## WHO'S PAYING FOR THIS?

## Huicheng Wu, graduate researcher

The apparel industry is one of the most wasteful on the planet. Not only do consumers throw out wearable clothing that ends up in landfills, says Huicheng "Jeff" Wu, but production of textiles consumes large amounts of water, energy, chemicals, and fibers, creating a large carbon footprint. The push for low-cost apparel also often leads to unethical treatment of workers.

Wu worked in marketing and other frontend positions at Chinese apparel companies for a dozen years, before coming to the Bryan School of Business and Economics and the Department of Consumer, Apparel, and Retail Studies, to conduct research on apparel supply chain management. He chose the program, he says, because it is one of the largest and best respected in the country.

When Wu explored the literature on sustainability in apparel supply chain practices, the doctoral student says, "There was a void." Publications focused on engineering questions rather than on human interactions, which can determine whether sustainable solutions are actually used.

He was particularly interested in open costing, an industry technique that has been growing in popularity over the last five years.

"International buyers from developed countries often refuse to pay higher unit prices that would compensate manufacturers for environmental costs," he says, putting pressure on manufacturers to ignore sustainability. Economists have a word for these ignored costs, which must still be paid by societies in the form of health care and environmental clean-ups – externalities.

But manufacturers are beginning to respond to this issue by openly including sustainability costs in their negotiations with buyers. "The open costing method," Wu explains, "uses a list of itemized cost elements when a garment is presented to buyers, instead of a lump-sum unit price."

To learn more about the human dynamics of open costing, Wu drew on research methods and theories from the social sciences. He conducted 30 in-depth interviews and administered 200 surveys, employing a snowball sampling strategy where his contacts in the Chinese industry reached out to other likely respondents in China and Bangladesh. The two countries account for 42% of world apparel exports.

Wu found that open costing is helping suppliers adopt more sustainable practices. He also discovered unexpected impacts on supply chain partnerships.

Itemizing costs might seem like an obvious thing to do, given our consumer experiences with cash-register receipts. But between businesses, revealing information creates vulnerabilities, thought to be exploitable by competitors willing to cut corners. Despite this traditional model of fear and secrets, Wu found open costing increased trust between long-term supply chain partners.

The work garnered Wu a Most Promising New Research Award at the 2019 meeting of the International Textile and Apparel Association in London. He hopes his efforts will contribute to a greener future for a global industry.

By Randall Hayes
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