



**THE CIRCULAR OPPORTUNITY
HARNESSING THE POWER OF
PRODUCT-AS-A-SERVICE IN**

IT



BNP PARIBAS
LEASING SOLUTIONS

Equipment finance for a changing world

ABOUT THIS REPORT

This sector report forms part of the more detailed report, “The Circular Opportunity: Harnessing the Power of Product-as-Service”, which was commissioned by BNP Paribas and BNP Paribas Leasing Solutions. The research was conducted by Do Well Do Good, a purpose-led strategy consultancy. The report aims to contribute to advancing Product-as-a-Service (PaaS) business models, in line with the European Union’s efforts to promote the transition towards a circular economy.

The report offers an overview of the role of the PaaS in the circular economy ecosystem. It also explores two key sectors in depth, examining how agricultural equipment and green tech have responded to opportunities and challenges presented by PaaS models. These industries have been identified as core sectors for BNP Paribas Leasing Solutions due to their significant economic impact and the possibility of integrating PaaS models into their operations. Additional insights have also been gathered across four other sectors – heavy vehicles, healthcare, IT, and construction.

While researching this report, interviews were conducted with 28 industry experts across six industries, who were asked to share their comprehensive understanding of how PaaS models are transforming traditional business practices in their field.

You can access the full report and more insights into Product-as-a-Service models here.

Thank you to everyone who shared their time, knowledge, and insights:

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INTRODUCTION

Regulators in the EU, and the world over, have made their intentions clear – linear consumption models must become a thing of the past if we are to tackle the immense challenges of climate change and resource scarcity.

The EU's target to transition to a fully circular economy by 2050 sets a firm deadline, just over two decades away, to achieve seismic and systemic changes to the way we design, produce, distribute, sell, buy, use, and dispose of goods and services. This will require new laws, new technologies, new processes, and new business models. But most crucially, this transition will require a level of global collaboration, trust, partnership, and goodwill throughout the value chain and across industries and borders.

If circularity is the concept that can lead us to a more sustainable future, now we urgently need practical tools to help make progress on the ground. New financial models and operating systems that prioritize servitization will be important levers that enable organizations to adopt the principles of a circular economy in practice.

Product-as-a-Service (PaaS) models support a shift away from purchasing products outright to buying the services, value, and benefits products provide. This has the potential to reduce the demand on natural resources, by laying the foundations for producers to take responsibility for assets throughout the entire product lifecycle and to retain the value of materials by keeping them in use.

Financial and contractual mechanisms, such as leasing, are a key part of the PaaS equation. Crucially, leasing can allow the use and possession of an asset to transfer between different parties, while ownership is maintained by one entity; and it encourages optimal use of assets over time.

Today, most of these circular service models are still in their infancy and all major sectors still have a long road ahead to develop mature PaaS offerings. Every part of the value chain must contribute to progressing this new, circular approach to production and consumption, and there are undoubtedly complex challenges ahead.

This mini report explores the role of PaaS in the agriculture sector. It forms part of the wider report, "The Circular Opportunity: Harnessing the Power of Product-as-a-Service". As part of this broader research, we discuss the role of service models in enabling a circular economy and the challenges and opportunities this presents for businesses.



THE PAAS OPPORTUNITY: IT

Gartner predicts global IT spending will reach \$5 trillion in 2024,^{lxviii} with demand showing no signs of slowing. But as organizations carry out digitalisation initiatives, many are also seeking to improve ESG performance. Manufacturing tech is carbon and material-intensive, and tech devices are often decommissioned before their value is fully utilized. In 2022, \$62 billion worth of recoverable natural resources were unaccounted for in global e-waste,^{lxix} much of which could have been retained through circular economy practices. PaaS models have the potential to address these issues, allowing organizations to acquire technology more sustainably and efficiently.

Trends in the tech sector

Rapid digitalisation is connecting people, businesses and cities, with technology a leading factor in productivity and profitability.

E-waste is a leading cause of environmental harm - 62 million tonnes of e-waste was produced in 2022 alone, up 82% from 2010.^{lxx}

Data security is a board-level concern for every business. Over a quarter of EU CEOs believe their company will be highly or extremely exposed to cyber risks in the next five years.^{lxxi}

The refurbished device market is predicted to double from \$12bn in 2023 to \$24.4bn in 2030,^{lxxii} with refurbished devices increasingly mandatory in public and private tenders.



Innovation in IT-as-a-service

IT manufacturers have begun setting ambitious targets to incorporate recycled components into new products. For example, Apple has announced that soon nearly all rare earths in its products will be 100% recycled.^{lxixiii} Other ICT companies have followed suit, but to achieve these targets manufacturers must consider how to set up closed loop systems that allow for the return of used devices and the recycling of their components.

PaaS models may go some way to addressing these challenges by maintaining manufacturer ownership, while usage is transferred to different parties. Manufacturers also play an important role in designing new technology with its end-of-life in mind. For example, using modular components that promote easier disassembly, repair, and recycling.

The PaaS opportunity

Sustainable lifecycle management:

PaaS models can facilitate better lifecycle management, efficient in-life management, and circular end-of-life handling. Manufacturers that offer services to refurbish returned products, could benefit from reduced waste, lower raw material costs, and easing supply chain challenges.

Market differentiation and brand loyalty:

PaaS models differentiate manufacturers and dealers from competitors and build stronger customer loyalty through integrated service offerings. Flexibility in adjusting equipment volume based on real-time needs also appeals to clients, creating new revenue opportunities mid-sales cycle.

Access to modern tech:

Using PaaS models, businesses can tailor their IT procurement to suit the needs of their workforce, without the upfront of costs of investment. Value-add services also have the potential to lower the total cost of ownership and mitigate compliance, security, and sustainability risks that are inherent with cash ownership of digital devices.

Optimal utilization and efficient:

Asset management software, often included in PaaS contracts, can track the use and health of devices, maximizing efficiency and preventing unnecessary downtime. If devices are refurbished and sold to a new user after each use, it follows that the device's useful life may be extended.

Top 3 challenges to PaaS adoption

1

Recycling infrastructure needs to scale to meet demand, and collection processes for end-of-life products can be fragmented and patchy, making it difficult to track and recover products from end-users.

2

Some manufacturers may express reluctance to sell refurbished equipment, fearing it may impact sales of new products. However, with clients increasingly requesting a share of refurbished items in public and private tenders this is changing incrementally.

3

Damaged or locked devices can be challenging to refurbish and resell. However, knowing an asset has an end-of-life value is one factor that may influence user behavior, as clients could feel more incentivized to maintain and care for the assets.



WHAT OUR EXPERTS TOLD US:

Senior Executive, ICT
Manufacturer

“Device-as-a-Service is not just about offering technology; it’s about managing the entire lifecycle of devices, from deployment to refurbishment, in a sustainable way. Refurbishment is key to our DaaS model, allowing us to extend the life of devices and offer more affordable options to customers while minimizing environmental impact. The challenge in the second-hand device market is the lack of supply, which creates a chicken-and-egg problem where demand exists but there’s not enough inventory to meet it.”

PAAS IN ACTION

BNP Paribas 3 Step IT: Scaling circular technology management across Europe.^{lxiv}

The company

BNP Paribas 3 Step IT is a joint venture between 3stepIT, a leading Nordic circular technology management provider, and BNP Paribas Leasing Solutions. Operating in France, Germany, Italy, the UK, Belgium, the Netherlands, and Spain, BNP Paribas 3 Step IT supports businesses in acquiring new digital technology and managing it during its primary life before ensuring it is securely refurbished and then sold to a second user through a network of trusted trading partners.

PaaS features

BNP Paribas 3 Step IT supports its customers in leasing IT devices over a set term and includes, as part of the contract, an asset management platform that helps businesses to manage technology more efficiently, tracking and monitoring devices during their lifetime, and ensuring their secure return at the end of the contract period. BNP Paribas 3 Step IT then securely wipes and refurbishes the decommissioned technology to be made available for re-sale, with the aim of increasing the product's utilisation over its lifetime and reducing electronic waste.

Benefits to customers

BNP Paribas 3 Step IT's offers customers an end-to-end approach to IT management, which encompasses device procurement, management, and circular end-of-life handling. Organisations can access modern technology tailored to their business needs without the upfront cost of investment, while also ensuring they embed more efficient and sustainable IT management approach from the outset. BNP Paribas 3 Step IT's asset management platform enables the efficient use of devices throughout their lifetime and their secure return at the end of the contract period. This software can potentially reduce downtime, improve device performance, and increase utilization. Devices are then securely transported for data sanitization and refurbishing, before being made available for re-sale, giving organizations the confidence that their end-of-life devices are being handled securely, sustainably, and in line with circular economy principles.

Circular impact

In this circular approach, the value of IT equipment is maximized throughout the lifecycle. When devices reach the end of their initial contract, they undergo secure refurbishment, preparing them for a second life. By extending device lifespans through secondary markets, this model not only provides affordable technology options but also reduces the carbon footprint associated with manufacturing new devices.



WHAT OUR EXPERTS TOLD US:

Carmen Ene, CEO of BNP Paribas 3 Step IT, said

“Circular technology service models support businesses to fuel growth and competitiveness with new technology, while ensuring repair and reuse are baked into the procurement process from the outset. Considering the technology’s entire lifecycle—from financing to decommissioning— will support organizations to optimize value, minimize liabilities, and lessen the negative impact of technology on the environment.”

CONCLUSION

BNP Paribas Leasing Solutions has identified the circular economy as a key business priority, and an essential part of its alignment with the European Union's Green Deal. The transition to a circular economy has a clear role in addressing the causes of climate change and resource scarcity. But crucially, we believe that it also has the potential to build resilience in our business, in our customer's businesses, and in the global economy.

Our goal is to find new financial products and services that meet our clients' needs and drive business value, while respecting the planet's limits. That's why as circular solutions emerge and mature, we see a key role for our business in supporting our partners and clients to unlock the opportunities this transition presents.

As this report explains, leasing can bring to life a crucial principle of circularity. A lease contract can act as a thread that weaves through a product's lifecycle, linking the people and organizations who manufacture, finance, distribute, sell, and use it. By connecting this circular ecosystem, products can be used more efficiently and reused by more people, increasing lifetime utilisation, retaining value, and preventing unnecessary waste.

Through our research, we have explored the financial, operational, and environmental benefits of PaaS models as practical tools that organizations can use to embed circularity into their operations. However, we believe it's equally important to highlight the challenges that exist today, in what is still a nascent and emerging sector.

The linear economy remains deeply embedded in every industry and achieving a circular economy will require a complete transformation of the way we produce, sell, buy, use, and dispose of goods, as well as systems our society has in place to enable these economic exchanges to happen.

This is the important job ahead of us all, as we work towards the EU's deadline of achieving a fully circular economy by 2050. Only through new partnerships and greater levels of collaboration will this seismic change be possible. That's why we are inviting our network to transition with us as we unlock new ideas, solutions, and partnerships that help to build a circular economy.

All research references can be found in the main report.

You can access the full report and more insights into Product-as-a-Service models [here](#).

[READ THE FULL REPORT](#)



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