

Introduction

Various organisations are recognising the significant value that is lost when office furniture is discarded:

- Contractors that take old office furniture away
- The original manufacturers of the furniture
- Product designers
- Resource efficiency specialists

This recognition has been driving growth in the remanufacturing of office furniture. One illustrative story relates to the coming together of Premier (an office services provider) and Orangebox (a furniture manufacturer). Their emerging partnership has demonstrated a model that can work for both parties, neither of which would be well positioned to realise the opportunities on their own. This story illustrates how collaboration is a key enabler of business model innovation.

Background

Premier Moves Ltd was established in London in 1996 as an office relocation provider. Now rebranded as Premier Workplace Services, Premier has a turnover of £13m, employs 180 staff and a fleet of 42 vehicles. They are very focused on strong relationships with their clients, which include the likes of Transport for London, ITV, and the London Borough of Hammersmith. Orangebox, based in South Wales, is an award winning designer and manufacturer of office furniture, employing 400 staff and with a turnover of £55m. It sells furniture to business customers (eg. large corporates) through a well established network of 350 dealers.

Fig. 1 The Orangebox G64 task chair

Opportunities and Drivers

Premier started engaging in refurbishment & remanufacture driven by recognition that much of the furniture (eg. desks,

Opportunity

- Discarded office furniture often has remaining value
- Refurbishing or remanufacturing of such furniture offers
 resource and cost savings
- The remanufacturing market for furniture is estimated to be about €300 million, employing an equivalent of 2,700. There is strong potential for further growth

Approach

- Collaboration between different parts of the value chain benefitting from complementary skills and customer relationships
- Combination of design for customer appeal and sustainable use of resources
- Creation of a value network with a flexible business model at its heart

Impact

- Orangebox and Premier launch UK's first truly 'circular' office chair in July 2016
- Premier win Queen's Award in April 2016 in recognition of their sustainable office furniture services and work of their Renew Centre.

chairs) discarded during an office move is still in good condition and therefore has value. For instance much is discarded for stylistic reasons, or because fabric is ripped. Meanwhile, Orangebox have recognised that materials represent a large proportion (ca. 45%) of their costs, and that their customers are interested in sustainability. Hence they aim to design their products to be more desirable, more pleasing to use, and more durable, whilst using fewer resources. Their office chairs in particular have been designed in recent years to enable disassembly and reuse of components. Orangebox offer their own repair and refurbishment service, but since most of their sales, and the relationships with end users, are via dealers, the potential for circularity has not been fully realised to date.

Approach

Through the development of very strong working relationships with its clients, capitalising on its flexible approach, Premier was able to begin refurbishing and reselling old office furniture. Its first small step was the purchase of a circular saw, which enabled the reshaping, resizing or replacing of table tops, and the direct reuse of the component with the most value – the metal legs or base. Steady growth and evolution from these small beginnings has since been driven by the jobs that came in from Premier's client base. In 2011, Premier and Orangebox invested in the UK's only independent commercial facility which they called 'The Renew Centre'. The Centre has over 5,000 square feet, dedicated to remanufacturing, refurbishing and repairing office furniture.

Premier has been working with Orangebox to develop the remanufacturing of its office chairs. Remanufacturing, by definition, brings chairs back to an as-new condition. The focus has thus far been around Orangebox's G64 chair (Fig. 1), one of its most successful task chairs for over eight years. It features detachable cushions and recyclable components, but until now, the potential for circularity had only been realised at a modest scale. With the assistance of the Knowledge Transfer Network and Innovate UK, Orangebox has been investigating how to tackle this, looking at three main aspects:

1. Getting products back

2. The mechanics of remanufacturing (where, how, costs)3. Developing a market (and appropriate pricing) for the remanufactured units



Fig. 2 New equipment at Premier's Renew Centre

Orangebox has recently carried out trials, working with Premier, to investigate these challenges and develop a business model that works for both parties and their customers. The business model they have developed is based on take-back and resale, with Premier acting as the collector and remanufacturer of the old chairs, and the dealer for the sale of remanufactured chairs. This model works because of the different and complementary core skills of the two organisations, and their respective relationships. Orangebox's main market is corporate customers, who typically want the latest chair design. Its relationships are with procurement departments, and are in many cases via dealers. Premier's customers, on the other hand, are often more driven by price - for instance, those in the public sector. For them, the lower cost (as well as the improved environmental credentials) of the remanufactured chairs is very attractive. Premier also has relationships with different individuals in the corporate sector, such as facilities managers, who deal with the disposal of equipment and sustainability.

Benefits and Impact

The trials have demonstrated the success of this model, and shown that remanufactured chairs could be sold at around 30% less than the price of new, while making a comparable margin to that made on a brand new chair. The sustainability benefits are considerable: the remanufactured chairs have a 62% reduction in carbon footprint and 75% in water footprint.

This offer has recently launched on a commercial basis. Because the market for remanufactured chairs is different, Orangebox plans to launch a separate line called "Orangebox Remade". These remanufactured chairs will typically have their fabrics replaced (and will therefore feature updated colours and styles). Orangebox will hold the sole warranty on the remanufactured units; with Premier acting simply as a dealer and provider of the remanufacturing service. The two partners are looking at how they can optimise the proportion of used



Fig. 3 Orangebox G64 chair bases (old units below; remanufactured above) at Premier's facilities

parts that are re-used in the remanufactured chairs, while maintaining quality. For instance, at the moment, a chair's arms will be reground, as opposed to remanufactured. Ideally, take-back will eventually be written into the contract upon the purchase of brand new chairs to increase uptake of the remanufactured offer. Premier recently won a Queen's Award in recognition of its sustainable office furniture services, and is looking to expand this kind of service into IT. Orangebox has been developing a new "chair for life," which aims to deliver a four-fold improvement in resource efficiency. The chair was launched in July 2016.

"Businesses can no longer operate as usual and the circular economy provides a great framework for change. Premier Sustain has evolved our services in response to both client demand and the wider environment. We identified blockages to best practice and where services did not exist, Premier invested in setting them up. Remanufacturing and refurbishment of office furniture just makes sense. It is great to find a forward thinking manufacturer such as Orangebox, who recognises that change to working practices are needed and embrace the circular approach holistically. New ways of working, new partnerships and some bravery is needed by business to try and deliver more circular solutions across the business spectrum."

Ann Beavis, Premier Sustain

Image Sources: www.premiermoves.net

ⁱhttps://connect.innovateuk.org/documents/3005437/0/Orangebo+-Case+Study.pdf/1fd3884a-6383-4b86-a5b9-838272e8e249 ⁱⁱhttp://www.premiermoves.net/service/the-renew-centre/ and ⁱⁱⁱhttp://www.premiermoves.net/service/the-renew-centre/ and ⁱⁱⁱhttp://www.premiermoves.net/launch-of-the-uks-first-truly-circular-office-chair/ ^{vi}http://www.premiermoves.net/premier-wins-the-queens-award-for-enterprise-in-sustainable-development/ ^{vi}http://connect.innovateuk.org/documents/3005437/0/Orangebox+Case+Study.pdf/1fd3884a-6383-4b86-a5b9-838272e8e249. European Circular Economy Package Remanufacturing Market Study, ERN, February 2016. ^{vi}http://www.remanufacturing.eu/european-remanufacturing-in-

dustry-estimated-at-e30bn-with-potential-to-triple-by-2030/

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