



## MNB Connect Ltd

*Innovating Education | Empowering Industry | Transforming Futures*

🌐 [www.mnbltd.com](http://www.mnbltd.com) | ✉ [mark@mnbltd.com](mailto:mark@mnbltd.com) | ☎ +44 (0)7825 544095



---

### Who We Are

MNB Connect is a consultancy specialising in workforce transformation, interim leadership, strategic partnerships and digital innovation. Founded by Mark Byerley, a British Army Veteran with 35+ years in leadership, education and skills, we bridge the gap between education, industry and communities to deliver measurable impact.

---

### Our Super Seven Core Services

We support colleges, training providers, employers and global partners through:

- **Interim Leadership Support** – providing calm, focused leadership to stabilise curriculum, drive quality improvement and ensure continuity.
- **Strategic Workforce Solutions** – designing strategies aligned with skills priorities, funding and employer demand.
- **Strategic Growth and Skills Development** – shaping programmes, including Higher Technical Qualifications (HTQs) and sector-specific pathways.
- **Immersive Learning Solutions** – embedding XR, VR, AI, and data-driven tools in partnership with [Fuzzy Logic Studio | Immersive Learning Specialists](#).
- **Strategic Partnership Development** – building strong partnerships, creating career pathways and connecting learners to live opportunities.
- **Global Skills and Collaboration** – developing international workforce models, knowledge exchange and cultural competence.
- **Project and Programme Management** – unlocking revenue streams, supporting delivery and creating sustainable partnerships

---

### Our Purpose

At MNB Connect, our purpose is to innovate education, empower industry and transform futures. We believe lasting impact comes from solutions that are not only forward-thinking but also inclusive, scalable and rooted in real-world needs. Our approach is values-led and collaborative, bringing together education, employers and global partners to design sustainable workforce strategies that deliver measurable outcomes and long-term success.

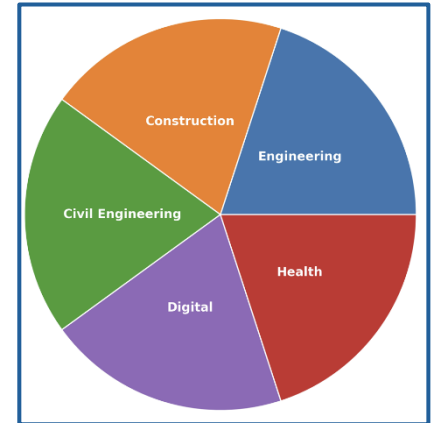
---

## Case Study: The Chelmsford HTQ Journey So Far

### Introduction

**Chelmsford College** has embarked on a transformative journey to implement Higher Technical Qualifications (HTQs) across priority sectors Engineering, Construction, Civil Engineering, Digital and Health. In collaboration with employers, **Anglia Ruskin University** and sector specialists, the College is aligning its provision with local, regional and national workforce priorities to address critical skills gaps and create clear progression pathways.

With strategic support from **MNB Connect Ltd**, this journey is underpinned by specialist expertise in employer engagement, digital innovation and curriculum design. MNB is working alongside the College to ensure HTQs are not only future-proofed and modular, but also industry-led and progression-focused providing learners with the technical skills, work-ready experiences and opportunities to thrive in an evolving economy.



### Phase 1: Foundations

- **Employer Consultation** – Initial workshops held to identify priority skills gaps and sector needs.
- **Curriculum Blueprint** – Drafted across five pathways, designed with modularity to align with the Lifelong Learning Entitlement (LLE) and flexible step-off points.
- **Strategic Partnerships** – Formal collaboration with ARU to strengthen progression routes and co-design blended delivery models.
- **Digital Integration** – Exploration of AI-driven tools, immersive XR learning and industry-standard software to enhance delivery.



### Phase 2: Insights & Shaping the Future

Attendance at **WorldSkills UK** Technical Leadership Exchange (March 2025) provided key insights to inform HTQ development:

1. **Future-Proofing the Workforce** – Embedding industry projects, modular learning, and workforce foresighting.
2. **Digital Transformation** – Integrating AR/VR, AI and simulation to raise quality and engagement.
3. **Employer Partnerships** – Strengthening advisory boards, embedding placements and co-delivery.



#### 4. **Entrepreneurial Mindset** – Equipping learners with innovation, adaptability and commercial awareness.

These insights are now being embedded into the Chelmsford HTQ model, ensuring the programmes are responsive to evolving industry and learner needs.

#### Opportunities

- **Enhancing Learner Recruitment** – Strengthening outreach and engagement strategies will help raise awareness of HTQs and increase applications and enrolments.
- **Investing in Capacity** – Developing staff skills, expanding digital infrastructure and deepening employer collaboration will enhance the quality and sustainability of delivery.
- **Staying Future-Focused** – Continuous alignment with workforce needs and sectoral trends ensures HTQs remain relevant and provide strong progression pathways.



#### Progress to Date

- **Collaborative Curriculum Design** – Employer partners are actively contributing to shaping HTQs, embedding live projects and work-based learning into programmes.
- **Pathways and Progression** – Clearer routes are being established from HTQs into apprenticeships, degree-level study and employment, strengthening learner journeys.
- **Staff Development and Innovation** – Teams are building confidence in using digital and immersive tools, enriching teaching and learning approaches.
- **Regional Alignment** – HTQs are being positioned to support wider skills priorities, reinforcing the College's role in driving local and regional workforce growth.



#### Conclusion

The Chelmsford HTQ journey demonstrates how strategic partnerships, employer engagement and digital innovation can create flexible, future-ready qualifications. While this is still an evolving journey, strong foundations are in place to ensure HTQs become a key part of Essex's technical education landscape and workforce development strategy.



At **MNB Connect**, we are committed to innovating education, empowering industry and transforming futures ensuring every partnership delivers lasting impact.



Immersive (XR) Onboarding and Training

## Building Competence at Scale

Enhance work-based skills training and streamline employee onboarding processes using immersive (XR) technologies

- ✓ **Real-World Scenarios**  
Create immersive experiences that bridge the gap between theory and practice.
- ✓ **Reduce Costs**  
Decrease the need for expensive physical training equipment with 3D digital replicas.
- ✓ **Simulate Hazards**  
Provide a safe space for employees to learn essential skills without risk.
- ✓ **Go Global**  
Deliver your training programmes anytime, anywhere by using mobile devices and headsets.
- ✓ **Enhance Engagement**  
Embed game-based learning principles to captivate users and keep them engaged.
- ✓ **Strengthen Culture**  
Create a deeper connection to your company's culture, values, and mission from day one.



## Case Study - Network Rail

**Reimagining staff onboarding using an immersive Augmented Reality (AR) timeline celebrating the rail industry**

### Challenge

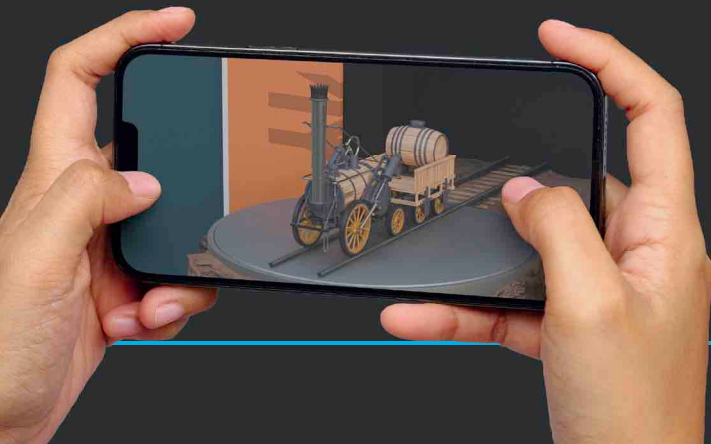
When designing their new onboarding programme, Network Rail faced a number of challenges:

- engage hundreds of people with the rich history of the organisation and the rail industry
- communicate the bold vision of the future of Network Rail and the role everyone will play in it
- showcase their commitment to ongoing digital transformation

### Solution

We created an interactive AR timeline, which is the starting point of the onboarding day. It blends physical and digital storytelling to celebrate the pioneers and key moments that have shaped the railway, and continue to move it forward.

Each attendee also receives a brochure containing the same AR markers, letting them revisit the timeline at home and share the engaging stories with friends and family.



# Case Study - HVM Catapult

## Addressing the skills gap in automotive electrification using Augmented Reality

### Challenge

The Emerging Skills Project is developing national training programmes designed to address the future skills gaps in manufacturing and the wider engineering workforce. In building the course content for the electrification modules, the team wanted to explore how immersive technologies could be applied to further enhance learning outcomes.

### Solution

We created an AR app that enables learners to practise assembling and disassembling an EV battery, motor and connector using interactive 3D digital replicas. This solution includes a drag-and-drop toolbox, as well as text-to-speech functionality.

This project enabled us to use the latest technology to provide as much **'hands on experience'** to learners **without any risk of safety critical issues**

Nicola Kirkwood  
Project Engineer (Em)



## How To Guide

Follow the steps below to access the Augmented Reality experience and try it for yourself



- **Download the App**

Scan the QR and download the app to your mobile device or tablet



- **Launch the App**

Open the app and follow the on screen instructions to start the experience



- **Expand Your World**

Visualise and interact with the dynamic 3D models in Augmented Reality

