

<b>Institution: Robert Gordon University</b>		
<b>Unit of Assessment: 32. Art and Design: History, Practice and Theory</b>		
<b>Title of case study:</b> Embedding design competencies within a traditional textile SME through a Knowledge Transfer Partnership (KTP)		
<b>Period when the underpinning research was undertaken:</b> 2018 – 2020		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>  Josie Steed	<b>Role(s) (e.g. job title):</b>  Design Researcher in Sustainability & Knowledge Exchange	<b>Period(s) employed by submitting HEI:</b>  2011 – present
<b>Period when the claimed impact occurred:</b> 2018 – 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> No		
<b>1. Summary of the impact</b> (indicative maximum 100 words)		
<p>Applied research by Steed at Gray's School of Art, Robert Gordon University supported an SME in NE Scotland in embedding design competencies through a Knowledge Transfer Partnership (KTP). The KTP resulted in the embedding of design-led innovation processes that played a pivotal role in the strategic repositioning of the company's sub-brands and brought cultural change within the organization. Significant impacts also include the development of a strategic plan for the company with new processes implemented with increased efficiency and quality control, employment of new staff, and creation of a new product range with a sustainability agenda.</p>		
<b>2. Underpinning research</b> (indicative maximum 500 words)		
<p>Steed's research applied a new model of collaboration using an inclusive, iterative and objectives-driven, performance-based approach focusing on the role of design as a management tool within a traditional textile company. The project demonstrated the impact of creative design and design management tools in the exchange of knowledge and new product development, and transformed the company's understanding of the value of design towards their economic growth.</p> <p>Previously the business had built a strong client base through their reputation to deliver functional and hard-wearing products quickly to the Oil &amp; Gas sector. As this sector retracted as a result of the O&amp;G crisis of 2015, the company did not have the internal innovation competencies required to explore new markets within the design sector. This study identified alternative business operations integrating design methods to explore new markets within the fashion sector. This was achieved through a product situational review including both internal and external analysis of their current processes and existing methodologies/technologies towards new markets. As part of this audit, a number of internal consultations with staff were undertaken to understand the perceived challenges.</p> <p>The project encompassed a review of the company's product portfolio, in conjunction with the mapping of its manufacturing process and a desktop analysis on competitors' activities, customer segments/market opportunities, design technologies and methodologies and market trends. In parallel with this analysis, discussions were held with competitors and potential customers, as well as a consultation with external agencies. All findings were reported to management and the new situational environment embedded within the company was communicated via regular reporting/presentations to company staff. This allowed the implementation of inclusive design-led initiatives internally by engaging employees as</p>		

stakeholders in the repositioning strategy. A review of quality control systems revealed that the business needed to make significant improvements in their manufacturing standards to meet the requirements of premium markets. These improvements were successfully achieved through the formation of an internal working innovation group, employment of new staff experienced in quality manufacture, together with a training programme for staff and the employment of an apprentice machinist. In addition, a dedicated manufacturing area for the new product range was created, and the creation of a design studio as a bridge between design with manufacture was achieved, where creative design and management tools were embedded within the company.

New business-to-business collaboration with Halley Stevensons, a world leading manufacturer in waxed cotton and weatherproofed fabrics, resulted in prototypes exhibited as part of their stand at the international fabric fair 'Premiere Vision' to test the potential market. Product diversification towards the fashion market was further recommended through an external business management consultancy who facilitated an internal workshop with staff to develop the communication and marketing strategy for the new product range to the premium fashion market.

The project produced three peer-reviewed journal papers <sup>R1,R2,R3</sup> and conference articles, two under-graduate and one post-graduate student industry projects, four invited presentations and showcase events, and received an outstanding grade A assessment award by Innovate UK.

### 3. References to the research (indicative maximum of six references)

**R1:** NordDesign: Balancing Innovation and Operation, 11/14 August 2020, Technical University of Denmark, Kongens Lyngby, Denmark. Paper entitled: Embedding Design Innovation within Traditional Scottish Textile Manufacturing through Knowledge Transfer. <https://www.norddesign2020.dk>

**R2:** STEED, J. & GAIR, G. 2020. Enhancing 21st Century Interdisciplinary Design Skills within Higher Education through Knowledge Transfer Partnerships; EPDE22 conference to be held at VIA University College, Herning, DENMARK on 10 - 11 September 2020 - The Value of Design & Engineering Education in a Knowledge Age Published open access by The Design Society

**R3:** Futurescan 4: Valuing practice, 23rd – 24th January 2019, University of Bolton, UK. Paper entitled: Collaborating with Industry: From Oil & Gas to the High-End Luxury Accessories Market through a Knowledge Transfer Partnership. <http://www.ftc-online.org.uk/futurescan-4-conference/>

### Details of the impact (indicative maximum 750 words)

Embedding design competencies within Montrose Rope & Sail Company Limited has enabled company stakeholders to take control of their brand and design direction towards new premium markets. In a design capacity, the company is now in a position to invest and develop their research, design and brand strategy. This project has enabled the company to actively seek high profile collaborations with fashion brands to develop their positioning within the fashion market, both B2B and B2C. This will support their 10-year strategy which aims to be recognised in other global markets outwith the O&G sector <sup>C1</sup>.

**IMPACT 1** – The project introduced new quality standards and operations that met the demands of premium markets. By its conclusion, new quality assurance and control systems were fully implemented enabling consistency in product quality and bolstering the company's confidence in their ability to compete in high-end niche markets <sup>C2</sup>.

**IMPACT 2** - The research transformed how the business identified new markets through the development of a business development strategy which enabled it to diversify and de-risk its

reliance on one market<sup>C3</sup>. According to Lynda Paton, Montrose Rope & Sail Company Manager and KTP Company Supervisor, “The KTP has impacted on the whole company structure where through the embedding of design-led innovation processes has brought about a strategic re-positioning of all sub-brands under the core company. Having an Associate as design ambassador has brought significant cultural change within the company where they have acted as the conduit to embed a company-wide approach to design. The project has initiated the implementation of a design strategy at all levels across the whole company and we are now able to invest internally and externally in design to develop the company strategy. We are now able to continue our work on a transformational repositioning of the company brand<sup>C2</sup>.”

**IMPACT 3** – The project collaborated with Halley Stevensons, leading textile manufacturer and main supplier to international outdoor fashion brand Barbour. This collaboration has supported access to new markets as initial prototypes were displayed at the textile manufacturer’s stand at the international fabric fair in Paris - Premiere Vision (September 2018)<sup>C2</sup>.

**IMPACT 4** - The employment of four new members of staff to the company, one of which included the Associate to a full-time post as Design & Brand Development manager post-KTP. This is a 20% increase in the company’s workforce<sup>C2</sup>.

**IMPACT 5** - The Associate’s appointment to the senior management team as Design and Brand Development Manager illustrates the value of the underpinning research brought to the business over the course of the KTP endorsed by Lynda Paton, Montrose Rope & Sail, Company Manager and KTP Company Supervisor <sup>C1</sup>. “Moving into the fashion sector has required a systematic change for the company and our existing culture where the Associate will continue to work closely with staff as part of her new position post KTP to ensure the adoption of change within the business and will oversee and facilitate the embedding of all step changes required in manufacturing to produce high end products<sup>C2</sup>.” The embedding of a design graduate within the business has led to a greater focus on design-led innovation and quality assurance, thus transforming the working practice at the company<sup>C1</sup>.

**IMPACT 6** - While the economic impacts of the KTP are still to be fully realized due to COVID-19, by 2023 the company’s financial projections in net profits from the new range in annual sales turnover is expected to be £428,055 <sup>C1,C2</sup>.

**IMPACT 7** - The project focused on supporting Montrose Rope & Sail becoming a globally recognised brand in the fashion sector. Through discussions with its Scottish Enterprise Client Manager, an opportunity was identified to attend a workshop run by Scotland Development International (SDI) towards a growth plan for the new range. A meeting with SDI’s Japanese Market specialist led to SDI supporting the company to expand into international markets. This is a direct result of this project. The company have been invited by SDI to participate in their virtual trade mission to Japan and Physical Showcase at Project Tokyo, 10 & 11 March 2021 <https://www.project-tokyo.com/> <sup>C1</sup>.

**IMPACT 8** - The KTP was awarded Grade A (Outstanding) by the funding body Innovate UK<sup>C3</sup> and has also led to a further KTP project with Harris Tweed Hebrides with AHRC support. The findings of the KTP were presented to the Senior Investment Manager at the AHRC on his visit to RGU, which later led to a further KTP with Harris Tweed Hebrides, starting in the first quarter of 2021<sup>C2,C4</sup>.

#### 5. Sources to corroborate the impact (indicative maximum of 10 references)

[C1] Letter from Company Director, Montrose Rope & Sail Company Limited

**[C2]** Partners final report for the Knowledge Transfer Partnership between Robert Gordon University and Montrose Rope and Sail Company Limited.

**[C3]** Award Certificate from Innovate UK.

**[C4]** Email from Knowledge Transfer Advisor – North Scotland

**Press Articles**

- Herald Scotland Newspaper Opinion Article: “Agenda: Forging links between business, academia and bright young things”

[www.heraldscotland.com/opinion/18005158.agenda-forging-links-business-academia-bright-young-things](http://www.heraldscotland.com/opinion/18005158.agenda-forging-links-business-academia-bright-young-things) - dated 31/10/19 (accessed 16/6/20)

- <https://www.agcc.co.uk/news-article/grays-school-of-art-and-montrose-rope-sail-strengthen-partnership-to-break-into-new-high-end-markets>

<https://www.thecourier.co.uk/fp/business/business-news/546724/angus-firm-teams-up-with-art-college/>

- Maritime Knowledge Transfer with Amy Gair -

<https://www.journeysindesign.com/salvage-scotland>

<https://www.youtube.com/watch?v=58IMMg5nRh8>