

# Customer Journey

## Cardtronics UK

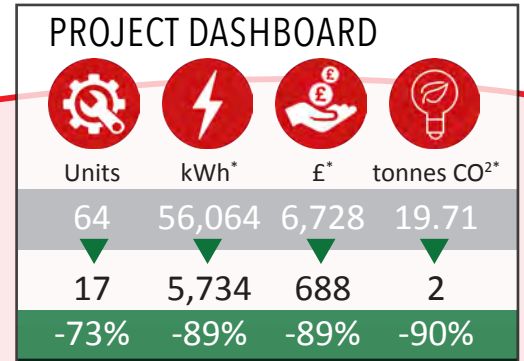


Cardtronics are the world leader in provision and management of self-service financial kiosks. They operate 295,000 Automated Teller Machines (ATMs) across four continents globally, with 18,000+ in the United Kingdom alone. Across the UK, Cardtronics process an average of 15.13 financial transactions EVERY SECOND!

Cardtronics UK were looking to reduce energy consumption and cost across multiple sites in the United Kingdom.



*"We wanted to reduce the environmental impact of our business, exceed government targets and reduce our energy costs, protecting us against ever-increasing energy tariffs".*



They employed the services of SmarterDM, Energy Demand Management specialists, to help them evaluate where improvements could be made. SmarterDM identified Cardtronics' warehouse lighting as a significant area of opportunity, driven by the fact that the business has long daily hours of operation, yet the warehouses are frequently unoccupied for between 30 – 50% of that period.

James Hudson, the Facility Manager at one of their UK sites, said *"Our lighting was identified as the most significant area to reduce our carbon footprint and energy costs. At this facility alone we were using a total of 64 twin 8ft 100W fluorescent batten fittings. Tube failures were commonplace and although the replacement tubes are not very expensive, we found ourselves spending a fortune hiring expensive lifting equipment just to maintain the light fittings within the building."*

On SmarterDM's recommendation, Lumiqs™ conducted a detailed on-site lighting survey and developed a lighting simulation that demonstrated it was possible to achieve the required levels of illumination within the facility by replacing the 64 twin fluorescent fittings with just 17 units of the Lumiqs™ Smart LED Highbay light. James continued *"The survey indicated that our energy consumption and costs would reduce by around 85%, alongside a significant reduction in the carbon footprint of the plant. On this basis we were more than happy to proceed with the installation at this site, and we also asked Lumiqs™ to conduct similar surveys on all our other sites"* .



### Security, Health & Safety.

Colin Bell, the site's Operations Manager added *"Naturally it was the energy savings that we were primarily looking for but we were delighted at the other improvements the lighting upgrade delivered. The facility is so much brighter than it was previously and we have had no problems with glare at all, which you sometimes get with LED. It really feels like we have made a huge step forward with regards to Health & Safety."*

The nature of Cardtronics business means they are extremely security-conscious. Colin highlighted a further benefit due to the motion-activated nature of the Lumiqs™ lighting. *"When we are working in the office we know when someone is walking around the facility because the lights will spring into action. The images from our CCTV systems are now much clearer too. There is a lot more detail in the pictures because the light is brighter and better."*

*"We have had the Lumiqs™ system installed for over a year now and I think we got exactly what we paid for - a high performance, very smart High Bay luminaire that has performed brilliantly and reliably from day one."*

James Hudson, Facility Manager, Cardtronics UK

## Maintenance & Warranty.

In any industrial facility lighting failures impact the working environment, causing inconvenience and down time, and are often costly to resolve. This was another key driver behind Cardtronics decision to switch to Smart LED. James said *“We are really happy with our lighting upgrade. It was always an expensive nuisance when one of the old fluorescent tubes failed.”*

James added *“There are so many LED luminaires on the market and it’s difficult to know which one to go for to make sure we get value for our investment. It’s reassuring to know that we’ll very quickly achieve payback on our investment and that our ongoing energy cost savings are protected by Lumiqs™ 5 year warranty.”*



***“We definitely made the right choice with Lumiqs™”***

James Hudson, Facility Manager, Cardtronics UK

## Energy & Cost Simulations.

Operating hours : 12 hours per day, 7 days per week = 84 hours per week.

### ORIGINAL LIGHTING : 128 units 100W fluorescent tube

Illumination time = 100% (amount of time the lights are illuminated during the 12 hour operating period)



|                                     | Daily  | Weekly  | Monthly | Annually  | Over 5 years |
|-------------------------------------|--------|---------|---------|-----------|--------------|
| <b>Power Consumption (KWh)</b>      | 153.6  | 1,075.2 | 4,673   | 56,064    | 280,320      |
| <b>Estimated Energy Cost (GBP)*</b> | £18.43 | £129.02 | £560.76 | £6,727.68 | £33,638.40   |
| <b>CO2 produced (tonnes)**</b>      | 0.054  | 0.378   | 1.643   | 19.71     | 98.55        |

### LIGHTING UPGRADE : 17 units Lumiqs™ 110W 13k lumen Smart LED Highbay

Illumination time = 70% (estimated illumination time due to motion sensing during the 12h operating period)



|                                     | Daily | Weekly | Monthly | Annually | Over 5 years |
|-------------------------------------|-------|--------|---------|----------|--------------|
| <b>Power Consumption (KWh)</b>      | 15.71 | 109.96 | 477.85  | 5,734.2  | 28,670.8     |
| <b>Estimated Energy Cost (GBP)*</b> | £1.89 | £13.20 | £57.34  | £688.10  | £3,440.50    |
| <b>CO2 produced (tonnes)**</b>      | 0.006 | 0.039  | 0.168   | 2.016    | 10.08        |

### ESTIMATED SAVINGS

|  | Daily  | Weekly  | Monthly  | Annually  | Over 5 years |
|--|--------|---------|----------|-----------|--------------|
| <b>Estimated Energy Saving (KWh)</b>   | 137.89 | 965.24  | 4,195.15 | 50,329.8  | 251,649.2    |
| <b>Estimated Cost Saving (GBP)*</b>    | £16.54 | £115.82 | £503.42  | £6,039.58 | £30,197.90   |
| <b>Estimated CO2 saving (tonnes)**</b> | 0.048  | 0.339   | 1.475    | 17.694    | 88.47        |

The above data indicates overall savings of approximately **89.77%** on energy costs and carbon production.

Return on the original capital investment, including installation, is calculated at approx. **14 months.**

**Lumiqs™**  
Let there be *intelligent* light

\* Estimated energy cost calculates using utility cost rate of GBP0.12 / KWh

\*\* Estimated CO2 produced is derived using uk.gov 2017 conversion factor of 0.35156 KgCO2 per KWh