

D&K Engineering and ecoATM Partner to Develop Automated, Self-Service eCycling Kiosks

Intro...

Designing and developing a custom kiosk can be a complex and costly process. For a start-up organization creating a product that will be successful in the market while managing development and manufacturing costs is critical. For ecoATM, a “retail automation” company based in San Diego, outsourcing the engineering and manufacturing of their kiosk was the perfect solution. But where would they look to find a good outsourcing partner?

With an initial business model that envisioned a single model kiosk versus a full product line of various kiosks, it didn't make sense for ecoATM to internally staff up a team of designers and multi-disciplinary engineers that would then not be needed once the project was complete. Also, building in-house manufacturing capabilities would require tens of millions in capital equipment, facilities and employees—not to mention valuable time. For a small start-up, that huge investment was definitely not an option.



Key to Success is Finding the Right Partner

After making the decision to outsource their engineering and manufacturing, ecoATM began their search to find a firm that would provide them with competitively priced engineering and manufacturing services, domestic and international options, and that would not push their project aside when a bigger customer came along. With raw ideas and a product development concept that was minimally formulated, ecoATM needed to find a product development firm that was able to brainstorm various ideas with them, create an initial product specification, and then turn the final idea into a fully functional machine. As successful product development is a highly collaborative process, selecting the right partner was critical to their success.

After researching and interviewing a number of design and manufacturing firms that included big organizations with huge multi-national resources, medium-size organizations and smaller specialized domestic design/manufacturing firms, ecoATM selected D&K Engineering, a San Diego-based contract, R&D, engineering and manufacturing firm as their outsourcing partner.

Close Collaboration Delivers Outstanding Results in Record Time

Keeping in-house all of the components of engineering, design, and support that were core-competencies (software and user interface design, system management), ecoATM engaged D&K Engineering to re-design and retrofit their first engineering prototype to realize unattended (fully automated) function operation of the kiosk. Engineering efforts included software/algorithm, mechanical and electrical development of the

About Us...

D&K Engineering is a global contract, R&D, engineering and manufacturing services company focused on developing and manufacturing complex electromechanical products and equipment. With a core set of best practices and industry knowledge that spans the entire product development lifecycle, D&K Engineering mobilizes the right people, processes, tools and infrastructure to create and deliver sustainable business value to organizations seeking to outsource the design, development and/or manufacturing of their equipment or products.

D&K Engineering enables organizations to decrease time-to-market, reduce cost and improve product quality.

Simply put, D&K Engineering bridges the gap between concept and reality.



visual inspection systems, electro-mechanical design and control of the cable dispense system, frame and structure design, integration of all peripherals and subsystems (PC(s), UPS, cash dispense, bar code reader, magnetic card reader, receipt printer, touch screen interactive display, debit card dispense, wireless WAN/LAN, thumb print scanner).

With the project on a tight timeline, the teams from ecoATM and D&K Engineering held weekly and at times daily meetings to resolve issues. The teams got to know one another personally and formed a bond that benefited communications and every aspect of the project. Many of the ecoATM team members set up workspaces at D&K Engineering's facility and worked daily, hand-in-hand with D&K Engineering team members.

Partnering Delivers World-Class Success

The result of this collaboration was a highly successful product development cycle done in record time. The project to design a brand new, highly sophisticated, recycling kiosk with advanced machine vision, robotics, and dozens of complex embedded subsystems began in early 2011 and by June 2011, ecoATM had a full working prototype. By year's end they had launched more than two dozen fully-automated production machines that immediately started generating revenue. The kiosk developed through this joint collaboration has won huge accolades from the press and a variety of awards including a CES 2012 Design and Innovations Award.

About ecoATM



Based in San Diego, Calif., ecoATM (www.ecoatm.com) is the first company to create an automated self-serve kiosk system that uses patented,

advanced machine vision, electronic diagnostics, and artificial intelligence to evaluate and buy back used electronics directly from consumers for cash or store credit. ecoATM's eCycling stations provide a convenient trade-in solution that:

- *Electronically and/or visually inspect virtually any consumer electronic device;*
- *Connects consumers real-time to broad worldwide secondary markets ensuring best pricing;*
- *Pays consumers immediately in cash and/or store credit; and,*
- *Automatically administers trade-in / trade-up promotions for retailers and manufacturers.*

ecoATM holds both Responsible Recycling (R2) and ISO14011 certification, confirming the company's commitment to maintaining the highest standards of electronics recycling.