ICT device lifecycle practices in Irish households: Procurement to disposal

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Introduction

Electronic waste (e-waste) is growing rapidly, driven by short product lifespans and the frequent replacement of household technologies such as mobile phones. While policies across Europe encourage a "circular economy", where devices are reused or recycled rather than thrown away, many households still struggle to bridge the gap between buying technological devices and their appropriate disposal. This study examines device procurement priorities across Irish households, and their post-use disposal practices.

Data and methods

The study used data from the CSO's 2022 Information Society Statistics – Households survey. This is a nationally representative survey of 1,510 people and contains information on how people buy and dispose of mobile phones, laptops and desktop computers. By looking at people's habits and behaviours, the research identified four distinct types of consumers: *Pragmatic Recyclers*, *E-Waste Active/Tech-Engaged*, *Price-Sensitive Hibernators* and *Conscious Consumers* (explained below).

Results

ICT device purchase priorities are dominated by price (66.1%) and hardware performance (58.3%), while eco-friendly features remain minority concerns (<15%). Post-use trajectories demonstrate widespread resource stagnation: 63.3% of households retain redundant smartphones in domestic storage ("digital hibernation"), while formal recycling rates range from 11.9% (smartphones) to 17.8% (desktops). Table 1 displays four distinct consumer archetypes across the population identified.

Table 1: Summary of consumer latent classes for ICT procurement and disposal

Class		%	ICT procurement/disposal practices	Socio-demographic characteristics
I	**Price-Sensitive Hibernators**	49	• Strictly price-driven (focus on initial cost); low interest in eco-design or warranty extensions. • Minimal engagement with formal recycling; default to storing/hoarding.	Dominant across most demographics, particularly younger and middle-aged adults (16–44)
II	**Pragmatic Recyclers**	27	• Moderate, balanced focus on hardware performance rather than eco-features or top-end specs. • Highest propensity for formal e-waste recycling across all device types.	Skews female, older adults (60+ years), rural or town residents, and non-active labour market participants.
III	**E-Waste Active / Tech-Engaged**	16	• Heavily focused on hardware specifications, performance, and technical capabilities. • High recycling rates for smaller devices (smartphones) but frequently stores larger equipment e.g. desktop PCs.	Skews younger (16–29 years) and male
IV	**Conscious Consumers**	8	• Actively prioritises eco-design, energy efficiency, extended warranties, and repairability. • Exhibits a cross-lifecycle gap: despite green purchasing intentions, retains old phones at high rates, similar to non-conscious groups.	Skews towards early-to-mid career adults (30–44 years)

Conclusions

Because different consumer groups have different habits and reasons for their behaviour, passive information campaigns may not be enough to encourage change. Policy makers could consider introducing producer-funded cash-for-gadgets schemes and certified data wiping at collection points to motivate households to release stored tech. Additionally, supporting repair markets through reduced VAT and EU Right to Repair durability mandates may help extend device lifespans.