

DELL

Pollution Ink and Sustainability Improvement

STUDENT TEAM:

Charles Moore – EGL (BSE Materials Science and Engineering/MSE Industrial and Operations Engineering)
Juan Alfaro – Master of Business Administration

PROJECT SPONSORS:

David Lear – VP Corporate Sustainability
Erika Chan – Senior Consultant: Sustainability
Oliver Campbell – Director Packaging Engineering
Piyush Bhargava – VP Supply Chain

FACULTY ADVISORS:

Ravi Anupindi – Ross School of Business
Steven Skerlos – College of Engineering

Dell, a \$90 billion company, is one of the largest technology companies in the world. Dell provides the essential infrastructure for organizations to build their digital future, transform IT and protect their information. A key part of Dell's brand strategy revolves around its sustainability initiatives. From ocean plastic to closed loop gold, Dell has built a portfolio of innovations to help address the challenges involved with moving towards a sustainable future.

An engaging and relatively new initiative, Pollution Ink, utilizes harmful PM2.5 black carbon harvested from fossil fuel emissions as pigment for ink. With growth halted at 400,000 boxes annually in India, the Tauber team was brought in to develop strategies to scale Pollution Ink. However, because scaling has proved to be a challenge on more than one sustainability project, the team was also asked to provide recommendations for improving scalability as a whole.

To develop an understanding of the issues and goals, the team conducted a knowledge download through a series of interviews throughout the company. Consolidating the findings with industry best practices and relevant literature, the team produced a framework to manage sustainability initiatives across the company. Running Pollution Ink through this framework, the team identified several key issues with the current supplier and identified an appropriate alternative. In partnership with this new supplier, the team conducted two pilots in Taipei and developed a roadmap to drastically increase scale and impact.

Through the scheduled implementation of the recommended framework, Dell will have the tools necessary to meet their ambitious 2030 corporate responsibility goals and provide solutions tailored to an increasingly sustainability centric customer base. To complement and test this framework, the team also outlined a plan to print over 40 million boxes using Pollution Ink by 2021, saving 17,000 Kg of PM2.5 from entering the ecosystem and preventing the emission of 45 tons of CO₂ annually.