



RAPID PROTOTYPING IN THE TEXTILE & APPAREL INDUSTRY:
A PILOT PROJECT

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ABSTRACT

Technological advances during the past decade have opened many new doors for the Textile and Apparel industries, especially in the area of rapid prototyping and related activities. We need to have a better understanding of how some of this technology may benefit the textiles industry, how these developing systems can be most successfully implemented, and how we can use these systems to the greatest advantage to serve our customers, today and in the future. A project was developed to explore integration of 3-D body scanning, CAD/CAM, and digital printing technologies to support prototyping and mass customization activities. Patterns altered to fit each specific customer were cut from their digitally printed designs, sewn into the desired garments, and tested for fit. This project allowed us to test the developing rapid prototyping and mass customization paradigms and look for the bugs that are inherent in new technologies. While the process was ultimately successful, several areas were uncovered where the implementation of these processes might be problematic for industry.