

# From an innovative product concept to innovating business model

Company: Timesco Healthcare Ltd

## What was the challenge?

Timesco Healthcare Ltd., established in 1964, is one of the UK's largest suppliers of anaesthesia, surgical and general medical instruments. The Company has over 10,000 products, low-tech devices that affect 3 million patients a year, and a market leading position in a number of those products. As they grew, they developed their own direct sales teams and started supplying products under their own brand names. Many of Timesco's products are manufactured to their registered design and specification, making them 'registered manufacturer'. However, all products are designed externally and manufactured via subcontracting agreements.

Timesco has a vision to become a product development led company, delivering innovative new products that meet the needs of its clients and positioning themselves as market leaders in medical devices. To make this transition from a distribution company, in 2009 Timesco acquired the rights to the Shakerscope Laryngoscope system and invested heavily in further development of the range through consultancy partnerships. Nevertheless, with no internal design or manufacturing capability, the model of product development was reactive with high risk of inappropriate development. The consultancy projects have sometimes lost focus and not delivered to their full potential due to the lack of structures and systems in place to collate market understanding, analyse its validity and utilize an evidence-based priority system for new products. Furthermore, the price pressures led to Timesco shrinking their share of Laryngoscope market from nearly 70% to approximately 50%.



## How design helped?

The Shakerscope Laryngoscope project introduced the company the concept of User-Centred Design (UCD). Consecutive iterations of the product have completely innovated the traditional stainless steel laryngoscope that remained unchanged for 50 years, winning new customers for the company and numerous design awards, including iF and Good Design Award, for PDR Design Team. The new product range replaced traditional and expensive metal instruments and dry cell battery technology with innovative polymer handles and a range of 'engines' suitable for different environments. The choices available in the range, from single use disposable outer handles married to a re-useable kinetically powered, non-battery dependent power source through to a high quality, durable outer handle suitable for repeated autoclave sterilisation with rechargeable or self-powered engines, bring new dimensions to user choice. Improved functionality and convenience that lowered cost and removed reliance on battery power appeal not only to mature medical markets but crucially are appropriate for the healthcare systems of developing countries, emergency relief and rescue situations where product cost, sterilization facilities and access and cost of batteries is prohibitive. The innovations and patents around the devices were numerous with IP registered around the designs, generation and energy management.



## What is the impact?

To pursue its strategic ambition of embedding a user-centred design process within the company, Timesco is working with PDR through the Innovate UK Knowledge Transfer Partnership (KTP) scheme. It is a nation-wide programme that helps businesses improve their competitiveness and productivity through the better use of knowledge, technology and skills that reside within the UK Knowledge Base.

In course of two years, PDR will mentor Timesco to develop core knowledge and skillset at a company-wide level, which focusses on the capture of value through user-centred design techniques and translates this value capture to innovative product outcomes. The expertise includes techniques of gathering user needs and requirements and analysing them in the broader ecosystem, ideation methods, lateral thinking and communication. PDR will also run training events for company members to ensure that the process is scalable and design is embedded holistically in the company's culture.

The £140,000 project is in two thirds financed by the government with a third match-funded by the company. It is expected that the company will see benefits of around £60,000 already during the lifetime of the KTP and over £1.2m in five years after completion, increasing its market share by 20%. Reducing development lead-time, improved development efficiency and targeted product development will increase the profitability of new products by lower cost of development, bringing items to market in improved timescales and reducing reliance on external expertise. Furthermore, the new processes across Timesco will result in the diversification of product ranges, improved market acceptance and global markets expansion increasing the volume of sales. The investment is anticipated to generate 20 new jobs, but most importantly, due to the user-centred nature of the development, the new products will better meet medical needs, improving clinical outcomes for many thousands of patients.



*Increased market share*

**Design4Innovation partner: PDR, Cardiff Metropolitan University**  
**Country: United Kingdom / Wales**