Human Capital at the Heart of the Omani Civil Aviation Story

Zahraa bint Saif Al-Munji

Advisor to the Chairman of Civil Aviation Authority for Human Resources

Aviation has two faces: one seen by the eye, and another crafted by knowledge far from departure lounges and runway extensions. The first is drawn by aircraft, airports, and navigation systems; the second is made by humans, silently, behind the safety of a flight, the discipline of an airspace, and the trust of an entire system. Technology gives aviation its tools, but it is humans who give it meaning; turning technology into capability, capability into value, and knowledge into decisions.

And here, the power of money ends and the power of time begins. An aircraft may arrive with a deal, an airport may rise in years, and a navigation system may be installed in months; but expertise has no market that sells its years. It is an asset that matures only with time, and its value rises only with what practice tests and responsibility refines. This is why human capital in civil aviation is based on a different economy; an economy measured not by what was spent on a person alone, but by what time has built in them in terms of judgment, and what they are able to leave behind in knowledge.

From here begins a story not told by runways nor recorded by aircraft movements; the story of the Omani human as he enters, with his country, a new era. The sky that opened before the Sultanate of Oman was not just a new domain for movement, but a responsibility that man had to grow into, knowledge he had to possess, and a horizon that widened as his ability to reach it widened.

Phase of National Capacity Building

With the dawn of the Blessed Renaissance in 1970, the Sultanate of Oman was not expanding a fully-founded state; it was building the foundation itself. Roads, schools, services, and institutions were forming at the same time, and resources were distributed among necessities where one could not wait for the other. In a country whose need for development was wider than its base of qualified human resources, scarcity was not only financial; the qualified human himself was one of the rarest assets of development.

Oman has a memory with distance that is older than the modern state; its fleets throughout history created a presence that went beyond the shoreline, transforming the sea from a geographical barrier into a domain of movement and influence. With the modern era, this extension took on another dimension; geography was no longer read

from the sea alone, but the sky became a new extension of Oman's location, and aviation a means to transform location into movement, and movement into value. As if Oman did not change its relationship with the world as much as it changed the space through which it practices that relationship; from a horizon carried by ships, to a horizon carried by wings.

But turning this horizon into capability was not easy. Oman was entering an industry preceded by decades of knowledge and regulation, while its educational and institutional base was still forming. A young national experience had to reach the standards of a mature industry that does not grant the novelty of experience an exemption from its conditions; safety does not give beginnings a grace period, and responsibility is not lightened by lack of experience.

Here was the paradox of capacity building: Oman had to develop its aviation sector, and at the same time create the national competence capable of carrying its responsibilities; two paths that did not have the luxury of one waiting for the other. Sector growth could not wait for national expertise to be complete, nor was it possible to shorten the time of expertise at the expense of professional standards. Between an ambition that wanted to accelerate, and a responsibility that required competence to mature in its own time, the challenge was to expand national participation without lowering the standard.

From this paradox, the logic of the phase was born: that external expertise would be a bridge, not a residence, and that education, training, and practice would become a path through which knowledge would be transferred inward and take root. What was required was not to prepare a citizen to fill a job, but to build a professional capable of bearing its responsibility. Thus Omanization acquired its deeper meaning: the professional standard was not lowered to widen national participation; national competence was raised until it reached its standard.

Investing in people was, in essence, an investment in time. Knowledge does not mature on command, and experience cannot be rushed in what practice grants in judgment and maturity. But the time that seemed at first to be a cost of building competence, as generations passed, turned into accumulated capital; because what one generation bequeaths to the next is not only what it learned, but the distance it will not have to travel again.

While this balance was forming, the map of Omani civil aviation was expanding; from limited civil beginnings and Bait Al Falaj Airport, to the opening of Seeb International Airport in 1973, then to a more extensive and complex system. With each expansion, the industry demanded a higher level of specialization in air traffic control, navigation, engineering, aviation, safety, security, operations, airports, handling, and cargo. It was not the infrastructure alone that was

growing; complexity was growing with it, and each success in building competence raised the level of the next challenge.

Thus the nature of the issue changed over time, from providing competence to deepening it, from learning the profession to bearing its responsibility, and from receiving expertise to being able to transfer it and build upon it. Quietly, the title of knowledge itself was changing; what Oman in its beginnings needed to summon from abroad, began to find in the Omani person and the Omani institution a home where it accumulates.

From here, Omanization goes beyond its numerical logic. Numbers can count who entered the industry, but alone they cannot measure how much of its capability the homeland has come to own. The deeper transformation was not that the Omani became part of aviation, but that aviation knowledge became part of the national balance; a transition from ownership of the job to ownership of capability.

Figures show the extent of the distance this journey has covered. From a limited national presence at the beginning of the Renaissance, the Omanization rate in the civil aviation sector reached about 82% by the end of the first half of 2026. The rate reached 100% in a number of specialized jobs, including air navigation engineering and technical, aviation security, and meteorology. The Omanization rate among air traffic controllers reached 93%, among pilots 71%, cabin crew 61%, engineering and maintenance 87%, passenger services 98%, and air cargo 89%. As for air safety inspection, the rate reached 20%; a rate that is still below the level of ambition, in a rare specialty where the cost of building expertise is high and competition for its competencies is intense, while efforts are underway to expand the base of Omani competencies and raise Omanization levels.

In this expansion, the presence of Omani women has grown to become part of the professional base of the sector; by the end of the first half of 2026, the number of Omani women working in it reached about 827 women, representing 16% of the national workforce, and the number of Omani women in leadership positions in the sector reached 86, representing 20% of the total leadership positions. It is a presence that not only added a number to participation, but expanded the talent base from which the industry draws its expertise and leadership.

Behind these results, a long effort in building and developing human capabilities has accumulated; through specialized training and qualification, professional practice, and transfer of expertise, until the knowledge that began to be summoned from abroad found its way inward, and settled in competencies and institutions. Investing in people was not an effort for a passing phase, but an extended path that contributed to building expertise, enhancing the ability to bear responsibility, and consolidating knowledge within the sector.

Figures are only the visible surface of a deeper transformation. What expanded was not only the Omani presence; what changed, in depth, is the home of knowledge itself. Knowledge that was summoned to operate the industry began to settle in the person and the institution and accumulate across generations. Here, capacity building goes beyond job accounting to the economy of value; for a citizen to occupy a job increases his share of work, but for its knowledge to settle in the homeland increases the homeland's share of the value created by the industry.

And that is the further outcome of the capacity building phase: what began as a reliance imposed by the gap of beginnings, matured into a national balance of knowledge, expertise, and decision-making ability. The most important transformation was not that the Omani found his place in a global industry, but that the knowledge of that industry found its roots in Oman. When it took root, the direction of ambition changed with it, from possessing knowledge to deepening it, from mastering the profession to expanding its boundaries, and from building presence to creating impact. From here begins another phase; not measured by the breadth of competencies, but by the depth of what they can add to the industry.

Specialized Maturity

With the expansion of Omani civil aviation, the question is no longer how many competencies the industry can build, but what depth that competence can reach. The more the sector matured, the more general knowledge became insufficient and the value of rare knowledge rose; that which is not granted by a certificate alone, but is refined by practice, tested by complexity, and given its true weight by the responsibility of decision-making. Thus the success of the capacity building phase raised the level of the challenge itself: from building a person capable of performing the profession, to building expertise capable of adding to it.

Accordingly, the nature of investment in qualification changed. With the expansion of Oman's ability to build its specialties internally, international cooperation turned more towards rarer and more advanced knowledge. Learning was no longer just a path to competence, but became a tool to deepen it; professional knowledge reaches its highest value when it transforms, through practice, into insight that sees beyond procedure, judgment that weighs decisions, and experience that can deal with cases for which rules do not provide a ready answer.

Perhaps the most honest account of the outcome of this transformation is the map of responsibility now borne by Omani competencies. Air traffic control and meteorology are now run by Omani competencies, and the national presence has been consolidated in air navigation engineering and technical, security, safety, and oversight, and extended through airlines and airports to pilots, cabin crews, operations, engineering, maintenance, operations, handling, and cargo. At the

heart of this scene, Omani women have entered some of the most specialized and responsible professions; as a pilot, air traffic controller, air navigation engineer, and flight attendant. Thus the national presence is no longer concentrated at the edges of the industry, but extended across the professional chain through which a flight moves from sky to ground.

But maturity is not measured by the breadth of this map alone; but by the quality of value that has come to be formed within it. Competencies that began in some specialties as recipients of expertise, have accumulated from practice and specialization what has moved them from the stage of catching up to parity; and in some areas, national expertise has reached advanced competitive levels regionally, and has moved from receiving knowledge to transferring it and contributing to the development of professional practice. Here the criterion of success itself changes, from reaching the industry standard to being able to add to it.

This shift carries an economic meaning that goes beyond the profession itself. In knowledge-intensive industries, competencies are not equal merely by equal numbers; the value of human capital rises the rarer its specialization, the deeper its experience, and the heavier the decision it can bear. Hence the question is no longer about the size of the national workforce alone, but about the value it has come to store within it; between an employee who performs a job, and an expert who can interpret complexity, make decisions, and transfer his experience, the value that the sector retains from its human capital changes.

However, true maturity does not mean declaring the experience complete. Between specialties in which national expertise has been consolidated, and others that still face challenges in building, attracting, and retaining competencies, a more important sign of maturity appears: the ability to see the gap without the achievement obscuring it. The higher the level of expertise, the higher the definition of what is missing; what was a ceiling for ambition in one phase becomes a floor for a higher challenge in the next phase.

Here appears the farthest return of decades of human building. What was built to meet the needs of a phase did not remain captive to it, but became a national asset that raises the starting point for what comes after. And that is the deeper outcome of specialized maturity: that Omani competence moves from proving its ability to bear the responsibility of the industry to deepening the value it adds to it. From this base begins the horizon of 2040; when the challenge is not only in how much Oman has mastered of today's industry, but in the ability of its people to find their place in an industry being reshaped for the future.

Aviation Strategy 2040: From Owning Knowledge to Creating the Future



In an industry that measures its movement in seconds, 2040 seems distant on the calendar, and close in human life. The child who enters school today may stand at that horizon before systems not yet designed, decisions shared by human expertise and algorithms, and professions whose names have not yet settled. Here lies the paradox of the future: to prepare today the person who will lead an industry whose features are not yet complete.

The aviation strategy sets ambitious economic features for that horizon: more than 40 million passengers, about one million tons of air cargo, more than one billion Omani Rials in cumulative private sector investments, and a contribution exceeding 3.5% of GDP. However, these numbers measure the size of the future more than they measure the ability to create it; between the target and reality stands the human as the force that transforms ambition into economy.

At its core, the strategy's projects do not come to expand air traffic alone, but to reposition Oman in a world where maps of travel, trade, and investment are changing; so that its location is not just a point that movement passes through, but a platform around which value is generated. Here the meaning of growth goes beyond the number of passengers, the volume of cargo, and investment to what Oman can retain of the value of that growth within its economy, and what it can build on in terms of status in a global industry.

But the road to that status passes through an industry whose technology is redefining it from within. Artificial intelligence, automation, data, and emerging technologies do not just add new tools to aviation; they change the boundaries of the profession, redistribute roles between humans and machines, and raise the value of the ability to innovate, analyze, and make decisions. Therefore, the bet of 2040 does not lie in introducing technology into the industry alone, but in the Omani human advancing with it; so that the machine's capability does not expand while the human's space narrows, but the value of the role he can play rises with technology.

Here, qualification takes on a different meaning. What creates superiority today may become tomorrow the minimum for competition, and what represents a rare specialty now may be redefined by technology within years. Therefore, the value of the coming human capital lies not in how much it knows alone, but in its ability to learn, transform, and rebuild

its skills whenever the boundaries of the industry move. The future does not reward accumulated knowledge alone; but the ability for that knowledge not to become a constraint on what comes after.

Oman has what gives this bet a meaning that goes beyond economics. It is the one that made peace a language for its presence, and dialogue a bridge when paths narrow between others; and in that is a philosophy that finds in aviation a different extension for it. Both, in their own way, resist distance: peace opens the way between positions when they diverge, and aviation opens the way between people and places when geography separates them. If the former has given Oman a presence that goes beyond its location, the latter gives its children a new horizon to carry that presence to the future.

Hence the aviation strategy acquires its further human meaning. It does not draw the future of aircraft, airports, and technologies as much as it draws the place of the Omani human within the future that these transformations create. The true value of technology does not begin when it enters the industry, but when it raises the human's position in it; when it opens up higher roles for the Omani in innovation, leadership, and creating solutions, so that he is not a consumer of a future that reaches him after it is created by others, but present in the space where it is created.

Here, with the aviation strategy, a new Omani story begins; a story that does not cut its connection with what the past decades have built, but starts from the height to which they have brought it. If the first chapters wrote the story of the Omani human building his place in the aviation industry, then chapter 2040 begins from status, not place; from the Omani being where ideas are formed, technologies evolve, and the features of the coming aviation are drawn. The strategy does not only open new routes in the sky for Oman, but opens a wider space for its children in the world. And if Oman has known throughout its history how to make its location a bridge to the world, then its next story is to make its people a bridge to the future; so that Oman's share of tomorrow is not what reaches it from it, but what its children can add to it.