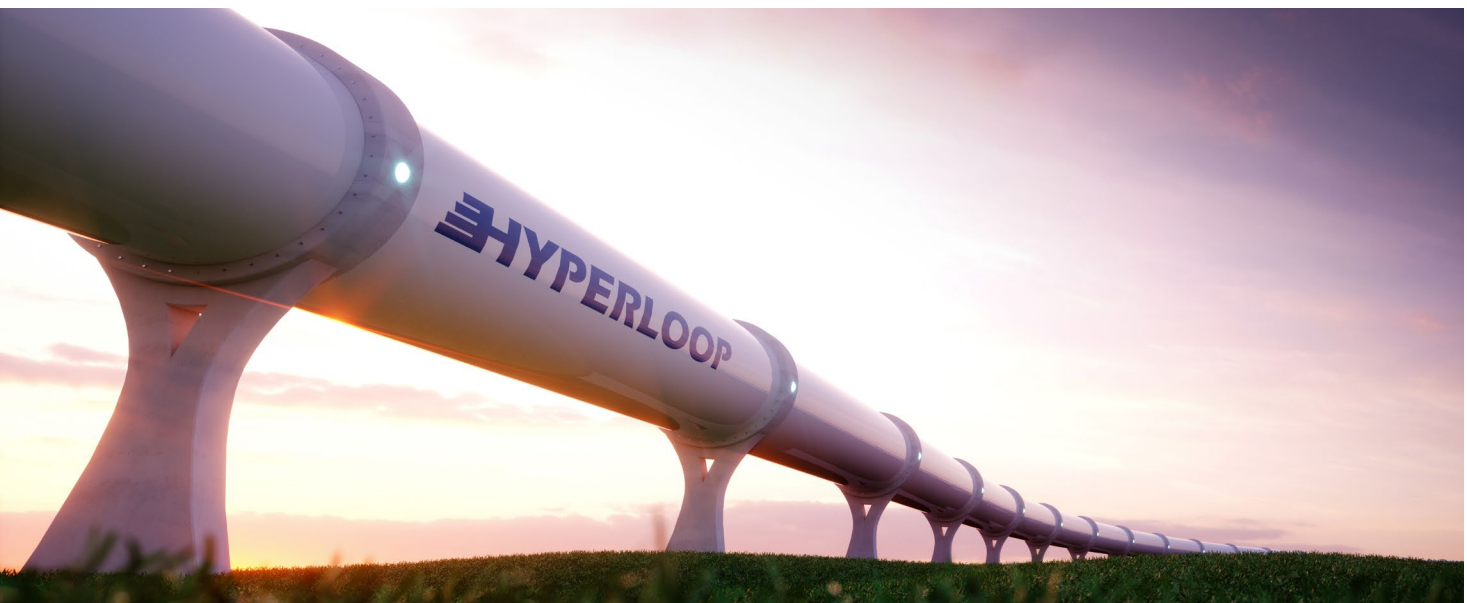
41 percent
*of the current U.S.
construction workforce
is expected to retire
by **2031.***
(McKinsey)

disrupt airport operations for days and weeks, and in some cases, permanently. Such disasters will likely have significant financial consequences, both immediate and in the longer term.

New competitors and complements to air travel. Emerging technologies such as drones, Hyperloop, and electric vertical take-off and landing (eVTOL) aircraft may provide alternative passenger and cargo transportation for selected routes and distances. Conversely, some new technologies may enhance the financial viability of the airport business model – for example, automated aircraft and airport operations.

Growing geopolitical instability. Global events may unfold that raise the risk of greater international tensions, affecting international air service and access to the commodities (i.e., raw materials and natural resources) that underpin the transition to clean energy sources.

Given the higher level of uncertainty experienced by the airport business due to the pandemic, disruptions can create “paralysis by analysis” in how airports approach decisions, even on near-term time horizons. Airports will need to balance operational stability with the need to be nimble and flexible.



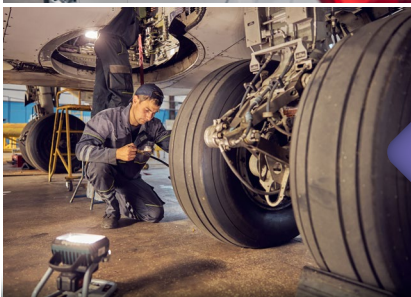
CHANGING AIRPORT ROLES

The trends and factors discussed throughout this section will likely change a number of airport job roles. Examples of these changes include:



Airfield operations specialists

- who will incorporate more automation in daily runway inspections and operate drones to help them complete these tasks



Maintenance workers

- who will need to monitor and interpret “live” data generated by airport asset systems and use new technologies to repair electronically-driven systems



Hybrid or dual-trained workers

- who will perform multiple roles, such as a maintenance worker who can also serve as a firefighter, especially at small airports with limited staff



Human resources professionals

- who will use AI to eliminate bias in the recruitment process and increase diversity in the workforce




Concessions workers

- who will focus on personal and sales-oriented interactions with customers while robots perform or automate repetitive tasks, including but not limited to cooking certain meals and completing retail purchases

KEY FUTURE WORKFORCE SKILLS, CAPABILITIES, AND COMPETENCIES

Having explored the long-term trends that will impact the airport workforce, we will now identify the key workforce skills required to successfully manage the future airport business and remain competitive in the job market with other industries. We will explain why these are the essential skills, capabilities, and competencies that airports should build and develop in their workforce. Finally, we will provide practical examples of these skills and their relevance in an airport setting.



While different definitions exist and often overlap, we will use the following definitions:

- ***Skill – a learned ability, regardless of its complexity***
- ***Capability – a trait or characteristic needed to achieve something***
- ***Competency – the ability to apply one's skills, capabilities, and knowledge***

For simplicity, the word “skill” may be used to collectively refer to all three of these terms.

In a very real sense, the airport industry has the opportunity to embrace a common language to describe the key elements and skills of the future workforce. Just as “succession planning” became a mantra for many airports, the industry needs a unified approach to describe the transformation required by the future workforce.

Most of the following list is focused on the “soft skills” that are applicable to all professions and job roles, many of which are also critical for emerging leaders. They are not easy to replicate, helping airports to have a competitive advantage over employers in other industries. In addition, the list represents areas where the greatest gaps generally exist in the workforce (as stated by many CEOs and recruiters) and are often among the most valued capabilities sought after by employers because they help create lasting value for the organization.

Skills

- 1) Specialized technical expertise
- 2) Problem solving and resolution
- 3) Critical thinking and judgment
- 4) Strategic thinking and future focus
- 5) Agility, flexibility, and versatility
- 6) Digital fluency
- 7) Navigating change
- 8) Individual resiliency
- 9) Essential leadership behaviors at all levels
- 10) Building interpersonal and cross-functional connections and relationships
- 11) Influencing without formal authority

What is it?

A description and general examples of the skill.

Why is it important?

An explanation of why airports should invest in the skill.

Situations faced by employees at different levels in the airport organization and how the skill might look in practice.

Executive Level

C-suite or other senior executive roles with responsibility for the organization.

Managerial Level

Managers and directors with responsibility for departments, groups, or programs.

Non-managerial Level

Employees who have no direct reports, are frontline workers, or are in a professional role.

Ramp Safety
Vorfeldaufsicht



1. SPECIALIZED TECHNICAL EXPERTISE

What is it?

Possessing certain types of specialized technical expertise will be necessary for the safe, secure, and efficient operation of the airport. Two forms of expertise are critical now and will remain so in the future:

Information Technology – workers who create and maintain the airport's backbone of technology systems, applications, and digital services.

Skilled Trades and Labor – workers who build and maintain the airport's physical infrastructure, whether it's runways, terminal buildings, or utility systems.

Why is it important?

Skilled trades workers are expected to be in short supply throughout the coming years, due to the ongoing retirement of Baby Boomers and the corresponding loss of experience combined with a greater interest by young people in professional careers. Many trade schools have reduced or eliminated vocational, hands-on learning opportunities. A shortage of skilled trades workers will impact airports and many transportation companies seeking to leverage funding for infrastructure renewal. In addition, the pace of airport digital transformation and the expanding role of technology at airports will require experts who can assemble and manage a growing interdependency of technology systems and applications.

Executive Level

A Chief Information Officer who must possess a strong enough background in technology and data system fundamentals to oversee the airport's technology department.

Managerial Level

A Construction Project Manager who must understand how each type of skilled trade is dependent on other trades when sequencing and executing a capital project.

Non-managerial Level

A Cybersecurity Analyst who is ensuring that the airport's technology systems are protected from hacking or ransomware threats that could disrupt operations or cause serious harm to life or property.



*"A skilled worker, regardless
of the job description,
remains a treasure." –*
**Madeleine M. Kunin, former
Governor of Vermont**

2. PROBLEM SOLVING AND RESOLUTION

What is it?

Problem solving and resolution is the process of identifying and analyzing issues, having productive discussions, and implementing appropriate solutions. Effective problem solving requires a clear understanding and definition of the problem and a recognition for whom you are solving the problem. Looking at a problem from multiple angles is an essential technique, especially in situations where there is significant ambiguity and uncertainty.

Why is it important?

Since many future challenges will require a multi-disciplined approach and impact diverse interests, employees must be creative and explore new ways of examining problems. Often the first solution may be improved upon through trial and error, a pilot approach, or “failing fast”. Employees who are experienced in problem solving methods are also more comfortable dealing with conflict in a constructive manner and arriving at consensus solutions.

Executive Level

A Chief Financial Officer who must wisely balance the varied current and future financial needs of, and potential risks to, the airport by using a collaborative approach.

Managerial Level

A Terminal Manager who must resolve the inherent tension between being operationally efficient and financially prudent, while providing an excellent customer experience to travelers.

Non-managerial Level

An Electrician who must troubleshoot an abnormal fluctuation in the electric current that is impacting the lighting on the airfield.



“We cannot solve our problems with the same level of thinking that created them.” – Albert Einstein, theoretical physicist

3. CRITICAL THINKING AND JUDGMENT

What is it?

Critical thinking and judgment entails the ability to clearly reason, rationally reflect, carefully analyze information, and make sound decisions. Critical thinking enables employees to ask logical questions and avoid binary decision-making when solving problems or aiming for a specific goal. Employees who can think critically and exercise good judgment appreciate the cause and effect nature of many problems.

Why is it important?

With the level of uncertainty expected in the future, possessing critical thinking skills allows employees to make sense of a chaotic world and instill a semblance of order in a rational manner. Critical thinking and exercising judgment means employees gather relevant information through observation and experience, formulate solutions, and make higher quality decisions based on findings, analysis, or other evidence.



“Critical thinking is what leads to the next breakthroughs in any area.” – Roberta Michnick Golinkoff, Unidel H. Rodney Sharp Chair, School of Education, University of Delaware

Executive Level

A Chief Commercial Officer who must decide how and when to pursue new commercial opportunities.

Managerial Level

A Safety Program Manager who is conducting an investigation of current airport safety practices.

Non-managerial Level

A Financial Analyst who is determining the best method of presenting financial information to the airport's leadership team.

4. STRATEGIC THINKING AND FUTURE FOCUS

What is it?

Strategic thinking and future focus is the ability to see and understand the entirety of the airport business, fit the individual organizational pieces together, and plot a course of action to achieve a future goal. Employees with a strategic and future focus are adept at identifying patterns and “connecting the dots”. Strategic thinking can involve a range of activities such as finding new ways of doing business, evaluating and implementing long-term solutions, and assessing risks to the airport business.

Why is it important?

Even though the future is unpredictable, strategic thinkers can apply their insights in a manner that addresses tomorrow’s challenges today. Employees who can think in a strategic manner are more likely to shape future events, rather than react to them. By appreciating the collaboration, interconnectedness, and interdependence of internal departments and external stakeholders, strategic thinkers can look at situations from a unique perspective, discover new opportunities, and create value for the entire airport business.

Executive Level

A Chief Executive Officer who is responsible for proactively reimagining the airport to fit the needs of the future while addressing the vulnerabilities of the organization.

Managerial Level

A Strategy Manager who is serving on a critical organization-wide initiative and must weigh in with sound advice on the direction the group is taking.

Non-managerial Level

A Human Resources Business Partner who must guide other departments in the optimal methods of recruiting new employees and retaining existing employees.



“A vision without a strategy remains an illusion.” – Lee Bolman, author and retired professor, University of Missouri-Kansas City

5. AGILITY, FLEXIBILITY, VERSATILITY

What is it?

Agility, flexibility, and versatility collectively represent the ability to pivot quickly and adapt in response to changing events, circumstances, or priorities. Examples of this skill include having the comfort level to rapidly change one's mindset, compromising when confronted with new stakeholder demands, and/or taking on new or different job initiatives. People who are agile, flexible, and versatile are better able to proactively address issues, sometimes even before a concern arises.

Why is it important?

The future world of work, whether for skilled labor or professional roles, will continue to evolve. Airports must be able to adjust and respond accordingly to new events, technologies, and ways of doing business. However, it is not just the airport organization that must be versatile. The airport's people, individually, must be capable of adapting as well. These constantly changing conditions will require the workforce to alter their approach as new business or operational risks and opportunities emerge.



“Success today requires the agility and drive to constantly rethink, reinvigorate, react, and reinvent.” – Bill Gates, co-founder, Microsoft

Executive Level

A Chief Planning / Development Officer who must re-allocate elements of the airport's capital plan as business requirements change.

Managerial Level

A Concessions Manager who has to adapt to fluctuating passenger traffic volumes and quickly shifting consumer tastes and habits.

Non-managerial Level

A Procurement Specialist who must incorporate national, local, or airport policy changes into future procurements without making processes more complex.

6. DIGITAL FLUENCY

What is it?

Digital fluency is the knowledge and proficient use of the technology necessary to effectively perform one's job. A person who is digitally fluent will be comfortable interacting with emerging smart machines and systems and can use the types of devices that are best suited for their specific role. Digitally fluent workers better appreciate how digital tools can simplify and automate processes and are equipped to select the right tools to achieve their goals.

Why is it important?

Society is increasingly becoming more dependent on leveraging various digital tools and platforms in our personal lives and careers. Having employees who are comfortable working in a fully digital environment is a prerequisite in the current Information Age. Airports also need employees who can understand, evaluate, and interpret data to solve problems and make informed decisions.

Executive Level

A Chief Executive Officer who appreciates that the airport of the future is highly dependent on integrating and harnessing digital processes to make customers' journeys easier, operations more efficient, and infrastructure safer.

Managerial Level

An Airfield Operations Manager who is interpreting the data gathered from drones that conduct airfield inspections and detect Foreign Object Debris (FOD).

Non-managerial Level

A Maintenance Technician who is using digital, real-time tools that enable predictive maintenance and real-time identification of safety issues or equipment failures.



“Digital is the main reason just over half of the companies on the Fortune 500 have disappeared since the year 2000.” – Pierre Nanterme, former CEO, Accenture



7. NAVIGATING CHANGE

What is it?

Navigating change is the process of addressing individual, departmental, organizational, or industry change by intentionally selecting and pursuing a course of action. Successfully navigating change requires balancing processes, systems, and frameworks with the change's impact on people, beliefs, and emotions. Often navigating change, especially organizational or industry change, requires persuasiveness and strong communication skills to explain why change is needed.

Why is it important?

Having the ability to navigate through business disruptions is necessary for the airport business to remain competitive in the future. Change can create a state of flux and can be overwhelming. Employees who can capably navigate change are more proactive, less likely to have a defeatist attitude, and exhibit greater resiliency.



“Change is the law of life and those who look only to the past or present are certain to miss the future.” – John F. Kennedy, 35th U.S. President

Executive Level

A Chief Human Resources Officer who must build stakeholder coalitions to guide the organization through emerging changes in the work environment.

Managerial Level

An Innovation Manager who is enlisting a network of change agents throughout the organization to implement new ideas and ways of doing business that are contrary to the status quo.

Non-managerial Level

An Accountant who must adjust policies and practices as new financial regulations are introduced.

8. INDIVIDUAL RESILIENCY

What is it?

Individual resiliency is the ability to adapt to, and bounce back from, specific one-time events and from the constant onslaught of change. A central component of individual resiliency is the focus on the overall well-being and mental health of the person. Effective coping mechanisms, strong social networks, and emotional self-awareness are all factors that contribute to individual resiliency.

Why is it important?

Having the ability to respond to disruptions and quickly correct course is crucial in navigating the “always on” business demands of the future. Resiliency is essential to ensure that employees are taking care of their personal well-being so that they can remain productive employees. An employee who is resilient will be better equipped to overcome hardships, have positive interpersonal relationships, and effectively address issues without becoming overwhelmed.

Executive Level

A Chief Innovation Officer who has just completed a stressful, high-profile product implementation and then immediately takes time to personally recharge.

Managerial Level

A Business Diversity Manager who loses an employee and has to temporarily take on that additional workload, without experiencing burnout themselves.

Non-managerial Level

A Police Officer who faces unforeseeable threats to their person every workday, while processing the strong emotions that can come from being a frontline public safety worker.

“Do not judge me by my success, judge me by how many times I fell down and got back up again.” – **Nelson Mandela, former President of South Africa**

9. ESSENTIAL LEADERSHIP BEHAVIORS AT ALL LEVELS

What is it?

Leadership is the ability to guide and influence other members of a group or organization. While commonly thought of in terms of organizational hierarchy, leaders can be found at all levels of the organization and generally exhibit the following behaviors:

- Communicate openly with others about what's going on
- Balance the demands of various individuals or stakeholders
- Embrace diverse perspectives, even when they contradict one's own viewpoint
- Identify risks to the organization, whether on a small or large scale
- Consistently engage with individuals and teams, including those from other departments
- Are comfortable holding others accountable and providing objective feedback
- Nurture, coach, and prepare future leaders

Why is it important?

With the rapid pace of change, having effective leaders at all levels of the organization is critical for the airport's future success. Employees who demonstrate leadership capabilities can better address the varied customer, operational, financial, and community demands the airport will encounter.

Executive Level

A General Counsel who must persuade peers at the executive level to adopt an enterprise risk assessment when it is not obvious that it is required.

Managerial Level

An Air Service Development Manager who must convince community stakeholders of the value of expanding air services to reach new or underserved markets.

Non-managerial Level

A Maintenance Lead on the midnight shift who must ensure that the team's critical work orders are completed while aircraft and passenger traffic is at a minimum level.



“Leadership is a series of behaviors rather than a role for heroes.” – Margaret Wheatley, author and organizational consultant

10. BUILDING INTERPERSONAL AND CROSS-FUNCTIONAL CONNECTIONS AND RELATIONSHIPS

What is it?

Building interpersonal relationships involves being intentional in connecting with others and putting forth the effort to build such ties. An important component of building connections is the capacity to understand and authentically engage with others. This engagement requires effective communication and listening skills to exchange information and ideas.

Why is it important?

Interpersonal relationships form the basis of most work interactions, including virtual interactions. With the increasing complexity of managing the airport business and balancing stakeholder needs, employees must have the ability to work well with others and work across functional lines. Building strong interpersonal and cross-functional connections and relationships is vital to unify the airport's culture, achieve common goals, and bridge the gap between remote and on-site workers.

Executive Level

A Chief Marketing and Communications Officer who is cultivating positive relationships with the media, external stakeholders, and the community.

Managerial Level

A Sustainability Manager who is leading the airport's efforts on implementing sustainable practices by reducing waste in collaboration with airport business partners and stakeholders.

Non-managerial Level

A Government Relations Specialist who is interacting with elected government officials to educate them about the economic and community benefits of the airport.



"You cannot continuously improve interdependent systems and processes until you progressively perfect interdependent, interpersonal relationships." – Stephen Covey, author and former professor, Jon M. Huntsman School of Business, Utah State University

11. INFLUENCING WITHOUT FORMAL AUTHORITY

What is it?

Influencing without authority is the practice of persuading others, over whom you have no direct or formal authority, and gaining their buy-in to achieve a goal. Employees who can positively influence others will exhibit a high level of emotional intelligence and understanding of the true workings of the airport organization. Key elements of influencing without authority include the ability to communicate upwards in the organization, negotiate effectively, build strong relationships, and achieve consensus.

Why is it important?

Many organizational efforts require aligning several internal functions and/or external stakeholders and convincing them to make a decision, implement a project, or achieve a specific outcome. Influencing others is a critical skill for emerging leaders to cultivate, especially considering the many interdependencies that exist in the airport environment.



“The key to successful leadership is influence, not authority.” – Ken Blanchard, author and motivational speaker

Executive Level

A Chief Customer Experience Officer who is advocating for an excellent customer experience, even though they do not have direct control over key operational departments or external stakeholders.

Managerial Level

An Employee Relations Manager who is responsible for encouraging other department managers to build a cohesive culture and value engagement with their employees.

Non-managerial Level

An Airport Operations Specialist who is seeking additional budget funds to purchase new automated technology to monitor airfield conditions.

SKILL DEVELOPMENT COLLABORATION WITHIN THE AIRPORT INDUSTRY

The previous section outlined the vital skills necessary to succeed in the future world of work. However, simply identifying and recognizing these skills is not enough. Airports must take concrete steps to educate their employees and cultivate these skills within their respective workforces.

The competition for talent is fierce, so it may not be practical or affordable for airports to simply hire for the skills and capabilities they will need in the future. Therefore, it is imperative that airports begin now to expand the skill set and versatility of their current employees and emerging leaders.



***Growing** talent
from within
the **airport
organization**
is a long-term
commitment.*

BUILDING A FUTURE-ORIENTED LEARNING PROGRAM

According to McKinsey, the argument for organizations to build up their employees is persuasive. “Organizations that invest in developing their people while launching a transformational change program see a higher success rate than those that do not.” Furthermore, exceptional companies have demonstrated that capability-building programs have common components such as:

- A focus on the skills that matter
- Using a variety of proven learning methods
- Incentivizing participation and engagement
- Starting with a scalable pilot
- An intent to positively impact the organization’s business performance


Airport leadership should embrace employee learning opportunities and recognize that creating or modifying a learning program must be employee centric. That is, the program should be readily accessible to employees and easy to consume by making it simple with a short timespan to complete. Airports can leverage an employee’s motivation to learn by giving them the tools and opportunities to take charge of their own learning and growth, which may consist of creating a formal individual development plan.

By demonstrating a clear link between learning efforts and the employee's potential career path, airports can ensure that employees view learning as a worthwhile alternative and are motivated to continue on the learning journey.

UPSKILLING AND RESKILLING EMPLOYEES

In today's challenging recruiting environment, airports are best served to focus on upskilling and reskilling their current workforce. "Learning new skills to remain competitive is touted as the most important way workers can future-proof themselves against workforce disruptions, such as automation; surveys show nearly 40% of workers fear their job will become obsolete in the next five years." (BBC)

Efforts to equip current employees with new skills may be the single most effective mechanism for airports to prepare their workforce for the future and to provide their employees with enhanced long-term career prospects.



An investment in knowledge always pays the best interest." – **Benjamin Franklin, author, inventor, and statesman**

Upskilling is the process of learning skills that deepen an employee's knowledge. These skills are often directly related to the employee's current position or the foreseeable changes along their chosen career path.

Reskilling involves equipping employees to move into new, often unrelated, roles in the organization. These skills can be dramatically different, for example, when a restaurant server seeks to switch to a career in finance.

GENERAL APPROACHES TO DEVELOPING KEY WORKFORCE SKILLS

Building an employee's capabilities can take a number of forms and be delivered in a variety of formats. Some approaches can be administered collectively by the airport industry, while others will require each individual airport to integrate skill development into their day-to-day business.

The most common methods of training and developing skills include:

- Traditional or formal in-person classroom settings
- Online or virtual learning, whether it's during a fixed class time or is done at a time that is convenient for the learner
- Hands-on or intensive boot camps, where the learner is immersed in a single topic over a period of time, usually 1-3 days
- Interactive sessions or exercises that simulate real-world situations
- On-the-job training, where skills are learned and applied in real-time situations

As new artificial intelligence (AI) enabled and other emerging technologies enter the market, airports will have the opportunity to expand these learning options. For example, AI-enabled training adapts to the employee's learning pace and assesses how quickly they have grasped the knowledge. This minimizes wasted time by the employee reviewing material they already understand.

As Stella Lee, PhD, and Director at Paradox Learning states, "While the page-turner e-learning courses are here to stay for the next little while, there's an opportunity to pilot more varied learning and development activities and tools: personalized learning content using [predictive algorithms], push content via chatbots, peer-based knowledge sharing on collaborative platforms, and the integration of curated third-party content with custom internal in-house content."



Employee learning

*will often combine these **methods** in a way that balances conveying **new information** to an employee with applying that same **knowledge** in a practical manner.*



What Can I Help You With?

CREATING A SHARED AIRPORT INDUSTRY APPROACH

While general approaches to learning the key future workforce skills are valuable, the application of those skills often requires an adaptation unique to the airport environment. Having a demand-driven, airport-specific focus can better link skill development to the common situations frequently faced at airports.

There are training and development programs and courses available to airports through national and international trade associations such as Airports Council International-North America (ACI-NA), the American Association of Airport Executives (AAAE), ACI World, and the International Air Transport Association (IATA). Many of these programs concentrate on the technical knowledge and specialized expertise needed to operate the airport in a safe, secure, and efficient manner.

However, there is a significant lack of learning opportunities for the workplace skills previously identified and almost none that are customized to address the future challenges faced in the airport environment. In addition, any skill development in these areas is generally aimed toward current and emerging leaders and not the general population of airport employees, including the operational, maintenance, and public safety roles which typically comprise 60–80% of the airport workforce.

So what options should the airport industry explore? The following options aim for the broadest possible benefit to airports of all sizes and resource levels and are ones the industry should investigate to prepare their workforces for the future.



*"Alone we can
do so little; **together**
we can do so much."
– Helen Keller, author
and disability rights
advocate*

Partner with technical education institutions. By working with community colleges and trade schools on a collective basis, the airport industry can guide instruction of the practical application of skills in the airport environment. The American Association of Community Colleges (AACC), the Accrediting Commission of Career Schools and Colleges (ACCSC), and the National Association of Career Colleges (NACC) in Canada are examples of potential partners.

Modify existing apprenticeship models. Apprenticeships are a vital path for airports to secure the skilled trades workers they will need in the future. By incorporating and emphasizing the identified skills that airports will need into existing models, apprenticeships can expand their effectiveness in transferring knowledge to the next generation.

Create an airport-focused skill program. Though programs and courses exist for many of the identified skills, there are no current airport-focused programs on these skills. Establishing skill programs that apply the skills in the airport environment and are tailored to various levels in the organization, in particular for entry level or frontline employees, would bring a substantial benefit to the industry.

Publicize examples of simple and effective on-the-job application of the identified skills. Most learning is done through on-the-job experiences and everyday situations. Airports need to have easy-to-implement examples that can be incorporated into an employee's day-to-day work and can be used by airports of all sizes and governance models.



*"A **community** that is engaged and working together can be a powerful force."*
– **Idowu Koyenikan,**
author and business consultant



Develop a shared career guidance model. Entry level employees provide a significant opportunity in which to instill the identified skills. A career guidance model, purpose-built for the airport industry, can assist in coaching entry level employees to change and challenge the way they think about and approach their work, especially as their work habits may still be in the process of being established.

Communicate a cohesive learning message to the industry. Airport leaders share the responsibility to help their employees learn and grow. Without consistent executive level support, airports will struggle to build their workforces for the future. Communicating the importance of skill development is critical for the airport industry's continued success.

FRAMEWORK FOR ASSESSING SKILLS

Yet another crucial challenge remains. How does the airport industry verify that the skill-building programs are of sufficient quality and will remain relevant to changing airport needs over time? After all, just because an employee takes a skill development training program doesn't automatically mean they can readily put that knowledge into practice.

Successful learning should not be measured by the number of courses taken or hours completed. Since learning is not a 'one size fits all' endeavor, new measures will need to be established to accurately capture whether employees have achieved the level of competency the industry requires.

The airport industry should consider the following guidelines when determining a framework for assessing and verifying skills:

- Evaluate existing skill assessment tools in the identified areas for their applicability in the airport setting
- Establish certifications and "micro" credentials for specific competencies that are recognized across the industry
- Provide airport networking opportunities that reinforce and foster soft skill development

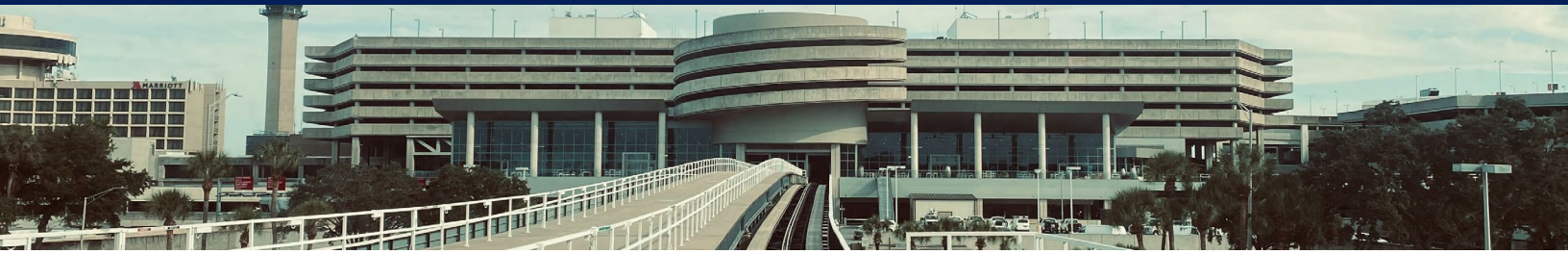
PUTTING SKILLS INTO PRACTICE

As the airport industry prepares its workforce for the future, a few case studies are shared to highlight different ways to successfully build and apply the identified skills.



*Verifying skills plays
an **essential** role
in confirming an
employee is **equipped**
to **apply the skill** on
the job.*

TAMPA INTERNATIONAL AIRPORT (TPA): NAVIGATING A CHANGE IN THE WORK SITE ENVIRONMENT



The Situation

In 2016, the Hillsborough County Aviation Authority, operator of the Tampa International Airport (TPA), embarked on the design and construction of a new corporate headquarters (“SkyCenter One”) that would become home to almost half of its 650-employee workforce.

The Challenge

Knowing the move would dramatically impact how TPA conducted its business, leadership recognized that navigating change would be just as important as the actual SkyCenter One construction. Some of the key challenges expected from the move included transitioning to a digital environment and adopting an open office concept for most employees.

However, the most significant challenge occurred when the COVID-19 pandemic struck. The project was at 60% design when administrative employees were sent from the office to work from home. Having piloted flexible work solutions pre-pandemic, TPA’s leadership embraced the “work-from-anywhere” concept for their administrative workforce. Recognizing that the future workforce would not all be physically present at the same time, TPA decided to reduce the number of workstations, requiring employees to select an available workstation when on-site.

The Approach

TPA navigated this change in an intentional manner to ensure all affected employees received a high level of communication and engagement throughout the project implementation.

TPA’s leadership established Guiding Principles for the project that served as the foundation for all decisions regarding the future workspace. In particular, the organization focused on designing a workspace which cultivated:

- Engagement and Connectivity: Promoting new interactions and preserving existing connections
- People First: Prioritizing employee development, wellness, and empowerment

- Innovation and Adaptability: Implementing evolving technology to fit current and future needs
- Commitment to Excellence: Exemplifying TPA's world-class facilities and commitment to customer service excellence

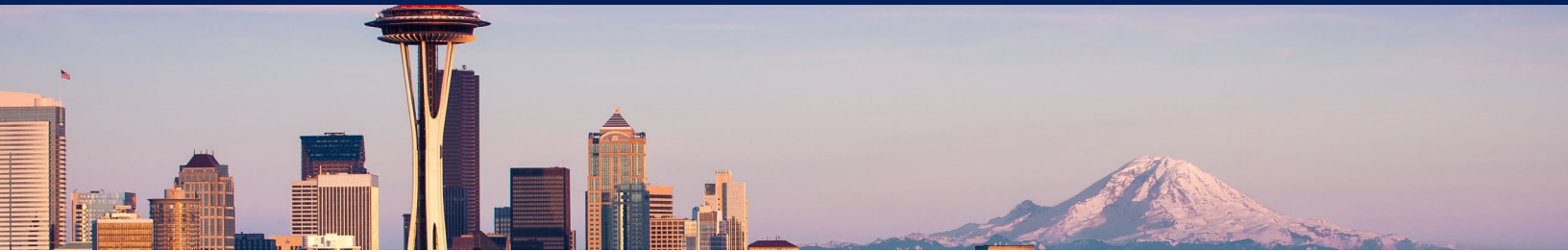
TPA initiated a change management campaign that focused on four key areas: creating awareness about the change ahead, building desire among employees to collectively embrace the change, providing the knowledge and ability to support the change in their day-to-day activities, and sustaining the change through engagement and positive reinforcement.

Over the life of the project, the communication approach narrowed its lens shifting from sharing high-level design and construction updates to a more strategic focus on relocation logistics and the future employee experience. This helped create excitement and enthusiasm for the big move and a new way of working.



By **surveying employees** about key decisions, TPA discovered that having the **flexibility to work-from-anywhere** was **ranked as the most valuable aspect of the workplace experience** and was viewed as an equitable trade-off to sharing a workstation while in the office.

SEATTLE-TACOMA INTERNATIONAL AIRPORT (SEA): EMBRACING EQUITY, DIVERSITY, AND INCLUSION IN LEARNING AND DEVELOPMENT



The Situation

The Port of Seattle, which manages the Seattle-Tacoma International Airport (SEA), is committed to being a leader in regional and national efforts to achieve equity and social justice. Its vision is to develop a Port that mirrors – throughout its breadth of operations and services and within its leadership hierarchy – the diversity of their community, instills principles of equity in its culture, and ensures a fair and intentional distribution of opportunities to expand economic development and quality of life for all.

The Port has had in place for almost a decade a “Second Century” competency framework that establishes core performance standards for individual contributors, managers, and senior leadership. This framework supports the Port’s efforts to align its strategies and objectives to 21st century challenges and innovative solutions.

The competency framework incorporates concepts such as cultivating healthy coworker relationships, being an agile learner, delivering solutions to problems, demonstrating global thinking, and exhibiting change leadership.

The Challenge

Leadership was keenly aware that a dynamic, changing business environment, culture, and industry required more attention on their part as well as from their employees. While the competency framework has been in place for several years, the Port has just recently initiated a transformational journey to embed equity within the Port and create organizational, systemic change. This requires ensuring equity, diversity, and inclusion (EDI) is embedded in the attraction, retention, and learning and development of its workforce.

The Port recognized that creating a racially equitable organization was critical to their public service mission and required commitment and perseverance. Acknowledging the importance of EDI necessitated a review of Port strategy, organizational structure, policies, and practices. It also highlighted the significance that organizational culture plays in an employee’s learning and in providing equitable opportunities for individual development.

The Approach

In 2018, the Port launched a “LINK Leadership” program which focused on the development of its people to drive sustainable change and extraordinary results. The LINK Leadership program was created with both the learner and the Port in mind. Through a development process that included benchmarking against leading Seattle businesses and community organizations, five clear themes emerged:

- All employees lead
- Development is a lifelong commitment
- Development comes in many different forms
- Progress can be measured
- Everyone brings unique talents

The LINK Leadership program intentionally uses key business and organizational initiatives as well as structured Port events and activities to create learning opportunities specific to each participant. These activities expand the participants’ application of knowledge beyond a traditional one-time training event. In addition, the curriculum emphasizes project, simulation, and action-learning in the primary areas of leading oneself, leading others, and leading across the organization.

The Port is currently reviewing its LINK Leadership program through the lens of EDI, which includes the creation of a leadership development strategy, the evaluation of existing learning programs, and the development of all employees’ knowledge and skills related to equity, diversity, and inclusion.

The principles that are guiding the review include:

- Normalize equity work throughout the enterprise from leadership to staff at all levels in all divisions and departments
- Ensure equitable internal policies, programs, operations, and structures
- Build leadership for equity work
- Create a culture where all Port employees are valued and included in decision-making and feel safe in reporting instances of bias and discrimination
- Grow leaders who model public service and have a commitment to equity and social justice



*EDI remains a journey of **transformational change** at the Port. However, the initial commitment of time and resources to **embed equity, diversity, and inclusion** into the fabric of the organization is an essential step in setting a **strong learning foundation**.*

AEROSPACE/DEFENSE INDUSTRY

COMPANY: EQUIPPING LEADERS THROUGH HANDS-ON LEARNING



The Situation

The dynamic environment of airports makes learning certain skills particularly challenging. One of the largest aerospace companies in the world provides a model for how airports can practically apply soft skills while growing leaders at all levels in the organization.

The “Learning Through Stories” model has leaders present a team building or leadership topic to their group or department on a regular basis. This enables leaders to practice communication, listening, and team facilitation skills, while they themselves learn about new leadership-related topics. The model encourages a learning mindset in leaders, as they will be regularly educated on an assortment of topics that are people and team-based, not functional or technical-based.

The Challenge

Much existing leadership learning is concentrated on formal training programs or courses, primarily for current executives or young/emerging leaders. Airports are faced with finding approaches and activities for hands-on leadership learning that:

- Can be done in a micro-learning format
- Accommodates the 24/7 nature of the airport
- Is scalable and applicable by airport size
- Supports the airport’s equity, diversity, and inclusion/belonging efforts

A key benefit of this model is how it cascades downward in the organization. Managers are allowed to see the discussion in practice before they facilitate the discussion with their own teams.

The Approach

Leaders are provided background and talking points on a designated leadership topic. The information gives the leader an understanding of why the topic is important, items to consider in the discussion, and questions to ask their team to prompt discussion.

The discussion is designed to take no more than 10–15 minutes of a team meeting and can be done monthly, quarterly, or as the organization sees fit. This permits maximum flexibility in accommodating a team's unique schedule or cadence of work, while minimizing the time commitment.

Examples of topics that can be discussed include:

- How can we work better together as a team?
- How do we bring new people onto our team and maintain our level of performance while mentoring the new hires?
- How can we become more conscious of our biases?
- How do I help ensure the safety of me and my co-workers on a daily basis?
- What would I do if I see a co-worker having a rough day?
- How should we address change exhaustion?



*"If you want to be
leading the world, you
have to be learning."*
– **David Perring** Director
of Research, Fosway
Group

LONG-TERM WORKFORCE DEVELOPMENT

As the airport industry takes specific steps now to develop the skills of the workforce, it must concurrently take a longer view to ensure a viable, qualified, and high performing airport workforce. While the skill development of current employees is imperative, airports must also engage in external efforts to find new sources of talent.

WHAT IS WORKFORCE DEVELOPMENT?

According to the Federal Reserve Bank of St. Louis, workforce development describes “a relatively wide range of activities, policies, and programs to create, sustain, and retain a viable workforce that can support current and future business and industry.” In essence, workforce development is the tool to identify and prepare the workers needed for the future, including the industry’s future leaders.

Workforce development is generally applied at three levels:

- **Individual** – used by educational institutions to develop individuals for sustainable careers and long-term employability
- **Organizational** – used by employers to instill the skills and capabilities of their own workforces for the future
- **Regional** – used by communities, cities, and regions to create and retain a workforce that meets the needs of business and industry in their geographical area

For the purposes and needs of airports, we will focus on the importance of *industry* workforce development. That is, ensuring that the airport industry has the workforce with the right skills to deliver the industry’s anticipated infrastructure growth and renewal. Part of the solution is to find new sources of talent that integrate with the airport industry’s unique and demanding requirements.



*The **industry** must position **airports** for tomorrow's job market.*

THE VALUE OF COLLABORATIVE WORKFORCE DEVELOPMENT

Having a comprehensive approach towards workforce development can yield substantial value for the airport industry. “The best workforce-development solutions happen when leading employers come together to address the talent problem for an entire sector. Such collaborations can be attractive because the costs are shared and the risk of poaching is limited.” (McKinsey)

Why should the airport industry undertake these initiatives collectively? Airports have a strong incentive to collaborate on workforce development, since all airports must successfully compete against other industries for talent in the future. As a result, joint workforce development efforts can deliver a return on investment that produces maximum strategic impact for the industry and can be of benefit to all airports.

Just as skill learning and development can be done in a cohesive manner, so too should workforce development that is customized for the airport industry. This common approach can:

- Ensure the highest priority areas and common interests of the industry are taken into account and effectively addressed
- Maintain the long-term economic viability and stability of the airport industry
- Encourage consideration of careers in the airport industry, especially by youth who are not yet in the workforce
- Break down barriers and improve employment access for underrepresented individuals or those with fewer historical job opportunities



- Cultivate critical relationships with public and private partners
- Equip airports to partner with their community and government officials on local workforce development efforts

EXAMPLES OF WORKFORCE DEVELOPMENT EFFORTS

The skill development efforts previously noted are a complement to workforce development undertakings and can take a variety of forms.



FINAL THOUGHTS

Preparing the airport workforce for the future need not be an overwhelming journey. By investing in and cultivating the key skills of their workforces, airports – individually and as an industry – can ensure their employees are equipped to navigate through the changing post-pandemic landscape. Only then, can the airport industry meet the challenges of the coming decade...and beyond.

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*"The best time to plant
a tree was 20 years
ago. The second best
time to plant a tree is
now." – **Anonymous***



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