North East Automotive Sector Workforce Plan

The Brief

Identify actions which will enable the Automotive sector in the north-east to have the workforce capability required to support sector growth and new investment.

Key Findings

Evidence based research with input from more than 60 subject matter experts

- Multiple factors are resulting in skills shortages which may constrain growth in the automotive sector and advanced manufacturing.
- New investment, volume growth, digitalisation, emerging technologies, and workforce demographics, are driving new demand for skills, whilst low unemployment, access to work, and the strength of the skills pipeline are impacting supply.
- Great examples of best people development practice exist in the sector, but there is still more opportunity to collaborate and leverage best practice to benefit the broader sector.
- The sector now has a less consistent and compelling employment and career offer, which is impacting the ability to attract and retain talent.
- Emerging advanced engineering and technology businesses provide an opportunity to grow leading-edge capability, create high-value jobs, establish cross-sector synergy and diverse STEM career opportunities.
- The regional education and skills supply chain is complex and fragmented, and not sufficiently aligned to efficiently deliver future sector requirements.

Conclusions

- Action is required to now ensure the supply of entry level operators, level 3 technicians, manufacturing engineers, and supervisors, that the automotive sector, and advanced manufacturing, will need over the next 5 years.
- More focus on developing and sustaining advanced engineering and technical capability in the region is required.
- A more coordinated and holistic approach is needed to effectively deliver the skills required and attract them to the sector. A sector-level workforce plan is needed with the appropriate governance, resources, and accountability to scale and leverage best practice, and work with the regional education and skills supply chain to most efficiently improve skills availability.

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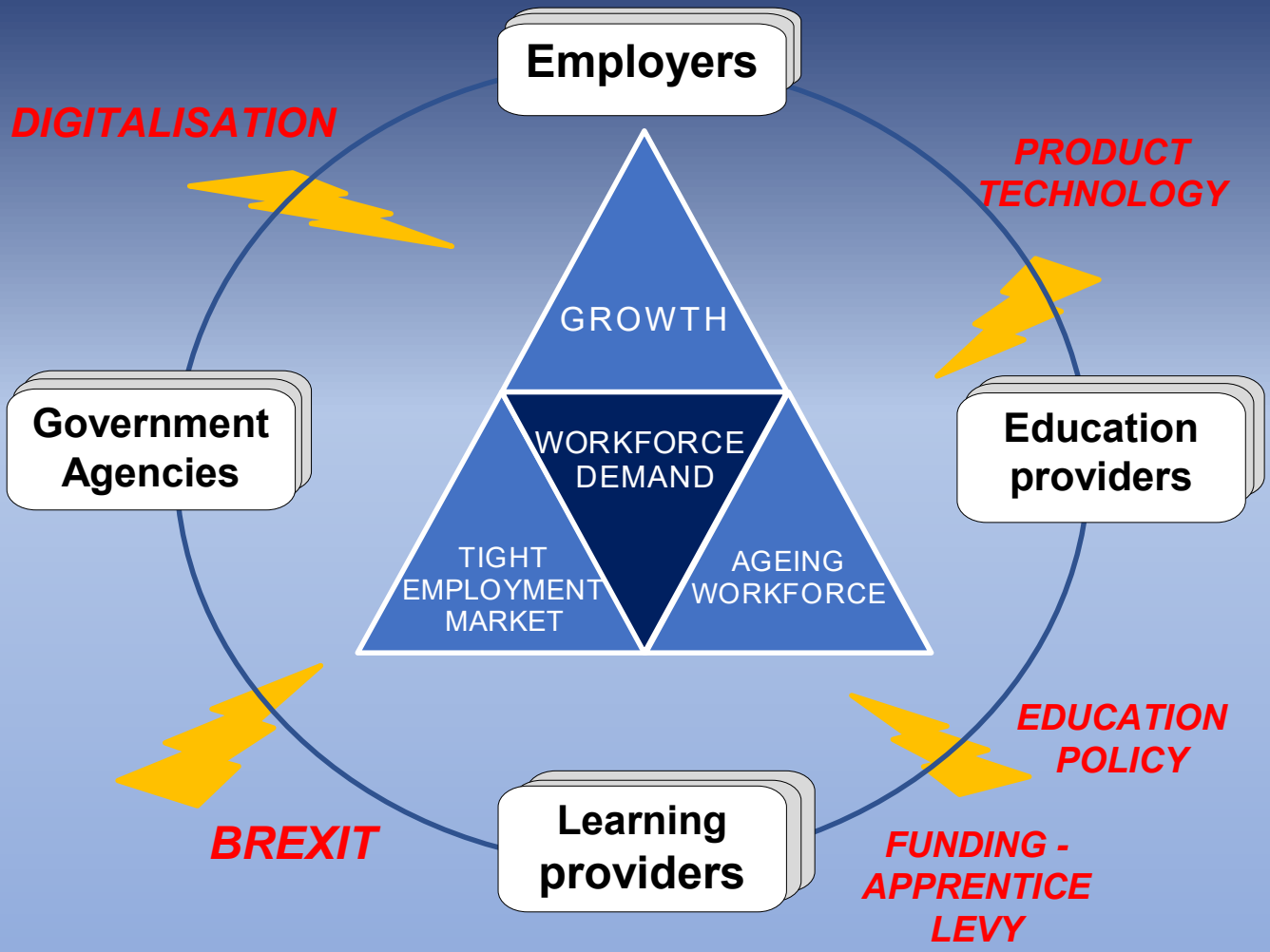
THE NEXT 5 YEARS – OPPORTUNITIES, CHALLENGES & CHOICES



BUSINESS AS USUAL

- ✓ NMUK and some Tier 1 will manage to attract skills
- ✓ Agile colleges & providers will survive
- X Risk for some Tier 1 and 2+
- X New entrants struggle to attract skills
- X Labour market disruption
- X High-value work migrates from region
- X Resources not efficiently deployed

Or

COHESIVE WORKFORCE PLAN

- ✓ Match Supply with Demand
- ✓ Enable short and long-term action
- ✓ Efficient deployment of resources
- ✓ High quality delivery
- ✓ Focussed investment
- ✓ Solutions accessible to Tier 1 & 2
- ✓ Underpinned by labour market analytics
- X Up front funding for long lead-time activity
- X Resourced programme management and strategic governance

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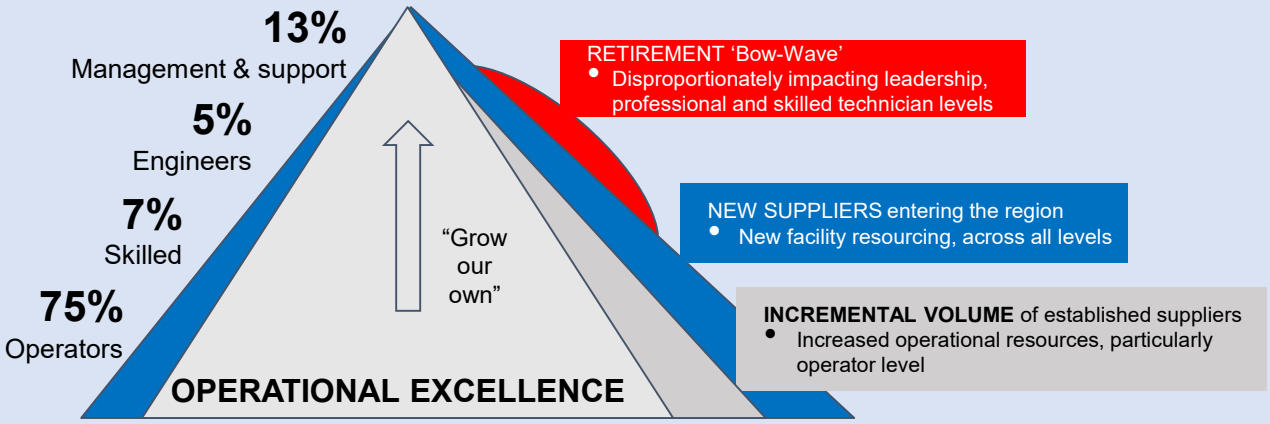
ALIGNING SKILLS TO REQUIREMENTS



Automotive OEM and Supply chain

Skills mix

Advanced Technology Businesses

50% Development Engineers

R & D

ENGINEERING EXCELLENCE

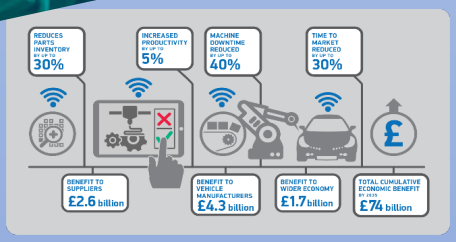
EMERGING TECHNOLOGIES
- Significant growth with high proportion of development engineers
- HE supply and talent pipeline may constrain growth in the region

AVID technology · BorgWarner · HYPERDRIVE

Skills drivers

Emerging technologies

Industrial digitalisation



The Boston Consulting Group (2014)

Advanced Propulsion Technology Roadmap

Source: Automotive Council.
Advanced Propulsion Centre, 2017

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KEY FINDINGS

PRIORITIES

- X Shortage of entry-level operators is impacting the sector now, and will undermine capability to support growth.
- X Low unemployment and National Minimum Wage is changing the employment market – more options exist for job-seekers.
- X Employment offer is no longer compelling – agency/temp offer & not accessible/attractive to many job-seekers.

1 Increase supply of capable entry level operators.

- X Insufficient level 3 skilled technicians in pipeline to replace natural attrition. Already a hot issue – high demand is causing churn within sector.
- X Lead-time to strengthen apprentice/skilled pipeline will compound the challenge of resourcing near-term growth and new investment opportunities.
- X Interim actions required to support near-term growth.

2 Resource and train sufficient skilled technicians.

- X Weak demand signal into HE/graduate market for Manufacturing Engineering – sourced historically through internal progression.
- X Skill requirements changing due to new process technology & digitalisation.
- X Workforce demographics and new investment driving new demand.

3 Establish pipeline of manufacturing engineers.

- X High quality line-supervisors continue to be key to enabling operational performance and productivity.
- X Succession strength is limited – demographics & growth are driving replacement demand.
- X Best-practice supervisory development exists in region.

4 Strengthen supervisory capability and succession.

- X Advanced engineering businesses in region need high-end engineering & technology skills to support new product development and growth.
- X Developing, attracting & retaining talent will be key to establishing a critical mass of E&T capability in region.

5 Build advanced engineering & technology capability.

- X Employment offer no longer differentiates sector as great place to work, and career paths not well understood.
- X Attracting candidates from more diverse pool is challenging.
- X Some best practice in STEM education outreach, but opportunities to align at sector-level and with adjacent sectors, and better align with schools.

6 Attract the best talent at all levels.

AUTOMOTIVE SECTOR INTEGRATED WORKFORCE PLAN

ACTIVITY	5-YEAR OUTCOMES
➢ Increase potential operator pool by improving attraction and access. ➢ Develop more compelling employment offer. ➢ Scale-up sector NVQ 1/2 pre-employment programmes to increase work-readiness.	✓ **1,000** jobseekers in work. ✓ **2,000** pre-employment trained. ✓ **1,800** trained to **level 1.** ✓ **200** trained to **level 2.**
➢ NEAA sector-level pledge to train sufficient apprentices to replace forecast attrition. ➢ Establish sector level 3 technical apprenticeship programme to support growth & investment. ➢ Attract required skills to the sector and region in near-term to contain short-fall.	✓ **400+** additional **level 3** technicians. ✓ **350+** additional **level 3 apprentice** technicians trained.
➢ Establish sector-led degree-apprenticeship programme in Manufacturing Engineering. ➢ Build HE capacity and align Manufacturing Engineering curriculum. ➢ Support new entrants with graduate resourcing.	✓ **250+** more **level 6** manufacturing engineers. ✓ **60+ level 6** engineering degree apprentices trained.
➢ Scale supervisory development programme – deploy cross sector, and leverage existing best practice.	✓ **300** new manufacturing leaders trained.
➢ Align graduate and post-graduate education, development and attraction plan with broader cross-sector advanced E&T business strategy for region.	✓ Plan to develop long-term advanced engineering capability ✓ **100** more **level 6-8** development engineers a year
➢ Identify key issues impacting employment/career choices at different levels. ➢ Deploy sector attraction strategy, including redeployment/reskilling programmes. ➢ Develop sector education outreach programme based on Nissan best-practice.	✓ **15,000** young people engaged in STEM. ✓ **3,000** new employees attracted to sector in region.

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SIX KEY PRIORITIES – ONE PLAN

Automotive OEM and Supply chain

Strengthen supervisory capability and succession. 4

Establish pipeline of manufacturing engineers. 3

Resource and train sufficient skilled technicians. 2

13% Management & support
5% Engineers
7% Skilled
75% Operators
OPERATIONAL EXCELLENCE

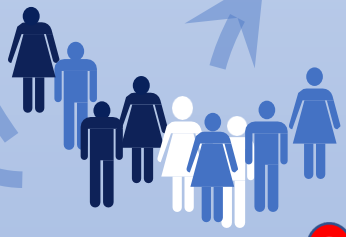
Increase supply of capable entry level operators. 1

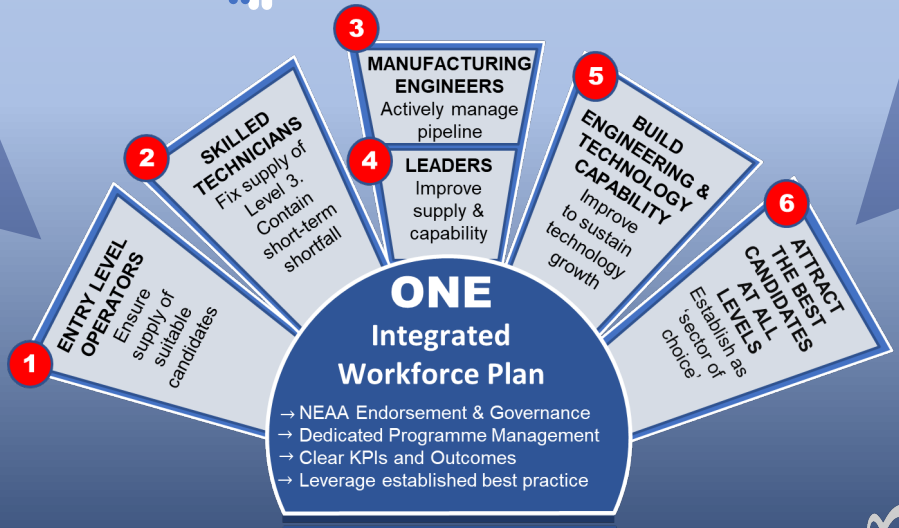
Advanced Technology Businesses

50% Development Engineers
R & D
ENGINEERING EXCELLENCE

Build advanced engineering & technology capability. 5

Attract the best talent at all levels to the sector. 6





→ Aligned to SEP, Industrial Strategy and Automotive Sector Priorities
→ Leverage Sector Deal & Funding

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AN INTEGRATED WORKFORCE PLAN

3,000+ New Jobs

650+ new manufacturing engineers & technicians

60+ new manufacturing engineering degree apprenticeships

2,000 Pre-employment trained

E & T enabling innovation

15,000 Young People engaged in STEM

1,000+ Job seekers employed

350+ more level 3 Apprentices trained

exciting & rewarding careers

300 new leaders trained

inclusive & sustainable workforce

100 more level 6-8 development engineers a year

aligned education & training

creating

MORE and BETTER JOBS

INDUSTRIAL STRATEGY

through

SECTOR GROWTH

100,000 jobs by 2024

5 foundations of productivity

- Ideas
- People
- Infrastructure
- Business environment
- Places

- *Supply chain competitiveness and productivity improvement.*
- *Ultra-low & zero emission vehicles.*
- *Advanced Propulsion.*
- *Automotive R&D.*
- *Future of mobility.*

North East Local Enterprise Partnership Strategic Economic Plan

Department for Business, Energy & Industrial Strategy

automotive council UK

Automotive SectorDeal

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