

Device Deployment Optimization for Energy and Cost Savings

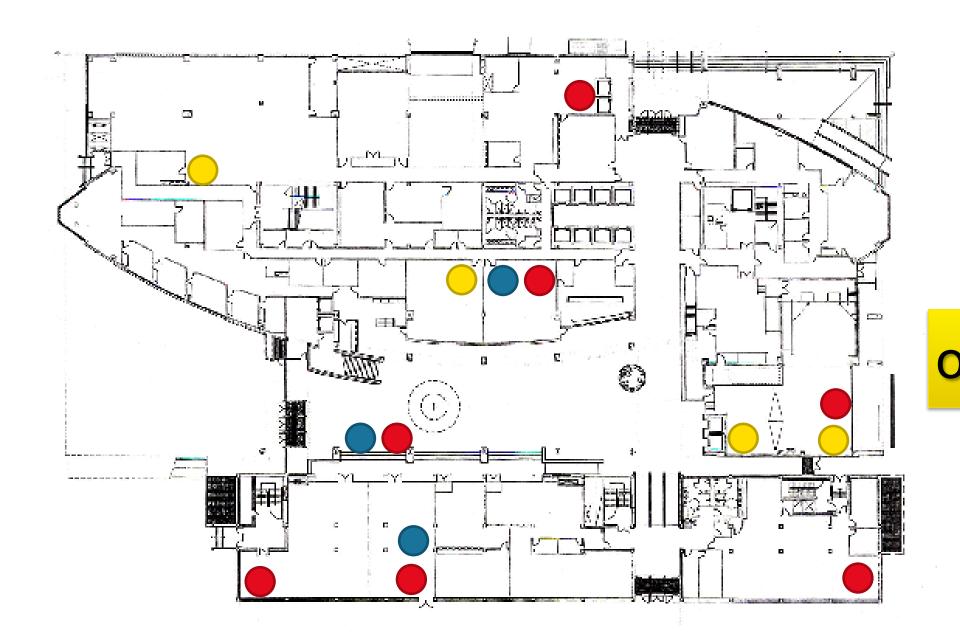
Lexmark is a provider of printing and imaging products, software, solutions and services that help customers save time, money, and the environment.

The Problem

- Consultants visit a company and record information about the current configuration of printing devices.
- The consultants then manually enter all this data into a computer.
- After manually analyzing the data for potential improvements, the consultants generate a future configuration.

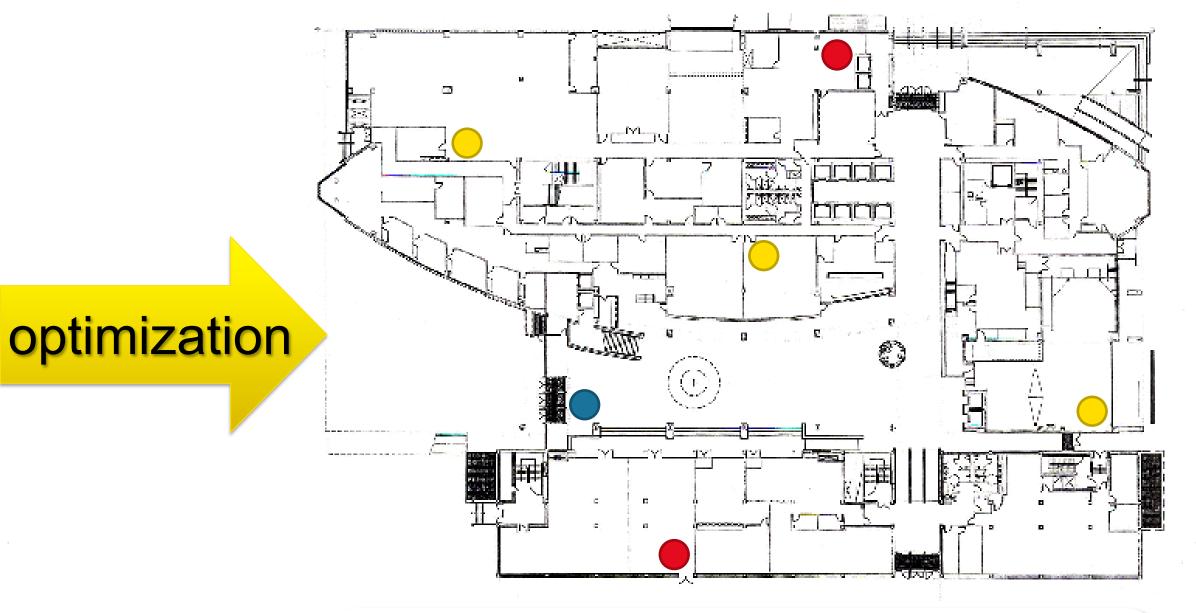
The task of manually analyzing device data is costly and slow.

The goal of our project is to develop software to facilitate the optimization process by automating the generation of new device configurations.



Current State

Inefficient person-to-device ratio, Many types of printers, toner cartridges, Printing too much, Underutilized devices



Future State

Cost savings, Consolidation of devices, Improvements in workflow, Managed print services, More environmentally friendly

Our software replaces manual analysis by automatically generating optimized device configurations.

Improvements

- Speeds up time-sensitive process
- Produces more consistent results
- Helps build relationship with client
- Gives Lexmark competitive edge

Cost savings generated by the consultant's future state solution compared to those generated by our software.

Average Cost Savings Average Cost Savings Able to Reuse Devices Replacing All Devices 70% 70% 60% 60% 50% 50% 40% 40% 30% 30% Consultant 20% 20% Our software 10% 10% 0% 0% Cost Cost Cost Cost Savings Savings per Savings per Savings Page Year per Page per Year

Team Members

Carisa Leal, Alyssa Levitz, Jacob Miller, Alyshia Olsen, Albert Setjoadi, and Rachael Stedman

Olin Adviser

Mark Chang, Asst. Prof. ECE

Lexmark Liaisons

Shaun Love, Rich Russell and John Salsman

