UNLOCKING THE POWER OF CIRCULAR DATA CENTERS

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ITRenew
SERVICES
- Data center decommissioning services
- Circular data center operations

PRODUCTS
- Sesame computer and storage solutions

VALUE
- >$1B TCO recovery to date
The opportunity

THE IMPERATIVE

$50B+
hyperscale TCO value recovery

$10B+/yr
recent hardware market currently blocked

52%
of global population not online

368k tons
of equipment deferred from waste streams
It’s all about the hardware...
It’s all about the hardware...
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TCO cost per year ($ Million)

- Hardware
- Other Costs

Hardware: 52% → 67%
Meanwhile, markets are blocked

- 13.6zb
- 1.5T spend
- Mid-sized banks spend 50% less on technology than megabanks
- $100B funding gap in ICT
Circular data centers redefine and maximize lifetime value

\[ f \{\text{DESIGN, OPTIMIZATION \{TCO, S, D, P, T\}}\} \text{ ACROSS MULTIPLE LIFETIMES} \]
The Circular Data Center Model

MODEL KEY
- Recertify systems
- Remanufacture systems
- Remarket parts
- Recycle residual
- Recertify systems & parts for reuse

HYPERSCALE DATA CENTERS

COST AVOIDANCE

LIFETIME VALUE MULTIPLIER

START HERE

DESIGN AND PRODUCE HARDWARE THAT ENABLES CIRCULARITY

SECONDARY MARKETS

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Impact of going circular

Optimization of Mix

00/0/0/75 → 10/35/35/20

TCO

$1.33B → $1.08B

For every 150k ft² of data center

Implications are massive

For 1.5M sq. ft.

$2.5B

At scale
Bang for the buck

Server Unit TCO ($/yr)
Normalized to 2018 Server
All stakeholders win

**EWASTE**

The same mix change (0/0/0/75 to 10/35/35/20) results in 262K servers diverted from the waste stream.

**ENERGY**

Using recertified equipment for only 20% of workloads saves >2x the total annual energy consumed in the data center.
So what does it take to deliver the circular IT hardware opportunity?
Open is NECESSARY

THE OCP MISSION

to design, use and enable mainstream delivery
of the most efficient designs for scalable computing
But not sufficient

OCP OUTSIDE OF HYPERSCALERS =

1% SHARE OF TOTAL MARKET SHARE

4-4.5% OF ODM SERVER MARKET
Orchestrating The New Global IT Hardware Market:
For ALL

Design, engineering and product expertise, rigorous commitment to quality

Open source software stack to enable support

Global operations and logistics footprint – time to market is critical

Automation and machine learning to fuel both customization and efficiency at hyperscale

Market-making scale and diversity of downstream channels

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Services and Products + a changed mindset and shared ethos across the ecosystem
Product innovation

THE FUNDAMENTAL ENABLER

- First of its kind, recertified, open ODM computer and storage systems
- Warrantied
- Rack solutions for data centers globally
- New form factors for new use cases
- Availability of supply
- Quality on par with new: <0.5% failures in field
- Disruptive economics to enable adoption at scale

2x COMPUTE CYCLES @ EQUAL CAPEX!
Circular in Action

- Hyperscalers: $$ Billions!
- Everyone Else: Access, Scale, Support, Disruptive Product Economics;

Visit us at Booth C15 // Next Presentation: 4:25-4:40, Operationalizing the Circular Opportunity