The Circular Economy and IT Assets

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IDC #EUR148934422

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From e-waste to circular economy models

Setting the scene

UN's Global E-waste Monitor data — includes ICT equipment and electronic equipment

Circular economy models can help organizations achieve their sustainability goals.

- Designing waste out of the system: this requires a move from waste management to waste prevention.
- Increasingly, organizations are looking at ways to move to usage-based models for "IT as a service" — injecting innovation into traditional, linear models. Companies are taking into account end of life/disposal management at the procurement stage as part of the overall IT strategy.
- Move to selling customer satisfaction through other aspects beyond the device, such as the ability to deliver good for the planet, removing some liability from customers, etc.

Circularity applied to different business functions, such as IT assets

- ACQUISITION
- REUSE
- RESELL
- REFURBISH
- DISPOSAL

Focus
- Digitization
- Data driven
- Efficiency

Enablers
- IT
- Sustainability

UN's Global E-waste Monitor data — includes ICT equipment and electronic equipment

- 53.6 million metric tonnes of e-waste in 2019
- $19 billion
- 17% recycled

- 2019: 1.8 billion units, 405 million units, 15 million units, 144 million units
- 2025: 2.2 billion units, 4.6 billion units

• Digitization
• Data driven
• Efficiency
• IT
• Sustainability

• Enterprise infrastructure
• Mobile phones
• Industrial printers
• Personal computing devices
• Enterprise infrastructure

Enterprise infrastructure
Personal computing devices
Industrial printers
Mobile phones

From e-waste to circular economy models
The circular economy concept

Circular economy: limiting the consumption of finite resources

Designing waste out of the system: this requires a move from waste management to waste prevention

Society needs ways to generate value from waste.

Waste can be perceived as an inefficiency. Organizations are looking at ways to reduce the inefficiencies of waste generation.

This means keeping waste out of the system: optimization of resources, supply chains, and logistics processes to enable end-of-life services.

A move from a throwaway society to a servitization model based on usage and functionality.
Circular economy initiatives should be top of mind when it comes to business investment planning

Product design and life-cycle management/waste and hazardous materials management initiatives are of high and/or very high importance for 85% of organizations worldwide.

Source: IDC Sustainability Technology Survey, 2021

85% of companies say product design and life-cycle management are of high importance.

Top 3 enablers of meeting IT equipment waste management and circular economy business objectives over the next two years

- IT equipment modularity facilitating repairability
- Guarantee of refurbishment and reuse
- Guarantee of responsible recycling at end of life

Source: IDC EMEA Sustainability and Technology Survey, 2022
The circular economy affects the entire life-cycle process

All steps involved: from design for second life to maintenance to prolong the life of the assets to refurbishing and recycling

IT asset disposition and refurbishing fit within the renew/replace and refurbishing steps of a CE concept

IT asset disposition options: generating value from obsolete IT assets

IT asset management and disposal programs

Repair: repair and maintenance of defective products so that they can be used with their original function.

Refurbish: restore an old product and bring it up to date.

Recycle: process materials to get the same (high-grade) or lower (low-grade) quality.
Playing your part to make a better planet

Discarding assets creates bigger problems for the future:
Consider reducing your impact on the overall e-waste problem. Circular economy propositions can be a good alternative.

Global governance will become ever stricter:
Regulatory compliance will increasingly demand organizations to opt for circular economy alternatives to their traditional consumption models.

Use experts to limit your exposure:
IT asset disposal programs are an increasingly preferred alternative to reduce the e-waste and finite-resources problems.

Extended life is preferable to destruction:
Repairing, refurbishing, and recycling offer a hierarchy of actions when prolonging the life of IT assets.