



Houlihan
Lokey

Circular Tech Market Update

Q3 2024

About Our Firm

Houlihan Lokey, Inc. (NYSE:HLI) is a leading global investment bank with expertise in mergers and acquisitions, capital markets, financial restructuring, and financial and valuation advisory.

Our firm is the trusted advisor to more top decision-makers than any other independent global investment bank.

CORPORATE FINANCE

2023 M&A Advisory Rankings
All Global Transactions

Advisor	Deals
1 Houlihan Lokey	352
2 Rothschild & Co	349
3 Goldman Sachs & Co	300
3 JP Morgan	300
5 Morgan Stanley	253

Source: LSEG (formerly Refinitiv).
Excludes accounting firms and brokers.

No. 1
Global M&A Advisor

Leading
Capital Markets Advisor

FINANCIAL RESTRUCTURING

2023 Global Distressed Debt &
Bankruptcy Restructuring Rankings

Advisor	Deals
1 Houlihan Lokey	73
2 PJT Partners Inc	64
3 Rothschild & Co	51
4 Lazard	37
5 Evercore Partners	27

Source: LSEG (formerly Refinitiv).

No. 1
Global Restructuring Advisor

1,700+
Transactions Completed Valued at
More Than \$3.5 Trillion Collectively

FINANCIAL AND VALUATION ADVISORY

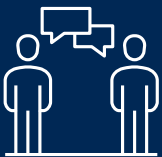
1999–2023 Global M&A
Fairness Advisory Rankings

Advisor	Deals
1 Houlihan Lokey	1,247
2 JP Morgan	1,035
3 Duff & Phelps, A Kroll Business	977
4 UBS	884
5 Morgan Stanley	716

Source: LSEG (formerly Refinitiv).
Announced or completed transactions.

No. 1
Global M&A Fairness Opinion
Advisor Over the Past 25 Years

2,000+
Annual Valuation Engagements



Learn more about how
our advisors can serve
your needs:

Corporate Finance →

Financial Restructuring →

Financial and
Valuation Advisory →

Our Industry Coverage →



Our clients benefit from our local presence and global reach.

36

Locations
Worldwide

~2,000

Total Financial
Professionals

323

Managing
Directors⁽¹⁾

2,000+

Clients Served
Annually

\$12B

Market
Cap⁽²⁾

\$2.1B

Annual
Revenue⁽³⁾

AMERICAS

Atlanta
Baltimore
Boston
Charlotte
Chicago
Dallas
Houston
Los Angeles
Miami
Minneapolis
New York
San Francisco
São Paulo
Washington, D.C.

EUROPE AND MIDDLE EAST

Amsterdam
Antwerp
Dubai
Frankfurt
London
Madrid
Manchester

Milan
Munich
Paris
Stockholm
Tel Aviv
Zurich

ASIA- PACIFIC

Beijing
Fukuoka
Gurugram
Hong Kong SAR
Mumbai
Shanghai
Singapore
Sydney
Tokyo

Fully Integrated Financial Sponsor Coverage

29

Senior officers dedicated to the sponsor community in the Americas and Europe.

1,300+

Sponsors covered, providing market insights and knowledge of buyer behavior.

800+

Companies sold to financial sponsors over the past five years.



(1) As of September 30, 2024.

(2) As of October 31, 2024.

(3) LTM ended September 30, 2024.

































About Our Circular Tech Team

The circular tech team, situated within Houlihan Lokey's Corporate Finance business, is a dedicated and highly skilled group of professionals committed to delivering exceptional services in the realms of M&A and capital raising. The focus extends specifically to companies operating within the circular economy, showcasing distinctive expertise in navigating the intricacies of this sustainable business model.

This specialized team brings unparalleled experience to the table, particularly in collaborating with recommerce platforms, product-as-a-service ventures, value recovery enterprises, and other circular enablers. Its extensive track record demonstrates a consistent ability to generate outstanding returns for investors while simultaneously fostering positive impacts for both people and the planet.

By aligning its efforts with businesses entrenched in the circular economy, the circular tech team positions itself at the forefront of financial innovation, recognizing the importance of sustainable practices in today's dynamic market.

Featured Transactions

 has received a majority investment from  Sellside Advisor	 has acquired  Buyside & Financing Advisor	 a portfolio company of TOWERBROOK has acquired  Buyside Advisor	 a portfolio company of TRILL IMPACT has acquired  Buyside Advisor	 has been acquired by  Sellside Advisor	 a portfolio company of Norvestor and majority owned by management and founders has entered into a partnership with NORDIC CAPITAL Sellside Advisor	 has been acquired by TOWERBROOK Sellside Advisor	Transaction Pending  has agreed to acquire  Buyside Advisor	 a portfolio company of BRIGHTSTAR has been acquired by  Sellside Advisor
 has acquired  Buyside Advisor	 has acquired  Buyside Advisor	 has acquired  Buyside Advisor*	 has acquired  Buyside Advisor*	 has acquired  Buyside Advisor*	 has acquired  Buyside Advisor*	 has been sold to Norvestor Sellside Advisor*	 has acquired  Buyside Advisor*	 has been acquired by ALTOR Sellside Advisor*

Tombstones included herein represent transactions closed from 2016 forward.

**Selected transactions were executed by Houlihan Lokey professionals while at other firms acquired by Houlihan Lokey or by professionals from a Houlihan Lokey joint venture company.*

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Contact Us

Please reach out to us to schedule a call to discuss this quarter's market update or to explore how we can serve your business needs.

 Request a Meeting

 Request Market Insights Report

Circular Tech Market Update

An Introduction

Various evolving dynamics are currently shaping the circular tech landscape, driving the demand for IT asset management, IT asset disposal (ITAD), trade-in, and recommerce services. These dynamics include, among others, the increasing awareness of environmental sustainability, regulatory pressures for responsible IT equipment and disposal of electronic waste, and the growing emphasis on circular economy principles within corporate strategies. As a result, organizations are seeking comprehensive solutions for managing their IT assets throughout their lifecycles, from procurement to disposal, and are turning to specialized providers for efficient and ethical handling of these resources.

Note: Data as of June 30, 2024.

According to Gartner, worldwide IT spending is expected to total USD 5.5 trillion in 2024, an increase of 8.0% from 2023. This puts worldwide IT spending on track to surpass USD 8.7 trillion well before the end of the decade. Moreover, IT services will continue to see an increase in growth in 2024, becoming the largest segment of IT spending (after communication services) for the first time. IT services spend is expected to grow in 2024 by 9.7%, compared to 6.1% growth in 2023.

With positive tailwinds from the global IT services market and a rebound in IT spend, the landscape of the circular tech sector continues to evolve, with both financial and strategic investors particularly looking for high-quality assets with strong circular competencies. Currently, the following dynamics shape the landscape:

- OEMs are starting to feel more and more pressure from EU regulation to offer refurbished devices in their RFPs; however, they are still reluctant to move into ITAD directly.
- Device-as-a-service (DaaS), or device leasing, is a preferred option for OEMs to keep control over devices and then work with ITAD partners to handle returning devices.
- Leasing providers such as CHG and Econocom intend to increase their capabilities for value recovery; however, they are not yet very active in terms of M&A.
- U.S. players are looking at Europe and recognize that the market is more advanced, which makes these companies more like targets than acquirers.
- There is increasing interest from private equity in the circular tech market.

The circular tech industry is currently very dynamic and being consolidated not only by various OEMs, IT distributors, and VARs but also by private-equity-backed platforms.



Circular Tech Market Update

Market Developments and Emerging Business Models

IOT	Real-Time Monitoring	IoT enables real-time monitoring of IT assets, ensuring optimal performance and timely maintenance to extend their lifespan and reduce electronic waste.	   
	Automated Inventory Management	IoT facilitates automated inventory management, improving efficiency and accuracy in tracking the usage and disposal of devices.	
AI-DRIVEN SOLUTIONS	Predictive Maintenance Equipment	AI enables predictive maintenance in circular tech by analyzing data from IT assets to predict failures before they occur, optimizing maintenance schedules and extending the lifespan of equipment.	  
	Resource Optimization	AI optimizes resource allocation by analyzing usage patterns and operational data, ensuring efficient utilization of IT assets and reducing unnecessary replacements.	
AUTOMATED ITAD SOLUTIONS	Secure Data Erasure	Automated ITAD solutions use advanced algorithms to ensure secure and efficient data destruction, safeguarding sensitive information while preparing devices for recycling or resale.	   
	Streamlining Processing	These solutions automate the sorting, refurbishment, and inventory management of IT assets, significantly improving the efficiency and speed of the IT asset disposition process.	
SUSTAINABILITY DRIVEN SERVICES	Carbon Footprint Reduction	Sustainability-driven services in circular tech focus on reducing the carbon footprint by optimizing IT asset reuse, recycling, and responsible disposal, ensuring minimal environmental impact.	   
	Compliance and Reporting	These services provide tools for compliance with environmental regulations and generate detailed sustainability reports, helping organizations meet their corporate social responsibility goals.	
LEASING AND SUBSCRIPTION MODELS	Cost Efficiency and Flexibility	Leasing and subscription models enable businesses to lease IT equipment instead of purchasing, offering financial flexibility and reduced upfront costs while ensuring access to the latest technology.	    
	Sustainable Lifecycle Management	These models include services such as maintenance, upgrades, and end-of-life recycling, which promotes the reuse and refurbishment of IT assets and minimizes electronic waste.	
DAAS	Comprehensive Management	DaaS provides complete lifecycle management of IT devices, including deployment, maintenance, support, and end-of-life recycling.	   
	Sustainability	DaaS promotes sustainability by refurbishing and reusing devices multiple times, which reduces electronic waste and extends the lifespan of IT assets.	

Circular Tech Market Update

Recent Challenges for Brokers and Light Refurbishers

TECHNOLOGICAL ADVANCEMENTS



The rapid pace of technological advancements challenges brokers and refurbishers to stay current with standards, upgrade equipment, and balance costs while ensuring competitive performance and compatibility.

INCREASING COMPETITION



Smaller brokers and refurbishers face intense competition, compelling them to innovate and uphold product quality to retain customer trust. As a result, a natural selection process occurs, allowing only the most adaptable and quality-focused to survive.

PRICE PRESSURE



Price drops for new devices are significantly affecting the resale value of used phones. For instance, the introduction of the iPhone 15 and corresponding price decreases in 2023 led to a decline in the resale value of other models, substantially impacting refurbishers.

EFFICIENCY AND SCALABILITY



Scaling circular solutions from niche markets to mainstream adoption presents several challenges, such as high capital intensity, and the need for increased market acceptance as well as regulatory support and clarity.

FINANCIAL ATTRACTIVENESS



IT refurbishers must demonstrate long-term economic and financial benefits and manage their net working capital carefully, as the initial investment, low margins, and business cycles (e.g., the introduction of new devices) can strain cash flow and impede growth.

REGULATORY COMPLIANCE



Brokers and refurbishers face challenges in maintaining regulatory compliance due to the rapidly evolving standards for e-waste and refurbishment. These standards necessitate continuous adaptation, thorough documentation, and the retention of certifications.

Why Are We So Excited About Circular Tech?

A Circular Economy Eliminates Waste Through Circularity Products, With Circular Tech Being a Cornerstone

Circular Tech

One of the key pillars to enable a circular economy and reduce e-waste.

Rapid Adoption

Rising practice and increasing adoption over the past four to five years.

Large and Growing Market

Sizable market supported by strong underlying ITAM/ITAD/recommerce trends.



Untapped Opportunities

Numerous (consolidation) opportunities at hand, yet to be properly assessed.

Regulatory Tailwind

More stringent regulations were and are being introduced to drive circular tech.

Increasing Awareness

Corporates have realized the importance of a sustainable IT lifecycle and are implementing strategies.

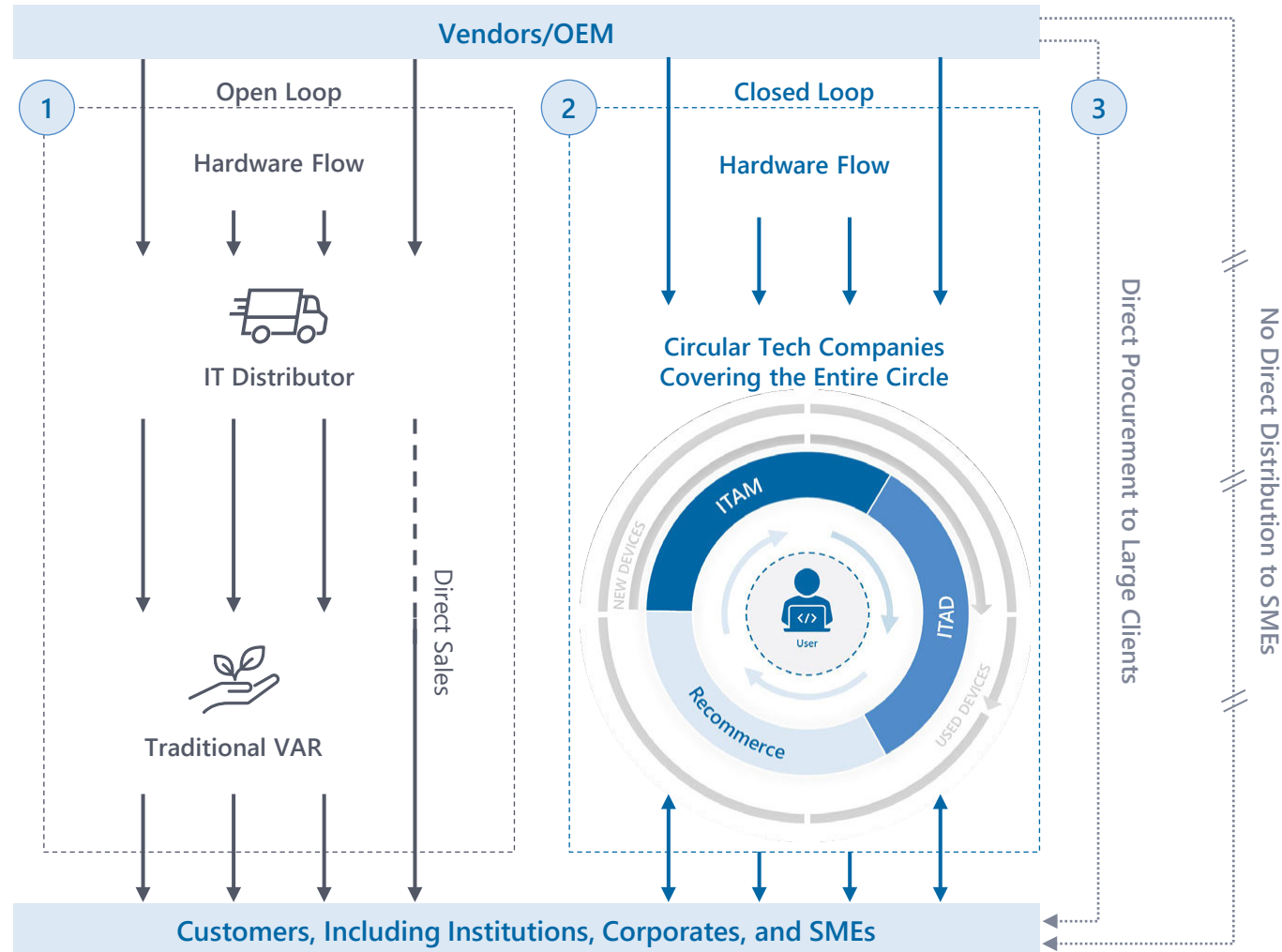


Circular tech encompasses a comprehensive range of services that approach IT lifecycle management holistically, integrating circular thinking. It includes all aspects of the IT journey, starting from procurement and encompassing services related to IT assets, all the way through responsible disposal to companies (ITADs) within the circular tech space that provide secure data wiping and value recovery of utilized devices, which are ultimately resold into the markets in their second and third lives before secure and responsible recycling.



Circular Tech Is a Cornerstone of the Circular Economy Model

The Circular Tech Offering Covers ITAM, ITAD, and Recommerce



1 Distributors

- Distributors work with high volumes from vendors/OEMs and usually have large warehouses to store assets.
- They are selling either directly to end customers or through VARs and are frequently educating resellers about new products.

2 Circular Tech Companies

- Offer full lifecycle from procurement to disposal and remarketing/refurbishing of IT devices.
- Enable circularity and sustainability with complete end-of-life solutions.

3 VAR

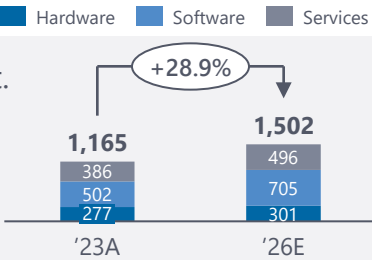
- VARs resell software, hardware, and networking products to end clients along with added services, including consulting, design, implementation, and training.
- VARs source directly from distributors and, in some rare cases, directly from IT vendors.

The “Specialist” Circular Tech Market Is Highly Fragmented

It Is a Market With Players Focused on Single Services and an Opportunity to Build Circular Tech Platforms

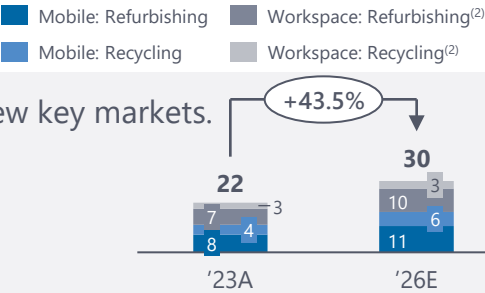
ITAM Strongly Driven by Device-as-Service Trend

- Numerous assets are available in almost every market.
- Critical to pick the right asset and make the right combinations.



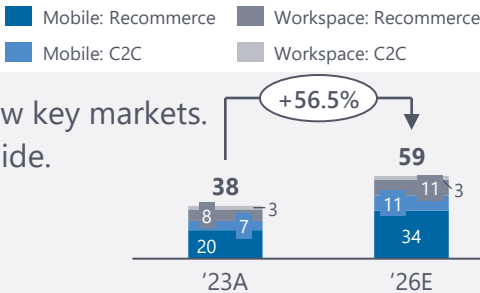
ITAD⁽¹⁾ Driven by Regulations and Sustainability

- Only a few sizable assets are available in a few key markets.
- Critical to evaluate the supply side.



Recommerce Entails Purchasing, Inspecting, and Repricing

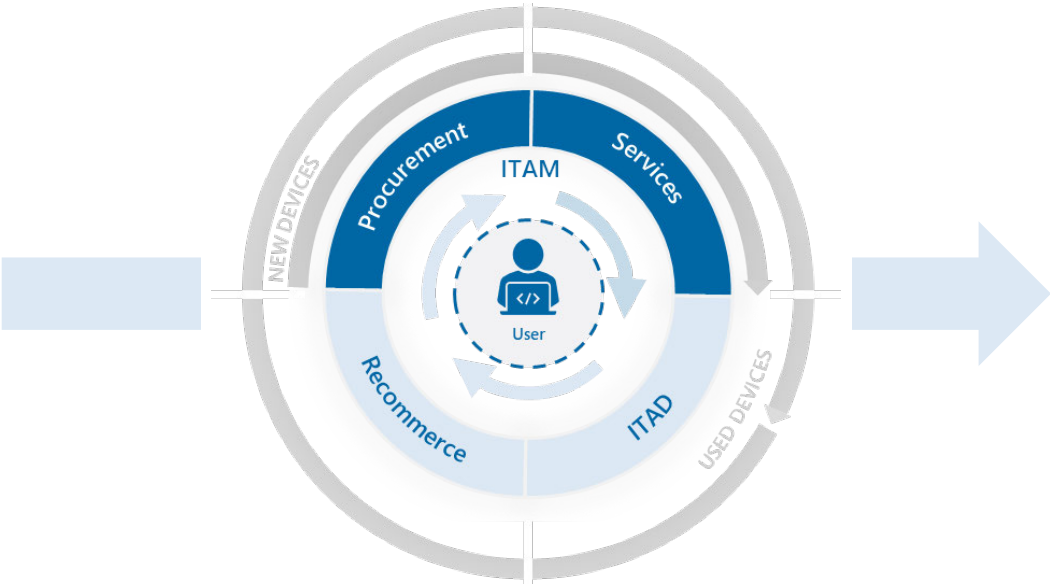
- Only a few sizable assets are available in a few key markets.
- Critical to evaluate the supply and demand side.



Source: Boston Consulting Group. Estimates based on source material.
 Note: Global market figures in USD billions.
 (1) ITAD market figures, excluding server, storage, and network; (2) Workspace refers to computers and laptops.

Full Circular Tech Platforms

- Critical to work on positioning to secure a premium valuation.
- Very scarce assets, trading at a significantly higher valuation than players focused on single services.



- Positioning around sustainability implies several conditions:
 - Proper reporting of internal ESG KPIs.
 - Quantification of external impact of stakeholders (e.g., clients).
 - Implementation of ESG programs (e.g., carbon-neutral programs).

EU Authorities Have Accelerated the Adoption of Stringent Regulation Further Driving Circular Tech




Houlihan Lokey

Multiple Regulations and Policies Are a Tailwind for Circular Tech

Laws, Regulations, and Policies in the U.S.

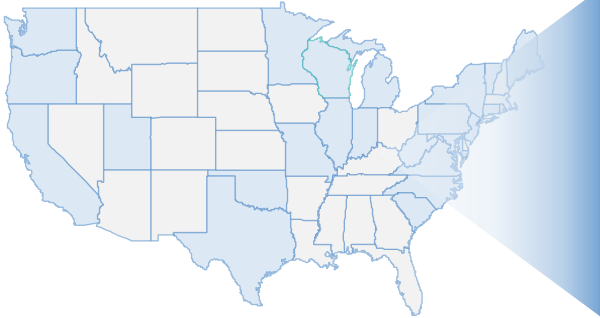
No. 1	Extended Producer Responsibility Programs	No. 2	Electronics Recycling Coordination Clearinghouse	No. 3	National Strategy for Electronics Stewardship	No. 4	Bipartisan Infrastructure Law	No. 5	Greening Government Initiative
IN APPLICATION SINCE 2004 Policies requiring manufacturers to take responsibility for the disposal of their products. IMPACT Encourages eco-friendly product design and responsible end-of-life management by manufacturers, promoting circularity.		IN APPLICATION SINCE 2010 The ERCC is a forum for coordination among state agencies implementing electronics recycling laws. IMPACT Supports harmonization of state e-waste recycling laws and facilitates efficient e-waste management practices.		IN APPLICATION SINCE 2011 A federal initiative aimed at improving the management of used electronics and promoting greener designs. IMPACT Promotes greener electronics, enhances e-waste recycling, and supports the development of recycling technologies.		IN APPLICATION SINCE 2021 This federal law includes provisions to enhance infrastructure, including technology-related initiatives. IMPACT Provides funding and support for technology-related projects aimed at improving sustainability and innovation in various sectors.		IN APPLICATION SINCE 2021 Launched by the U.S. and Canada, this facilitates information exchange, innovation promotion, and best practice sharing among countries. Its goal is to support global efforts and meet Paris Agreement commitments on climate change.	

U.S. ISO Certifications

	ISO 9000/9001—Quality Management System Identifying and Eliminating Inefficiencies <ul style="list-style-type: none">Reduces waste, improves customer expectations, and streamlines operational results in a cost-saving manner, driving better outcomes.
	ISO 14001—Environmental Management System Promoting Environmentally Responsible Practices <ul style="list-style-type: none">Provides a framework for organizations to design and implement environmental management systems and continually improve their environmental performance.
	ISO/IEC 27001—Information Security Management Protecting and Ensuring Secure Technology Adoption <ul style="list-style-type: none">Demonstrates robust information security practices and builds trust with stakeholders.

State Rules and Regulations

25 States With Electronic Recycling Laws



Stricter Disposal and Recycling Requirements

Many states are enacting stricter laws that mandate proper disposal and recycling of e-waste. This includes requiring manufacturers to take back their products at the end of their lifecycles and ensuring that e-waste is processed by certified recyclers to prevent environmental contamination.

Sources: National Conference of State Legislation, Electronics Recycling Coordination Clearing House, U.S. Environmental Protection Agency, Federal Trade Commission, Wisconsin Department of Natural Resources, and ERI.

Multiple Regulations and Policies Are a Tailwind for Circular Tech

Voluntary Sustainability Initiatives Driving Circularity and Innovation



Push to Net Zero

~7,000 companies committing to net-zero emissions following SBTi.

- Market-wide megatrend pushing companies to formulate net-zero targets by abating CO2 emissions from operations and their supply chains with timelines.
- ICT equipment is an important contributor to upstream scope 3 emissions of most service companies. Scope 3 emissions are typically hard to abate as they lie outside of the companies' boundaries.



Shift to Circular and "as-a-Service"

Megatrend hitting consumers and corporates.

- Consumers are increasingly shifting to as-a-service models to optimize budgets while benefitting from guaranteed quality and reduced complexity.
- As a response, industry organizations have identified circular offerings as a key to becoming more sustainable. For example, GSMA has predicted that the refurbished mobile market will grow 300% in 10 years.



Circular Economy Promotion by the World Economic Forum (WEF)

Various circular initiatives to advance sustainability and reduce waste.

- Around 53.6 million metric tons of e-waste is produced every year worldwide, from which 83% is not collected,⁽¹⁾ providing a huge opportunity for the development of circular business models.
- Through the Circularity Accelerator program, the WEF is identifying and scaling companies and innovations that contribute to the circular economy, providing solutions to address this challenge.



Circular Electronics Partnership (CEP)

Framework to aid companies in the electronics industry with their circular transition.

- CEP developed a Circular Electronics System Map, defining what a circular electronic product should look like and providing a system for change at scale.
- The Circular Electronics Roadmap was developed as the path that needs to be followed to achieve the vision outlined in the System Map. It identifies 40 actions that help drive progress in key stages of the electronics value chain.



Circular Initiatives From the Ellen MacArthur Foundation

Push for a circular economy, which is designed to eliminate waste and pollution.

- Launch of the New Plastics Economy initiative in 2017 (in collaboration with the WEF) to eliminate unnecessary plastics such as single-use plastics and packaging materials, design products for reuse and recyclability, and develop new recycling technologies and innovative materials. Development of Circulytics as a comprehensive measurement tool to help companies assess and track their progress toward a circular economy by eliminating waste and pollution, circulating products and materials, and regenerating nature.



Sources: WEF, Ellen MacArthur Foundation, and CEP.
(1) Data from 2023.



Software Implementation Makes All Processes of Circular Tech More Efficient

Combination of Hardware and Software as a Key Competitive Advantage

ITAM



Asset Tracking and Inventory Management

- **Automated tracking:** Software enables automated tracking of assets, providing real-time visibility into asset locations, status, and usage.
- **Inventory management:** Facilitates the management of hardware and software inventory, ensuring accurate records.

Lifecycle Management

- **Depreciation tracking:** Manages depreciation schedules to ensure accurate financial records and aid in budget planning.
- **Maintenance scheduling:** Automates maintenance schedules, reducing downtime and extending asset life.
- **Forecasting maintenance and lifetime value:** Software can help predict maintenance cycles and estimate the lifetime value of devices well in advance.

Cost Management

- **Cost analysis:** Provides tools for analyzing the total cost of ownership, helping with budgeting and financial planning.
- **Optimization:** Identifies underused or obsolete assets, allowing for optimization and cost-saving opportunities.
- **License management:** Ensures efficient use of software licenses, preventing over-licensing and associated costs.

ITAD



Secure Data Erasure

- **Automated wiping:** Software ensures secure data erasure, complying with data protection regulations and preventing data breaches.
- **Certification and reporting:** Generates certificates of data destruction and detailed reports for audit trails.
- **Chain of custody:** Maintains a documented chain of custody for assets, ensuring traceability and security.

Environmental Compliance

- **Sustainability reporting:** Provides tools for generating sustainability reports, demonstrating compliance with green initiatives.
- **Vendor management:** Manages relationships with certified e-waste disposal vendors, ensuring environmentally responsible disposal.

Value Recovery

- **Resale and recycling:** Software identifies assets with resale value or components that can be recycled, optimizing value recovery.
- **Asset valuation:** Assesses the residual value of assets, aiding in decision-making for disposal or redeployment.

Recommerce



Marketplaces Integration

- **Platform integration:** Integrates with online marketplaces for selling refurbished or surplus assets.
- **Automated listings:** Automates the creation of product listings, including detailed descriptions and pricing.
- **Inventory syncing:** Keeps inventory levels synchronized across multiple sales channels.

Pricing and Valuation

- **Dynamic pricing:** Utilizes algorithms to set competitive prices based on market demand and condition of assets.
- **Valuation tools:** Provides tools for assessing the value of used assets, ensuring fair pricing for both customers and sellers.
- **Historical data analysis:** Analyzes historical sales data to inform pricing strategies and maximize the reselling value.

Customer Relationship Management

- **Customer insights:** Tracks customer preferences and purchasing history, enabling targeted marketing and offers.
- **Order management:** Manages the entire order lifecycle from purchase to delivery, enhancing customer satisfaction.
- **Feedback and reviews:** Collects and analyzes customer feedback and reviews, aiding in quality control and service improvement.



Tech Giants Prioritize Sustainability: Circular Models Rise

Established Players Are Seeking M&A to Acquire “Specialist” Circular Tech Capabilities



“The Google Startups for Sustainable Development program supports a global ecosystem of impact-focused startups. The program builds community and supports startups with advisors, funding, and platform technology.”

September 2024



“We want to empower companies across all industries, of all sizes—from small businesses, to large multi-national organizations, and global companies—to take steps to decarbonize and develop sustainable operations, regardless of where they are in their sustainability journey.”

July 2024



“Rather than considering sustainability in isolation, we view it as an interdisciplinary function that interacts with other sub-strategies. Each department, country, and employee implements the sustainability strategy through operational measures, ensuring that these are compatible with the existing corporate and function-specific strategies.”

February 2024



“Dustin is strongly investing in circular and sustainable IT, and we are continuously working to reduce our climate footprint throughout the entire value chain. Our goal is to have a climate neutral value chain by 2030, and an important part of this is being able to help our customers make better decisions.”

June 2024



“With regard to our cities, we need to establish smart cities with sensors and AI analyses that regulate and optimize the areas creating the most carbon emissions. This needs to cover transportation, heat and energy supplies, and the maintenance and development of infrastructure.”

July 2024



“The proof of Apple’s commitment to climate action is in our progress: We have slashed emissions by more than half, all while serving more users than ever before. [...] More hard work is ahead of us, and we are focused on harnessing the power of innovation and collaboration to maximize our impact.”

April 2024



“The company unveiled a new Device Life Extension Service that maximizes device performance and the life of existing HP computers. The company also introduced a Partner Certified Refurbishment program, and the company is expanding its computer refurbishment program to the U.S.”

March 2024



“I am very proud to see the concrete actions we have taken to reduce our environmental footprint and that of our clients. So I am especially pleased about the launch of our site Impact as a leading witness of our responsible commitments.”

February 2024



“We have embedded ecodesign principles, as outlined in the ISO/TR 14062 standard, into our internal product development process, positioning sustainability and circularity as foundational elements of innovation.”

May 2024



“Samsung Electronics seeks to contribute to climate change responses through cooperation with various stakeholders by working with initiatives worldwide, carrying out industry-wide collaborations and external communications.”

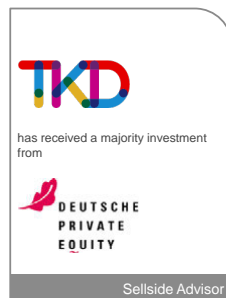
June 2024

Sources: Company websites and press releases.

Featured Transactions

Executed by Houlihan Lokey's Circular Tech Team

TKD



- Headquartered in Germany, TKD is a leading player within the circular tech industry in Germany. The company was founded in 2014, employs more than 100 people, and offers corporate customers an easy-to-use, fully integrated, and sustainability-promoting full-service device lifecycle management platform.
- TKD provides comprehensive solutions in contract and hardware management, including device rental, provision, registration, repair, maintenance, and customer support throughout the entire device lifecycle. This helps companies reduce the workload for their IT and administrative departments and ensures that circular economy and device longevity remain at the core. By using their own software-as-a-service platform, TKD.360, customers' employees can order end devices themselves and can manage and flexibly replace them with the latest models after a fixed term.
- The successful expansion of TKD's business in recent years has led to the acquisition of major customers in Germany and internationally. TKD Group manages over 60,000 devices in its fleet and serves more than 400 customers across various industries. With DPE as a strong partner, TKD will benefit from its recognition and appreciation of the potential to collaborate with key players in the DaaS market. DPE will significantly contribute to TKD's technological development, driving the expansion of its platform.
- Houlihan Lokey served as the exclusive financial sellside advisor to the management and shareholders of TKD, supporting all aspects of the transaction, including preparation of marketing materials, structuring and managing a competitive deal process, coordination of due diligence, and negotiating key deal terms. In addition, Houlihan Lokey played a crucial role in aligning the interests of all parties involved and in finding a strong partner that would make a significant contribution to promoting TKD's technological development and thus drive the expansion of the platform.

Ambienta



- Based in the Netherlands, The Rent Company is a fast-growing European company with operational footprints extending to Belgium and the U.K. Its mission revolves around providing DaaS solutions that specifically target the education market, enabling schools to enhance accessibility to digital education for every student.
- Currently, The Rent Company serves an impressive installed base of approximately 325,000 devices distributed across approximately 700 partner schools throughout Europe. In 2024 alone, the company planned to deliver approximately 127,000 new devices to students. The comprehensive service proposition, which encompasses insurance, maintenance, repair, and customer support, ensures a seamless and hassle-free digital education solution for parents, students, and schools alike.
- Supported by Ambienta, The Rent Company will aim to capitalize on the surging demand for sustainability and digitalization within the education sector. It is strategically positioned to leverage the growing economies of scale, driving both expansion and a sustained positive impact. Recent high-profile customer partnerships, coupled with the strategic acquisition and market entry in the U.K., underscore Ambienta's confidence in The Rent Company's robust business model and long-term strategy.
- Houlihan Lokey served as the exclusive buy-side and financing advisor to Ambienta on its acquisition of The Rent Company and assisted in structuring and negotiating the transaction, as well as providing debt advisory services that allowed Ambienta to raise the desired debt capital structure. The close collaboration between the Corporate Finance and Capital Markets teams facilitated a strong outcome for both Ambienta and The Rent Company.

Featured Transactions (cont.)

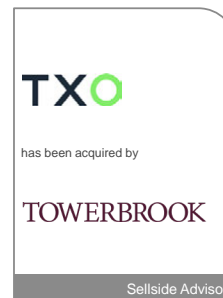
Executed by Houlihan Lokey's Circular Tech Team

Foxway



- Foxway is a fast-growing European company based in Sweden, with offices in Europe, Asia, and the U.S. By providing circular IT services in more than 100 countries, Foxway has supported its customers to make sustainability an integral part of its businesses. Foxway helps its customers increase efficiency and business success and reduce their tech footprints by recovering and remarketing IT devices and providing the infrastructure necessary to ensure a sustainable lifecycle. With circularity inherent to the business model, Foxway sources, finances, and refurbishes more than 1.5 million devices annually in the circular flow, avoiding 120,948 tons of CO2 emissions in 2022.
- Foxway is uniquely positioned to benefit from secular tailwinds of increasing sustainability demands from customers, digitalization trends, and the increasing economies of scale to drive growth and make a lasting positive impact. Several recent high-profile customer partnerships, together with acquisitions completed in Spain, Germany, and the U.K., reinforce Nordic Capital's belief in Foxway's business model and long-term strategy.
- Houlihan Lokey previously advised the founders of Foxway on the partnership with Norvestor and played a major role in initiating the buy-and-build strategy.
- Houlihan Lokey served as the exclusive sellside advisor and assisted in marketing, structuring, and negotiating the transaction as well as performing lender education on behalf of the shareholders. The close collaboration with the Capital Markets Group facilitated strong and comprehensive nonbinding offers and provided prospective buyers with an indication of the financing options early in the process.

TXO



- Headquartered in the U.K., TXO has a physical presence in Continental Europe, North America, South America, and Australia and is able to service customers globally. The company operates (i) four primary lines of business: telecom hardware sourcing, recovery, and resale; (ii) support solutions and services for telecom operators and critical communications clients, including testing, repair, infrastructure decommissioning, warehousing and inventory management, and logistics; (iii) recycling of telecom equipment and precious metal recovery; and (iv) distribution of complementary multi-vendor compatible accessories. TXO is differentiated through its ability to address customers' pain points on the back of its capacity to aggregate market supply and offer a large and diverse breadth of inventory.
- TowerBrook has been actively pursuing a thesis in the circular economy. The team has been seeking to build a leader in the ITAD and asset management (practice built around reusing, recycling, repurposing, repairing, or disposing of unwanted equipment in a safe and environmentally responsible way) or recommerce spaces with the ambition to significantly reduce the carbon footprint of the IT and telecommunications industry and support its commitment to a more circular model. The acquisition of TXO represents TowerBrook's first investment from the impact-focused TowerBrook Delta fund.
- As part of the growth and value creation plan, TowerBrook further intends to support TXO's ambitious business model transformation into a more sustainable and recurring-revenue-driven product-as-a-service provider, assist with the operational improvement of the business, and accelerate TXO's international expansion
- Houlihan Lokey served as the exclusive M&A and capital markets advisor to the TXO shareholders.



Peer Companies Overview and Rationale






Peer Groups Comprise ITAM/ITAD and IT Distribution Companies





Overall Considerations

The circular tech peer group universe is divided into two main peer groups. This is simply because there are currently no publicly traded and purely focused circular tech players. We consider the selected peer groups as the best proxies for a still-nascent industry. The relatively large valuation gap between these peer groups arises from the fact that ITAM/ITAD players offer comprehensive and value-added services to customers, whereas IT distributors mainly provide substitutable/less value-added services.

Public Companies Peer Groups

ITAM/ITAD





IT Distribution





Rationale

- Involves strategic management of IT assets, including hardware and software.
- Aims to optimize asset lifecycle, reduce costs, and ensure regulatory compliance.
- Includes responsible disposal practices to minimize environmental impact and data risks.

- Facilitates the distribution of IT hardware and software devices.
- Acts as a crucial link between manufacturers and end users, streamlining the supply chain.
- Offers a wide range of products, services, and support to meet diverse technological needs.



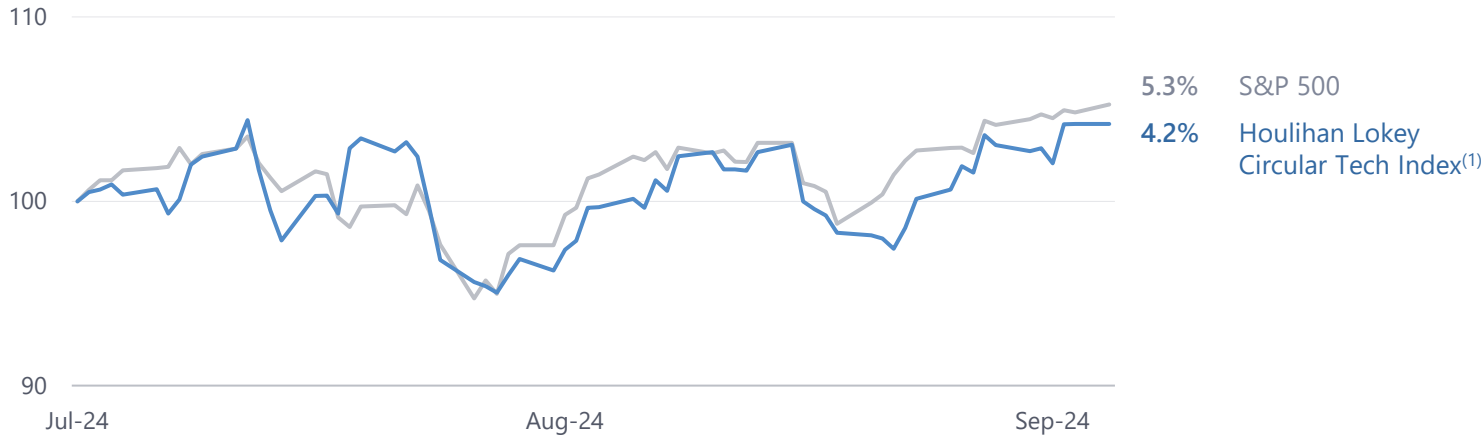
Equity Market Index Performance

Circular Tech

LTM September 2024 Performance



July–September 2024 Performance



Key Takeaways

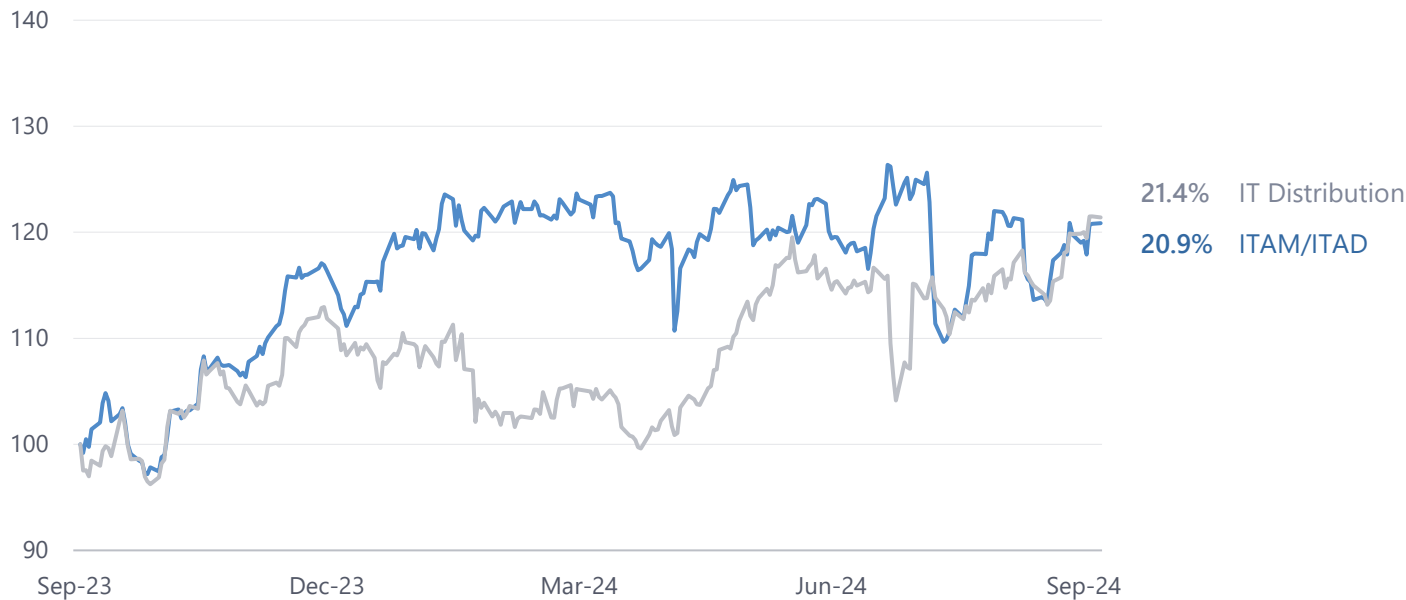
- In the second half of 2023, the Houlihan Lokey Circular Tech Index outperformed the S&P 500. However, in the first nine months of 2024, the gains vs. the S&P 500 were erased, and the Houlihan Lokey Circular Tech Index currently shows a 13% lower performance.
- The Poland-based AB significantly outperformed the S&P 500 with a gain of +62.9%, followed by Insight Enterprises with +45.2%. These companies were the only ones finishing above the S&P as of September 2024. As in 2023, Dustin underperformed significantly (-59.4%) but recovered slightly year-to-date. Similarly, Econocom, another ITAM/ITAD company, notably underperformed the market, with a decline of -20.5%.
- Q3 underperformance of the Houlihan Lokey Circular Tech Index was primarily driven by Dustin (-30.3%), ASBISc Enterprises (-19.7%), Kontron (-17.0%), Cancom (-13.6%), and Atea (-13.5%). Arrow Electronics (+9.1%) and Insight Enterprises (+6.5%) were both up. Other peers remained relatively flat in comparison.

Source: S&P Capital IQ.
Notes: Data as of September 30, 2024. All share prices rebased to 100.
(1) The Houlihan Lokey Circular Tech Index consists of a diversified set of companies across the circular tech sector. See pages 22 and 23 for a complete list.

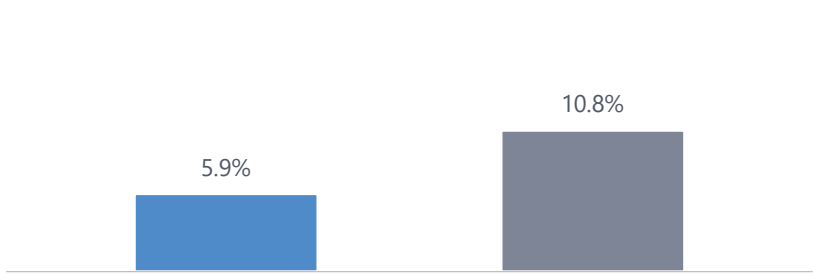
Equity Market Index Performance

Circular Tech: ITAM/ITAD and IT Distribution Companies

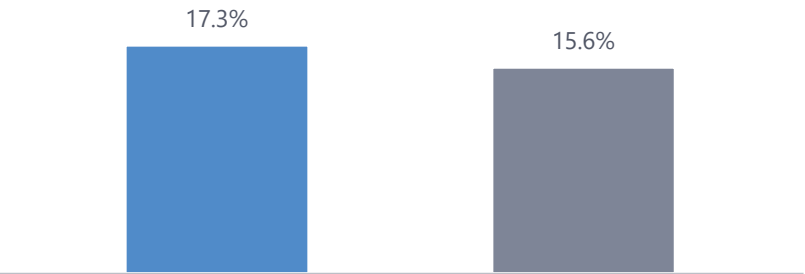
LTM September 2024
Performance
by Subsector



YTD Performance



Three-Year Performance



Key Takeaways

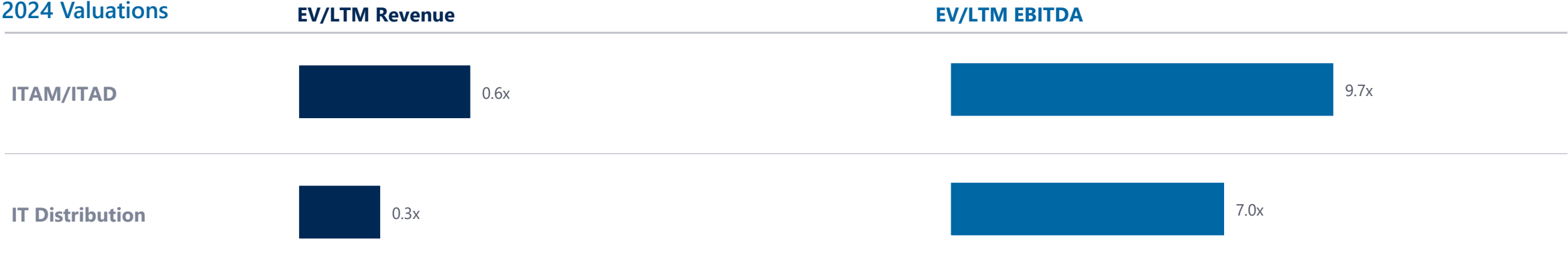
- During the LTM, the ITAM/ITAD and IT distribution peer groups exhibited robust returns of +20.9% and +21.4%, respectively. Over a three-year span, the ITAM/ITAD peer group recorded a solid performance, with returns standing at 17.3%, whereas IT distribution provided a return of 15.6%.
- None of the peer groups outperformed the market. However, the gap may narrow in the future, particularly for the ITAM/ITAD peer group, as the market benefits from favorable tailwinds such as the following:
 - Asset lifecycle management focus.
 - Sustainable practices and environmental responsibility.
 - Risk mitigation and compliance.
 - Revenue diversification.
 - Long-term cost savings for clients.
 - Adaptation to technology trends.
 - Recurring revenue potential.

Source: S&P Capital IQ.
Notes: Data as of September 30, 2024. All share prices rebased to 100.

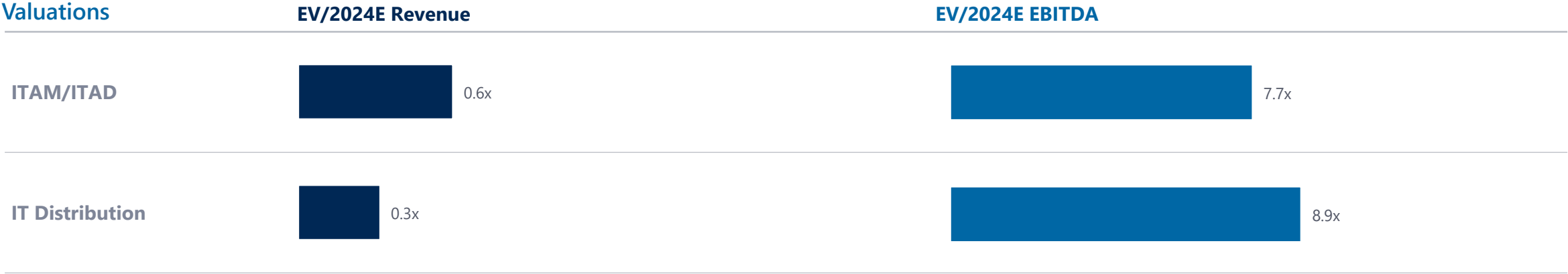
Public Company Valuations

Circular Tech: ITAM/ITAD and IT Distribution Companies

LTM September 2024 Valuations



2024E Valuations



Source: S&P Capital IQ.
Note: Data as of September 30, 2024.
Trading multiples are based on share price, other market data, and broker consensus future revenue and earnings estimates from S&P Capital IQ as of September 30, 2024.

Public Company Valuations Comparables (LTM September 2024)

Circular Tech: ITAM/ITAD and IT Distribution Companies

(\$ in Millions, Except Per-Share Prices)

As of 9/30/24		Market Cap USDMM	EV USDMM	Net Debt USDMM	Net Debt/ LTM EBITDA	LTM				TEV/	
						Revenue USDMM	EBITDA USDMM	EBITDA Margin	EPS	Forward P/E	LTM EBITDA LTM Revenue
ITAM/ITAD	CDW Corporation	\$30,228.1	\$35,757.0	\$5,367.2	2.6x	\$20,942.9	\$2,049.4	9.8%	\$8.2	21.3x	17.4x 1.7x
	Insight Enterprises	7,018.7	7,976.1	957.3	1.6x	9,043.4	580.5	6.4%	8.0	19.2x	13.7x 0.9x
	Bechtle	5,638.1	5,959.9	303.9	0.6x	6,806.5	529.1	7.8%	2.2	19.0x	11.3x 0.9x
	Computacenter	3,585.2	3,207.4	(363.7)	N/M	8,141.0	374.0	4.6%	1.9	13.6x	8.6x 0.4x
	Atea	1,446.4	1,607.2	159.0	0.9x	3,108.8	170.8	5.5%	0.6	15.8x	9.4x 0.5x
	Kontron	1,101.5	1,449.8	315.1	2.4x	1,607.0	131.6	8.2%	1.3	9.4x	11.0x 0.9x
	Cancom	1,099.0	1,126.9	26.4	0.2x	1,836.4	115.8	6.3%	1.2	19.0x	9.7x 0.6x
	Econocom Group	382.6	724.9	257.0	1.8x	2,914.3	144.3	5.0%	0.3	4.4x	5.0x 0.2x
	Dustin Group	372.3	644.1	261.7	3.2x	2,048.8	81.2	4.0%	0.0	8.5x	7.9x 0.3x
Median				\$261.7	1.7x	\$3,108.8	\$170.8	6.3%	\$1.3	15.8x	9.7x 0.6x
Mean				\$809.3	1.7x	\$6,272.1	\$464.1	6.4%	\$2.7	14.5x	10.5x 0.7x
IT Distribution	Arrow Electronics	\$7,032.6	\$10,725.9	\$3,622.6	2.4x	\$29,673.3	\$1,513.9	5.1%	\$10.6	11.3x	7.1x 0.4x
	Avnet	4,785.4	7,601.7	2,588.4	2.4x	23,757.1	1,091.9	4.6%	5.4	12.1x	7.0x 0.3x
	ALSO Holding	3,930.7	3,473.9	(430.8)	N/M	10,082.3	255.0	2.5%	9.9	21.9x	13.6x 0.3x
	ASBISc Enterprises	291.8	499.7	198.3	1.8x	3,024.2	107.5	3.6%	0.8	4.6x	4.7x 0.2x
	AB	416.1	458.7	40.7	0.5x	3,838.4	77.8	2.0%	2.7	9.3x	5.9x 0.1x
Median				\$198.3	2.1x	\$10,082.3	\$255.0	3.6%	\$5.4	11.3x	7.0x 0.3x
Mean				\$1,203.8	1.8x	\$14,075.1	\$609.2	3.6%	\$5.9	11.9x	7.6x 0.3x
Overall Median				\$259.4	1.8x	\$5,322.5	\$212.9	5.0%	\$2.1	12.9x	9.0x 0.4x
Overall Mean				\$950.2	1.7x	\$9,058.9	\$515.9	5.4%	\$3.8	13.5x	9.5x 0.6x

Source: S&P Capital IQ.

Note: Data as of September 30, 2024.

Trading multiples are based on share price, other market data, and broker consensus future revenue and earnings estimates from S&P Capital IQ as of September 30, 2024.

Public Company Valuations Comparables (2024E)

Circular Tech: ITAM/ITAD and IT Distribution Companies

(\$ in Millions, Except Per-Share Prices)

		Net Debt/2023 EBITDA	EV/Revenue		EV/EBITDA		P/E		2022-24E CAGR		EBITDA Margin		Forward P/E	
			2023	2024E	2023	2024E	2023	2024E	Revenue	EBITDA	2023	2024E	2023	2024E
As of 9/30/24														
ITAM/ITAD	CDW Corporation	2.6x	1.7x	1.7x	17.1x	16.5x	27.9x	22.7x	(5.0%)	0.8%	9.8%	10.1%	21.8x	21.3x
	Insight Enterprises	1.8x	0.9x	0.8x	15.3x	13.2x	28.5x	20.1x	(5.1%)	9.9%	5.7%	6.4%	20.0x	19.2x
	Bechtle	0.6x	0.8x	0.8x	10.9x	10.5x	19.2x	19.2x	5.9%	7.9%	7.7%	7.8%	19.0x	19.3x
	Computacenter	N/M	0.4x	0.4x	7.6x	7.0x	15.0x	14.3x	7.0%	5.4%	4.8%	5.1%	14.6x	14.0x
	Atea	0.9x	0.5x	0.5x	8.8x	8.5x	18.4x	17.6x	0.0%	3.8%	5.3%	5.7%	14.9x	16.0x
	Kontron	2.8x	1.0x	0.7x	13.0x	7.3x	14.1x	10.8x	33.7%	76.3%	8.0%	9.5%	12.3x	9.5x
	Cancom	0.3x	0.7x	0.6x	11.1x	7.7x	27.6x	20.3x	19.3%	34.1%	6.0%	7.4%	20.9x	19.3x
	Econocom Group	1.7x	0.2x	0.2x	4.8x	4.1x	6.0x	4.4x	7.1%	14.3%	5.1%	5.6%	4.1x	4.5x
	Dustin Group	3.0x	0.3x	0.3x	7.5x	7.3x	6.9x	8.4x	(3.4%)	(4.3%)	4.0%	4.1%	2.1x	8.7x
Median		1.8x	0.7x	0.6x	10.9x	7.7x	18.4x	17.6x	5.9%	7.9%	5.7%	6.4%	14.9x	16.0x
Mean		1.7x	0.7x	0.7x	10.7x	9.1x	18.2x	15.3x	6.6%	16.5%	6.3%	6.9%	14.4x	14.6x
IT Distribution	Arrow Electronics	1.9x	0.3x	0.4x	5.8x	8.9x	8.4x	12.4x	(13.5%)	(28.4%)	5.6%	4.3%	9.8x	11.3x
	Avnet	2.2x	0.3x	0.3x	6.0x	9.1x	7.5x	13.0x	(8.3%)	(22.3%)	4.9%	3.8%	9.5x	12.1x
	ALSO Holding	N/M	0.3x	0.3x	12.3x	11.1x	28.8x	24.0x	0.3%	5.1%	2.6%	2.5%	22.3x	22.3x
	ASBISc Enterprises	1.7x	0.2x	0.3x	4.2x	7.4x	5.5x	4.8x	(14.4%)	(23.4%)	3.9%	3.4%	3.3x	4.6x
	AB	0.6x	0.1x	0.1x	6.2x	5.7x	10.8x	9.1x	6.8%	13.7%	1.9%	2.0%	N/A	9.5x
Median		1.8x	0.3x	0.3x	6.0x	8.9x	8.4x	12.4x	(8.3%)	(22.3%)	3.9%	3.4%	9.6x	11.3x
Mean		1.6x	0.2x	0.3x	6.9x	8.4x	12.2x	12.7x	(5.8%)	(11.1%)	3.8%	3.2%	11.2x	12.0x
Overall Median		1.8x	0.3x	0.4x	8.2x	8.1x	14.6x	13.6x	0.2%	5.3%	5.2%	5.3%	14.6x	13.0x
Overall Mean		1.7x	0.5x	0.5x	9.3x	8.9x	16.0x	14.4x	2.2%	6.6%	5.4%	5.6%	13.4x	13.7x

Source: S&P Capital IQ.

Note: Data as of September 30, 2024.

Trading multiples are based on share price, other market data, and broker consensus future revenue and earnings estimates from S&P Capital IQ as of September 30, 2024.



Latest Business Performance and Market Updates

Slightly Pessimistic to Resilient Top-Line Growth Contradicted by Price Pressure for the New IT Devices Market



ATEIA

"Gross sales came in at NOK 14.7bn, 2% above company collected cons at NOK 14.4bn. (ABGSCe ~NOK 14.8bn). This corresponds to a flat sales development y-o-y. Hardware gross sales declined by 8% y-o-y (driven by networking), software was up 8% (ABGSCe 14%) and Services was up 2% (ABGSCe 0%). The gross profit was NOK 2,642m, in-line with Infront consensus at NOK 2,651m. Atea keeps its outlook unchanged saying that it expects revenue growth to return to a higher rate during the remainder of 2024. We expect cons to lower '24 EBIT by 7-9%, and 3-4% for '25e."

July 2024



"Q3 started with a strong July and was followed by a weaker August. This was expected as the previous year included a sizeable order from the public sector. Month-to-date, September is delivering a positive performance. [...] M&A will remain a central part of corporate strategy. They already helped Bechtle to expand their footprint in countries such as Italy and Spain. By increasing the headcount and gaining new competencies, Bechtle increases their chances to win bigger orders in these markets."

September 2024



"We have made an encouraging start to Q3 and, consistent with our July trading update, we expect stronger momentum in 2H underpinned by the size of our committed product backlog and wider pipeline of opportunities. While we are mindful of the backdrop of continuing geopolitical and macro uncertainty across our markets we continue to expect to make progress in FY24 as a whole on a constant currency basis. [...] Longer-term upside could be driven by further successful expansion in the U.S. combined with ongoing profit progression within Computacenter's European operations."

September 2024



"CDW's performance is affected by softness across the Corporate, Small Business and Public segments businesses. In the second quarter, revenues fell 3.6% year over year to \$5.4 billion. Uncertain macroeconomic backdrop and complex technological transitions are driving cautious customer spending behavior. Hardware sales fell 5% owing to a slowdown in netcomm and collaboration hardware. However, strength in security and cloud solutions boosted services revenues by 6%. It continues to expect to beat the U.S. IT market growth by 200-300 basis points on a constant currency basis in 2024."






























































September 2024



Key Transaction Multiples

Circular Tech: ITAM/ITAD

ITAM/ITAD

Date	Sep-24	Jun-24	Apr-24	Jan-24	Jan-24	Nov-23	Nov-23	Sep-23	Jun-23	Apr-23	Feb-23	Dec-22	Nov-22
EV (USDM)	n/a	n/d	56	n/d	n/d	n/d	205	n/d	n/d	n/d	n/a	n/d	n/d
EBITDA (USDM)	n/a	n/d	9	n/d	n/d	n/d	27	n/d	n/d	n/d	n/a	n/d	n/d
EBITDA Margin (%)	n/a	n/d	n/a	n/d	n/d	n/d	27%	n/d	n/d	n/d	n/a	n/d	n/d
<div>■ EV/EBITDA</div> <div>EV/EBITDA Median: 10.4x</div>													
	n/a	n/d	6.2x	n/d	n/d	n/d	7.6x	n/d	n/d	n/d	6.4x	n/d	n/d
Target													
Target Country													
Target Description	Provider of data disposition services	Provider of rental services for mobile devices	Provider of IT/tech lifecycle management solutions and services	Provider of specialized asset recovery services	Provider of educational technology devices through DaaS offering	Provider of IT/tech lifecycle management solutions and services	Provider of IT/tech recycling services	Refurbisher and online marketer of Apple products	Full circular tech provider of sourcing, financing, and refurbishment solutions	Provider of telecom asset management and asset disposal services	Provider of IT/tech products trade-in services	Supplier of refurbished and used IT/tech hardware intended for data centers	Provider of IT/tech lifecycle management solutions
Acquirer													
Acquirer Country													
Houlihan Lokey Transactions													

























































Sources: S&P Capital IQ, Mergermarket, and PitchBook Data as of September 30, 2024. All EV and EBITDA values were sourced in EUR and, for presentation purposes, converted to USD using the historical FX rate.

Note: Confidential Houlihan Lokey transactions are not disclosed (n/d) but are included in the median calculations and include transactions executed by Houlihan Lokey professionals while at other firms acquired by Houlihan Lokey or by professionals from a Houlihan Lokey joint venture company.

Key Transaction Multiples (cont.)

Circular Tech: ITAM/ITAD

ITAM/ITAD

Date	Feb-22	Dec-21	Jul-21	Jun-21	Apr-21	Apr-21	Oct-20	Oct-19	Aug-19	Jul-19	May-19	Sep-18	Jun-18
EV (USDM)	1,029	912	472	n/d	506	n/d	n/a	n/d	535	449	n/d	79	n/d
EBITDA (USDM)	51	76	30	n/d	34	n/d	n/a	n/d	54	35	n/d	7	n/d
EBITDA Margin (%)	n/a	n/a	16%	n/d	4%	n/d	n/a	n/d	3%	16%	n/d	30%	n/d
<div>■ EV/EBITDA</div> <div>EV/EBITDA Median: 10.4x</div>	20.2x	12.0x	15.7x	n/d	14.9x	n/d	n/a	n/d	9.9x	12.8x	n/d	11.3x	n/d
Target							Redeem Holding						
Target Country													
Target Description	Provider of IT/tech lifecycle management solutions	Provider of IT/tech lifecycle management solutions	Provider of managed services in IT, InfoSec, and multi-cloud solutions	Provider of IT assets refurbishment and replacement services	Online retailer of technology products	Operator of an online marketplace	Provider of recycling and recommerce solutions for mobile phones and tech	Provider of refurbished mobile and IT equipment	Marketer and supplier of technology products for businesses	Provider of maintenance services for computer equipment	Provider of IT hardware and digital services	Provider of technology financing services	Provider of IT services and lifecycle management services
Acquirer													
Acquirer Country													
Houlihan Lokey Transactions													


























Sources: S&P Capital IQ, Mergermarket, and PitchBook Data as of September 30, 2024. All EV and EBITDA values were sourced in EUR and, for presentation purposes, converted to USD using the historical FX rate.

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Key Transaction Multiples

Circular Tech: IT Distribution

IT Distribution

Date	Apr-22	Feb-22	Dec-20	Nov-19	Dec-18	Jul-18
EV (USDM)	229	n/d	6,683	5,081	66	n/d
EBITDA (USDM)	34	n/d	928	593	14	n/d
EBITDA Margin (%)	2%	n/d	2%	2%	1%	n/d
<div>■ EV/EBITDA</div> <div>EV/EBITDA Median: 6.5x</div>	6.5x	n/d	7.2x	8.6x	4.6x	n/d
Target	 Excelpoint®				Vicis New Investments (Former ABC Data)	
Target Country						
Target Description	Electronic components distributor that provides components, engineering design services, and supply chain management	Distributor of surplus products of laptops, desktops, servers, storage, and spare parts	Company engaged in the distribution of IT products and supply chain solutions	Distributor of IT software and hardware products and provider of logistics management and other value-added services	Distributor of IT hardware, software, and consumer electronics	Distributor of a broad range of information and communication technology equipment
Acquirer						
Acquirer Country						
Houlihan Lokey Transactions						

Sources: S&P Capital IQ, Mergermarket, and PitchBook Data as of September 30, 2024.
 Note: Confidential Houlihan Lokey transactions are not disclosed (n/d) but are included in the median calculations.

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