



THE TALENT CONUNDRUM:

PART 1



Why hiring alone won't solve the skills crisis...

...and what will.

Executive Summary

Across advanced manufacturing and technology-led industries, including composites, talent scarcity is now one of the most significant constraints on growth, competitiveness, and innovation. Demand for skilled capability is rising rapidly, driven by expansion in aerospace, EVs, hydrogen, defence, renewables, and automation. However, the systems that attract, develop, and retain talent have not evolved at the same pace.

This paper argues that the challenge facing industry is not simply a shortage of people. Instead, it is a structural talent conundrum characterised by limited visibility of opportunities, fragmented career pathways, lengthy time-to-competence, inconsistent role definitions, and inadequate succession planning.

While artificial intelligence is increasingly used in recruitment to improve speed and efficiency, it is not, and cannot be, a complete solution. AI can optimise processes, but it cannot replace leadership development, knowledge transfer, cultural engagement, or long-term workforce planning.

The most resilient organisations are shifting their focus from reactive hiring towards nurturing existing talent, building internal capability, and implementing proactive succession planning. In markets where skills are scarce and specialist knowledge takes years to develop, retaining and developing people is often faster, cheaper, and more sustainable than replacing them.

This white paper outlines:

- Why hiring alone is insufficient in talent-scarce industries.
- The structural barriers facing both employers and candidates.
- The growing strategic importance of succession planning.
- A practical, five-stage talent pathway for building long-term capability.

The conclusion is clear: talent challenges are strategic challenges, and organisations that treat them as such will be better positioned to grow, innovate, and compete.

Why Talent Has Become a Strategic Constraint

Over the last five years, technology-driven industries have undergone significant transformation. Demand has increased across multiple high-growth sectors, while projects have become more complex, regulated, and time-critical. Expectations around delivery, quality, and innovation have risen accordingly.

Yet, despite this growth, the talent pipeline has not expanded at the same rate. Productivity, innovation, and competitiveness now depend directly on the availability of skilled people, making talent not simply an operational concern, but a strategic one.

In composites and other advanced manufacturing sectors, this issue is particularly acute. These industries rely on specialist skills, long learning curves, and deep tacit knowledge. When talent systems fail, growth slows - regardless of market demand.

The Myth of the Talent Shortage

It is common to describe the current situation as a 'skills shortage'. However, this framing oversimplifies the problem.

In reality:

- Candidates exist.
- Employers exist.
- Opportunities exist.

What is missing is an effective system to connect them sustainably.

The challenge is better described as a combination of:

- A visibility problem - limited awareness of roles and career pathways.

- A capability problem - long time-to-competence and high training burden.
- An alignment problem - mismatched expectations between employers and candidates.

Without addressing these structural issues, increased hiring activity alone will continue to deliver diminishing returns.

Employer-Side Challenges

Many organisations - particularly SMEs - continue to rely on informal recruitment and development practices. While understandable, this creates several risks:

- Inconsistent role definitions and job architecture.
- Heavy reliance on personal networks.
- Limited internal mobility and unclear progression.
- High cost and long lead times to train new hires.
- Minimal or reactive succession planning.

In talent-scarce markets, the loss of a single experienced individual can disrupt project delivery, customer relationships, operational continuity, and innovation pipelines. When replacement times can range from 12 to 36 months, talent gaps quickly become business-critical risks.

Candidate-Side Barriers

From the candidate perspective, composites and specialist engineering sectors often appear opaque and difficult to navigate.

Common challenges include:

- Low visibility of roles hidden within supply chains and SMEs.
- Fragmented and inconsistent job titles.
- Unclear entry routes and progression pathways.

- High experience requirements with limited training access.
- Slow and informal hiring processes.

This results in a “catch-22” where employers seek experience that candidates struggle to acquire, particularly given the technical complexity and long learning curves involved. Over time, frustration leads many capable individuals to leave the sector entirely.

The Cost of Disconnection

When employers and candidates fail to connect effectively, the consequences are significant:

- Prolonged vacancies and delayed delivery
- Over-stretched teams and burnout
- Early-career attrition
- Reduced sector attractiveness
- Loss of future capability

Talent scarcity is not a temporary inconvenience; it directly affects revenue, quality, customer confidence, and long-term competitiveness.

Retention as a Strategic Lever

In specialist industries, retaining and developing talent is often more valuable than recruiting new people.

Key reasons include:

- High replacement costs and productivity loss.
- Long time-to-competence.
- Risk of losing tacit knowledge.
- Limited external talent pools.

Employees are more likely to stay when they can see a future. Clear progression routes, structured development, and visible investment in people all improve retention – particularly in sectors where roles require long-term commitment to master.

Succession Planning: From Optional to Essential

Succession planning has traditionally been viewed as a “nice to have”, particularly in smaller organisations. In today’s talent market, it has become a strategic necessity.

Effective succession planning:

- Reduces single-point-of-failure risk.
- Protects critical capability and relationships.
- Shortens future skill gaps.
- Improves retention by signalling long-term opportunity.
- Builds leadership depth and organisational resilience.

For investors, customers, and regulators, visible leadership continuity and bench strength are increasingly influential in shaping confidence and credibility.

A Better Model: The Five-Stage Talent Pathway

A sustainable talent strategy extends beyond recruitment and should include five interconnected stages:

1. **Awareness and Attraction**

Improving visibility of the sector and its opportunities.

2. **Entry and Induction**

Structured onboarding, mentoring, and early support.

3. **Structured Skill Development**

Deliberate training frameworks, certifications, and multi-skilling.

4. **Progression and Leadership Planning**

Transparent career pathways and proactive succession planning.

5. **Retention Through Culture and Reward**

Modern working environments, fair pay, strong leadership, and engagement.

This approach shifts talent management from reactive hiring to long-term capability building.

Conclusion

Talent challenges are not operational issues - they are strategic ones.

**Machines can be bought.
Processes can be copied.
Materials can be replicated.**

**But experience, judgement, and capability
cannot.**

Organisations that focus solely on hiring will continue to struggle. Those that invest in developing, retaining, and planning for their people will build resilience, protect knowledge, and create sustainable competitive advantage.

The talent conundrum is solvable - but only if talent is treated not as a cost to be managed, but as an asset to be nurtured.