

# BUILDING THE WORKFORCE OF TOMORROW

Ashley Nunes, PhD, a Principal Scientist at ISA Software, discusses aviation's workforce challenges

**A**viation's success is testament to the economic power of connectivity. IATA estimates that in the Middle East alone, aviation generates an astounding \$129 billion in revenue while supporting some 2.7 million jobs. Such numbers have motivated billion-dollar infrastructure investments aimed at increasing regional capacity. Yet, aviation has been, and will continue to be, a human enterprise. Its economic benefits depend on the recruitment and retention of a skilled workforce, and that workforce that is rapidly changing.

This change is due to Global Aging, a phenomenon characterized by declining fertility and increasing life expectancy. While the latter is a success story, it presents challenges in the face of declining fertility. One of these is how to deal with the impending retirement of an entire workforce generation across multiple industries. An aging population means that employers now face recruiting challenges as the global workforce shrinks. And as recruitment becomes more difficult moving forward, competition for the same talent amongst employers in sectors requiring specific skills will only intensify.

In the airline industry for example, Chinese carriers are luring American pilots with financial packages in excess of \$270,000, a sum roughly double what those pilots might receive back home. Such tactics are unsurprising considering the economic aspirations of airlines. Yet they offer only short-term relief, because the primary contributor to work-

force shortages is declining fertility. The situation is particularly challenging for countries that rely heavily on expatriates for specific jobs (e.g., pilots, air traffic controllers, maintenance technicians), as many of these professionals come from countries experiencing workforce shortages of their own. European expatriates, for example, migrate from a labor market where the 2010 gap between those retiring and those joining the workforce was a relatively 'manageable' 200,000. This figure is expected to surge to 8.3 million by 2030. Consequently, as these workers retire, replacing them will become increasingly difficult.

So where do we go from here? Addressing the future workforce needs of the aviation industry amid a rapidly changing demographic landscape requires action on several fronts.

## **CULTIVATE THE INTEREST OF YOUNG PEOPLE**

Although competition for recruits within the aviation industry is well known, less discussed but equally important is the competition posed by other sectors for the same talent. Hence, the first step toward meeting the industry's future needs must be to generate enthusiasm amongst young people for aviation careers. An example of this comes from Sri Lanka's Civil Aviation Authority, which in 2010 established a committee for increasing aviation knowledge amongst school children. As part of its efforts, the committee offers aviation awareness seminars, publishes aviation magazines for distribution in schools, and



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encourages aviation club establishment, all in an effort to raise the level of awareness of aviation amongst young people.

#### **IMPROVE ACCESS TO EDUCATION PROGRAM**

Recruits need training through accredited education programs to prepare for their chosen profession. Yet, they often face difficulties accessing such programs due to the soaring cost and geographical inaccessibility of education. Employers are dealing with the former by providing generous financial assistance in exchange for time served. Yet, the issue of geographical inaccessibility remains. Distance education programs, such as those offered by the Utah Valley University, are a means of addressing this. Since its inception, the program has provided formal training in aviation management, flight training and

more, anywhere that internet access is available. Such programs will be crucial as the industry comes under increased pressure to produce more professionals from a dwindling population.

#### **INCENTIVISE RECRUITMENT**

Over the past few years, a tough economic climate gave employers the upper hand in recruitment negotiations. However, according to an Ernst and Young report, this is changing as skilled labor scarcities give candidates “a greater say in how work is assigned, assessed and rewarded.” Hence, the aviation industry needs to implement a recruitment strategy that recognizes this social contract change, offering greater incentives for highly skilled candidates to join aviation-related professions. Such incentives may include signing bonuses and the elimination of policies that omit basic

pay for trainees prior to qualification.

#### **ENCOURAGE RETENTION**

Recruiting workers today provides little assurance of retaining them tomorrow. Generous wages are one way to encourage employee loyalty, but wages are not the only issue professionals consider when assessing their work situation. Today’s recruits also think about the quality of life their profession affords. The recent Lufthansa strike over pension schemes and early retirement drives home this point. Markus Wahl, a board member of the pilot’s union told Reuters that management measures represent ‘an attack on our social rights.’ Such measures, while financially understandable in the short-term, do little to encourage the retention of individuals critical for the long-term sustainability of the industry.

#### **INVEST IN HUMAN-CENTERED TECHNOLOGY**

An inevitable consequence of workforce shortages is longer, harder working hours for existing workers. This is already being observed across several areas of the aviation industry and has been the source of various disputes. Therefore, beyond its recruitment and retention efforts, the aviation industry must invest in technology that enables workers to generate higher levels of productivity at lower levels of effort. This is especially important in light of new research that demonstrates increasing duty limits and task complexity reduces the day-to-day profitability of companies. Perhaps most importantly, however, such investment helps address the workforce shortage problem by extending the ‘shelf life’ of individuals who may face early retirement prospects due to burnout.

Collectively, these measures provide a way for the aviation industry to attract and retain the best and brightest minds at a time when travel demand is soaring. Given aviation’s ability to drive fiscal growth, these measures are critical for ensuring future economic security.

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