

Harris Consulting

<u>Team Member Name</u>	<u>Year</u>	<u>Major</u>
Mark Gambeski	2023	Computational Neuroscience
Devansh Chandgothia	2021	Computer Science/Economics
Katie Tanizawa	2022	Economics/Mathematics
Sarah Wig	2023	Economics

Advisor(s): Michael Lawrence

Topic: Inking Towards a Better Future: A More Sustainable Printing Industry

Division: Undergraduate

Audience: HP Board of Directors

Sustainable Development Goal

SDG #12: Responsible Consumption and Production Ensure sustainable consumption and production patterns

Executive Summary

Each year 1.2 billion plastic ink cartridges are manufactured and sold worldwide. Most contain an ink blended of oil and toxic chemicals. After depletion, over 300 million of these cartridges will retire to landfills or oceans. Harmful ingredients and single-use plastics are two major issues facing the diminishing consumer printing industry. As consumers become more mindful about the environment, sales will slump further. However, sustainable innovation can reverse this trend, boost sales, and reinvigorate HP as a business leader of the future.

Sustainable Development Goal #12 promotes more mindful practices for both manufacturers and consumers. Our solution incorporates responsibly produced cartridges and vegetable-based inks marketed by a rebranded subscription service. Cartridges will be made from a bioplastic and returned to HP, who will recycle or repurpose the materials. Customers will also be able to choose from either a traditional or vegetable-based ink option. A subscription service will yield greater supply-chain control and consumer satisfaction. Most importantly, this plan will decrease waste and pollutants while making HP a more profitable and responsible company.