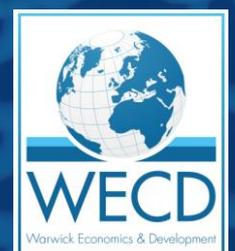


High Value Manufacturing Catapult
6 July 2015



Economic Impact Evaluation
Key Findings



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Foreword

It is with tremendous pleasure that I present the key findings of research to review key achievements and high-level economic impacts of the High Value Manufacturing Catapult (HVM Catapult) to date. The full report can be downloaded from our website, www.hvm.catapult.org.uk.



The HVM Catapult was launched in October 2011 with a clear mission, to be the catalyst for the future growth and success of manufacturing in the UK. We help accelerate new concepts to commercial reality to create a sustainable high value manufacturing future for this country.

Our seven technology and innovation centres, each with their own specialisms and areas of expertise, work with companies of all sizes and act as a catalyst for the future growth and success of manufacturing in the UK. They provide UK businesses with access to world-class manufacturing talent and facilities to accelerate new concepts to commercial reality to create a sustainable high value manufacturing future.

We have only been operational for almost four years, yet the impact findings leave no doubt that this model is working and that the HVM Catapult is making a real difference to manufacturing businesses of all sizes in the UK.

This study – which is based on desk based review and analysis of HVM Catapult data - represents the first stage of work currently undertaken by the HVM Catapult to inform a comprehensive assessment of its economic impact to date (and in the future) based on a wide range of indicators. The study shows the tremendous progress made in a very short space of time, and the huge potential for further impact, provided UK government continues its commitment to and support for high value manufacturing and the work of the HVM Catapult in particular.

A handwritten signature in black ink that reads "Bob Gilbert". The signature is written in a cursive style and is underlined with a single horizontal line.

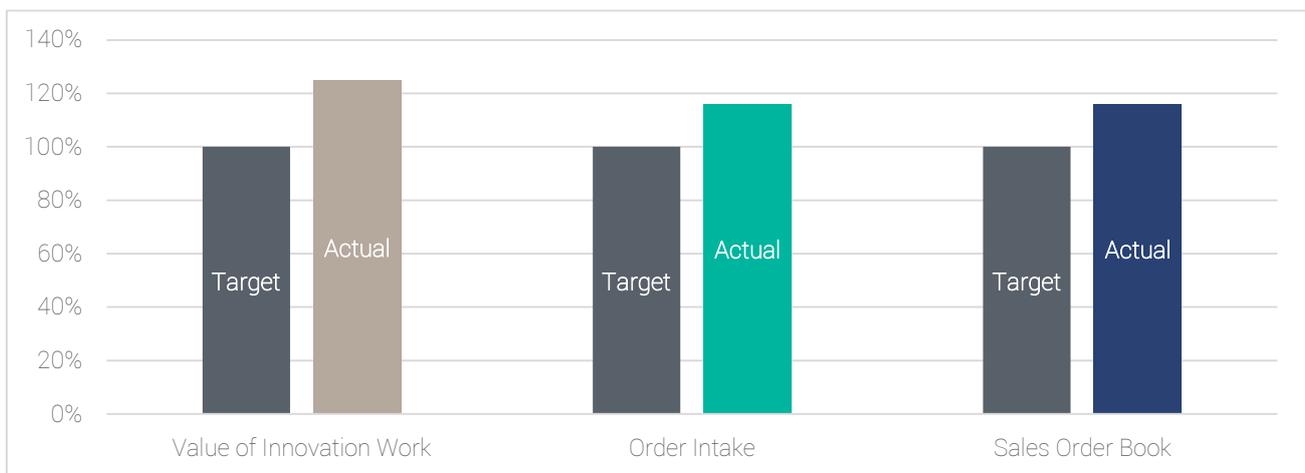
Bob Gilbert,
Chairman

Performing Strongly with Extensive Coverage

Within the last year alone the HVM Catapult has engaged with 1,514 businesses – with 2 in 5 being SMEs, and all of them at the forefront of research and development advancement and innovation, and of local, national and global economic significance.

For example, it is estimated that companies currently engaged with the HVM Catapult represent £172bn turnover and 692,000 employees globally

To date, the HVM Catapult has exceeded all its targets. For example, between 2013 and 2015, the value of innovation work represented 123% of the target figure and the order intake and the sales order book were both standing at 116% of the original targets, indicating that demand for services and support is well in excess of what was initially anticipated.



Public Investment Stimulating economic Impact

It is a captivating, albeit challenging topic for economists, scientists, industrialists and policy makers to capture and monetise the current and potential economic and financial impacts of research, development and innovations investments, which is what essentially the investment on the Catapults is about. One of the main reasons is the challenge of having to demonstrate impact and return of relative large sums of funding (private and public) that are required to deliver ‘transformational’ change through often new ideas, products and processes.

Nevertheless, and although the early years of the operation of the HVM Catapult represent intensive developmental work, review of existing management and financial information and discussions with businesses

HVM Catapult could generate an additional £6.1bn in the next five years

actively engaged with the HVM Catapult suggest that clear signs of impact of the HVM Catapult on the economy and society have already emerged and provide strong indicators of future impacts and potential from investment to date but also planned activities. For example, it is estimated that an initial £107 million core Catapult public investment has led to £290 million research & development investment resulting in £1.6bn of additional value for the UK economy - i.e. every £1 of core public funding for the HVM Catapult has generated net benefits worth of £15. Furthermore, it is estimated that the HVM Catapult could generate an additional £6.1bn in the next five years.



£1 → £15 Every £1 of core public funding for the HVM Catapult has generated net benefits worth of £15

Positive Feedback

Most importantly, feedback from businesses is also overwhelmingly positive about their relationship with the HVM Catapult. Companies interact with the HVM Catapult centres through collaborative R&D activity, access to facilities and equipment, working with HVM Catapult centre staff, co-location of staff, and joint bidding and delivery of commercial and publicly funded contracts. The HVM Catapult centres are also often used by businesses as a venue for meetings, marketing and networking events.

UK Industry Working Together

In particular, projects supported by the HVM Catapult centres clearly highlight that collaborations between the HVM Catapult centres and businesses directly contribute to enhancing national manufacturing competencies. Examples of key benefits to date include: novel manufacturing processes; adapting existing business models to accommodate diversification or larger scale manufacture; application of existing processes and techniques across sector such as aerostructure sheet forming techniques to healthcare use; and, fuelling the drive for ever increasing intelligent management of energy and resources.

Businesses were specifically asked about the strengths of the HVM Catapult 'offer'. Most frequently cited was the unique

“ We see [HVM] Catapult activities as key to helping to speed up commercialisation from innovation ”

nature of the HVM Catapult support - “there is nowhere else we are aware of, which could have that kind of impact on an organisation”. Businesses feel that the HVM Catapult centres are excelling at filling a gap in supporting high value manufacturing and supporting commercialisation of research - the raison d'être of the HVM Catapult -network.

“ Most of our machinery is fully committed due to production, we have been able to use the equipment at the HVM Catapult Centre to test, try development ideas, so this has increased our capacity for R&D ”

The HVM Catapult centre offer is tailored to the specific requirements of the target sector(s) and commercial market, as well as the needs of the individual business. Key strengths highlighted by businesses in this area are product testing facilities, development of demonstrators, helping

to establish commercial relationships, access to networks, as well as increasing the capacity to innovate and translate research into products or processes. The responsive and flexible nature of HVM Catapult support was also highlighted as a key strength, as was the calibre of the staff within the HVM Catapult centres.

The collaborative nature of the HVM Catapult network is evident. There are many different types of collaboration that are taking place including joint bidding and tendering for commercial contracts, shared delivery of contract work, sub-contracting arrangements between HVM Catapult centres and businesses, bilateral commercial arrangements (with the HVM Catapult as customer, accessing software, training, equipment, specialist services), as well as collaborative bids to unlock funding.

Regarding the level of impact on businesses, resulting from involvement with the HVM Catapult, for the majority of businesses

“ It has been dramatic...we are getting rewards from our involvement that far exceeded our expectations

consulted, the impact had been significant. One respondent explained how the impacts had been greater than anticipated.

Impacts on business productivity were also identified.

“ Working with the Centre has enabled us to trial new technologies and techniques to improve efficiency of production, we can trial it in the Centre and then adapt it to the operations – ‘prove and move’

Enabling Businesses to secure further Investment

Other impacts included strengthened capacity for leverage of investment. Businesses' ability to secure investment had been strengthened by HVM Catapult support, in relation

“ We have also invested in our own facilities and programmes, building on the knowledge and capabilities developed through the HVM Catapult Centre

to commercial contract award as well as securing internal funding from a central business function - one business explained this had led to a programme of investment across the company. Additional impacts were identified in producing stronger, more successful bids, as well as increased credibility from HVM Catapult endorsement.

““

Having [Catapult Centre] as a reference and a customer, backing up our research credibility, has made a huge difference

””

Delivering Additionality

In relation to HVM Catapult support, the levels of additionality were high. When asked whether they felt they would have achieved what they have achieved in the absence of HVM Catapult support, for nearly 4 in 5 companies the response was “Definitely not”.

Positive Advocacy for the Catapult Programme

Advocacy levels for the HVM Catapult were extremely high, in fact all of the businesses

““

It is one of the hidden gems of UK engineering... more companies should be encouraged to take advantage of the support available – not only in technology terms but also change management

””

consulted said they would recommend the HVM Catapult to other businesses.

One respondent commented: “Yes, absolutely – it is a highly effective way to support firms through the TRL dead zone, so much innovative technology stops at lab scale”. The advocacy question also led consultees to talk about the potential for awareness raising of the HVM Catapult. A third of businesses felt that the HVM Catapult profile should be higher, because of the quality of the offer.

Download the full report at www.hvm.catapult.org.uk

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HVM Catapult Centre locations

