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A System For A Sustainable Electronic Waste Marketplace

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Abstract : Due to increased technological advances and the high use of phones, tablets, computers, and other electronics, we continue to see rapid growth in the volume of e-waste. There are millions just throwing out their old devices, millions who have many devices and don't know what to do with them, and there are millions who would benefit from receiving those devices. The thesis of this paper is that by creating an ecosystem of donors and recipients and providing the right incentives, we can reduce e-waste. We discuss a system for sustainable e-waste by building a marketplace between donors and recipients. We also summarize experimental results comparing different incentives and present a live web service that allows for e-waste supplies to reach schools and nonprofit institutions.

Keywords: E-waste ecosystems, marketplaces, e-waste web app, online services

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