



Informing the future for manufacturing

Opinion Piece by Senior Research Fellow Jenny Williams published in the Newcastle Herald, 28 November 2014

Imagine a Hunter manufacturing region with an international reputation for quality, reliability, design and customer service, where firms are hooked into diverse global value chains.

A region where collaborations and partnerships between firms, research and training hubs generate a culture of innovation and a highly skilled workforce, which underpins the Hunter's sustainable economy.

This is the future that the Hunter Research Foundation (HRF) and a range of regional stakeholders are working together to create.

Imagining a better future for Hunter manufacturing is necessary and important. HRF today released the results of the *Manufacturing our Future* research project, the first focus of the Foundation's Regional Competitiveness economics program.

Stage 1 of our research, conducted between March and June this year, reviewed recent studies on the future of manufacturing and the keys to sustaining the industry. It showed that manufacturing is not only an important industry sector in terms of employment but is also critical to the future economic success of the Hunter and the nation. Manufacturing contributes 25 per cent of Australia's business research and development (R&D) spend and one-third of our national merchandise exports.

With the future of our economy clearly in services more than products, Australia's fastest growing advanced services exports are in engineering services. Manufacturing is also a training ground for many of the practical skills underpinning Australia's economy, ranging from traditional technical skills to industrial design and advanced engineering capabilities, critical to the future sustainability of modern economies.

With the support of our Advisory Group members, including AiGroup and HunterNet, HRF then identified and interviewed nine Hunter firms that have adapted to some of the competitive challenges. This confirmed that the international trends shaping the future of manufacturing, and providing the keys to success, apply equally in the Hunter. However, understanding the future trends and the best ways to adapt to them is not enough without also understanding the barriers many manufacturers face in making changes to the way they operate, and in developing strategies to become more competitive in a global market.

A major focus of Stage 2 of the project was to identify these barriers to competitiveness for Hunter manufacturers. To do this, we had in-depth discussions with 45 typical manufacturers about their business: its products, markets, staffing and ownership structure; challenges over the last five years; innovations; future planning; and suggestions for regional initiatives to support the industry in the Hunter. Predominantly

SMEs with less than 50 employees, more than half the firms we spoke to were experiencing falls in profitability and two-thirds had reduced their workforce in the last 12-18 months.

The barriers to increased competitiveness and access to broader markets for Hunter manufacturers are interrelated. They include operating in isolation, lack of information about how to implement a recognised need for change, lack of strategic or business planning process, and exclusion from global supply chains. There is a **strong** link between declining profitability (as a measure of lack of competitiveness) and:

- Not having a formalised strategic business planning process
- Not being part of a global supply chain or exporting.

Hunter manufacturers' response to the challenges varied across a spectrum – at one end are mostly small firms with a narrow and declining market (mining, rail or defence) and diminishing hopes for survival – then comes those with more diverse or niche markets that are on the road to meeting some challenges – to the more successful end where strategic planning is guiding a change in markets, products and/or services that are underpinning future sustainability. To improve competitiveness is not a matter of 'one size fits all' and requires a raft of solutions.

HRF's *Manufacturing Our Future* project has provided a 'grass roots' view of the issues and yielded suggested regional initiatives that closely parallel those developed by the key stakeholders through the Manufacturing and Engineering Futures Summit in Newcastle, auspiced by AiGroup, Hunter Research Foundation, HunterNet and Hunter Business Chamber.

There were three areas of alignment between suggestions from manufacturers (bottom up) and suggestions from the Summit and other stakeholder groups (top down):

- Initiatives to attract major infrastructure and large contracts (including Government) to the Hunter, e.g. establish Hunter as an advanced manufacturing 'zone'
- Initiatives to attract investment to support start-ups
- Initiatives to support/increase innovation (and commercialisation) including collaboration between firms and universities to establish research hubs and publicising these effectively.

Initiatives that have already been launched by industry groups following the Manufacturing Summit include:

- Three major industry players are close to formalising agreement for close collaboration
- 2. Brand "Hunter Advanced Manufacturing" has been registered
- 3. Outreach by University of Newcastle to manufacturers showcasing of skills and research opportunities, building on the AiGroup/HunterNet joint Innovation Cluster forums that link researchers with manufacturers, and exploring connections to international manufacturing centres
- 4. Joint international opportunities for local manufacturers are being canvassed with the University and industry groups.

Potential initiatives HRF has identified through *Manufacturing Our Future* that require further exploration and would need stakeholder support and funding include:

- Business mentoring, especially around strategic planning;
- Demonstrating to Australian and NSW governments the value of local procurement, by linking to regional social as well as economic wellbeing
- Scholarship or other mechanisms to support embedding third year or Honours university students in firms.

The *Manufacturing our Future* report and a presentation of the findings are available for download from HRF's new responsive website www.hrf.com.au, which was also launched at our Hunter Economic Breakfast event this morning.

Jenny Williams is a Senior Research Fellow at HRF and Project Leader for *Manufacturing Our Future*