IT firm increases workflow efficiency and productivity

Challenge

To develop ways to maximise space usage, enable efficiency improvements, reduce waste and increase productivity within a Burnley-based IT business.

Twinmotion goods-in visualisation.

Background

Rapid IT is a fast-growing IT business in Burnley, which works within IT asset disposal, data destruction as well as being an IT hardware recycling specialist.

The business collects and processes pre-owned IT equipment, with a view to maximising its resale value. A key part in maximising the value is assessing the state of the items received and determining whether they can be sold as is or if it is best to repair, strip down to recycle or scrap.

These decisions are made by different operators at different stages of the process. Due to the wide range of equipment processed and the high variety of conditions of the equipment, the operators must use their judgement and experience to assess the items.

Through the RADAR programme, AMRC NW offers a range of fully-funded manufacturing support projects and collaboration opportunities, designed to boost competitiveness and productivity for Lancashire's small and medium-sized enterprise (SME) manufacturing community.

The initial project was to analyse and map operational processes at Rapid IT, but following support through

Reworking the company's workflow efficiency has produced a reduction in its carbon footprint, due to the fact there has been a reduction in time required for assets needing to be powered during processing.

RADAR, this work led on to create a 2D and 3D virtual model of the company's Burnley-based facility to maximise space usage and enable efficiency improvements.

Its growth was previously impeded by the space available within their facility and they were looking at ways to increase efficiencies, reduce waste and increase productivity across their range of services, recycling and production processes.

Twinmotion external building visualisation.

Twinmotion building visualisation, elevated position.

Innovation

The objective of this project was to document Rapid IT's key processes, from when the customer first makes contact to when the items or scrap are added to storage.

With the processes documented, the company will be better equipped to:

- **Assess where and how key decisions are made** – for example predicting whether a job will be profitable at the enquiry stage, to whether it's worth stripping down a non-functional item into parts or putting it straight into scrap;

- **Improve its processes** – for example identifying duplication in the paperwork filled out or improving the item flow through the shop floor;

- **Introduce new workers to the processes**.

The AMRC North West's automation team worked with the business over the course of two European Regional Development Fund (ERDF) projects – the first was to analyse and map their processes to identify opportunities to smooth out their production flow and increase productivity.

These processes were broken down in a way that allows different functions within the company to drill down into the detail relevant to the work that they do.

The project team produced a comprehensive set of process flow charts that are intuitively laid out and can be modified and added to as Rapid IT grows. This will support process improvements and understanding of the key decisions made.

This solution then led onto the second support assist, which involved producing a 2D and 3D model as well as a virtual fly through of its workshop, enabling them to rearrange the layout to optimise space usage, plan equipment positioning and future equipment acquisition, and increase the efficiency of product movement through each process stage. This has also allowed for capacity for future expansion of operations.

Result

The project has helped the company to realise that its operations are very complex and has many moving parts, more so than originally thought. Through this work, it has allowed the business to be able to take a step back and begin to think in greater detail about its processes and how things work – helping the business to be more critical with its operations in general.

It also found the warehouse layout to be the most beneficial in relation to workflow. The biggest improvement to come out of the project has been the speed and efficiency in processing assets from receipt of goods in, its processing, including data sanitisation, through to resale/recycling. This enhancement has resulted in the company improving its service to customers by offering a reduced timescale for data wiping their assets, speedier reporting and the issue of compliance documents.

The warehouse design was also found to be a good benefit in terms of the company's cash flow because the quicker the process can be with pulling out IT assets for resale, the faster the business can replenish its funds.

In addition, reworking the company's workflow efficiency has produced a reduction in its carbon footprint, due to the fact there has been a reduction in time required for assets needing to be powered during processing.

Impact

The exercise of mapping out the business' processes has begun a transitional phase, which has made the company consider its existing operational processes and explore more leaner ways of working. Following completion of the exercise, Rapid IT was able to assess its weaknesses, establish a solution for greater efficiency, and implement those changes in each part of the process. The process map subsequently stimulated thoughts about planning the warehouse to be more efficient.

There has also been increased speeds in business productivity as a result of the warehouse layout which was devised as part of the project and is currently a work in progress and is something being constantly adapted. The work has helped the company to identify and prompted questions as to how it can achieve best practice and maintain continuous business improvement, and has already started to make a difference benefiting customers, processes and the company's finances.

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