

Turning the Circular Economy into Growth

Practical steps for manufacturers to build
sustainable growth, efficiency and profit.



Contents



What the Circular Economy is and why it's good news for manufacturing

The way we currently manufacture is reaching its limits.
We take resources, make products, then throw them away.
Take, make, waste. The linear economy.

It's clearly not an approach we can keep up forever, as the impact on our businesses, people and environment grows. That's why the circular economy has become such a hot topic.

However, while 93% of CEOs today claim that sustainability is important to the future of their business,¹ only 2% of sustainability programs in manufacturing effectively deliver.²

Why? Arguably because sustainability isn't seen by everyone as a value element that can win customers and markets. Many managers have retained the traditional thinking that you have to choose between sustainability targets and business targets.

So initiatives get limited resources and effort, and corner-office passion remains stuck at the top.

Yet the beautiful truth is that the two can go hand in hand. Manufacturers can reduce waste and achieve sustainable profitability by implementing Circular Economy principles in their operations.

¹ <https://www.swipeguide.com/insights/sustainable-profitability-circular-manufacturing>

² <https://www.bain.com/insights/achieving-breakthrough-results-in-sustainability/>

In this guide we will help you explore the value you can gain as a manufacturer, moving from linear economic principles to circular economics.

We'll also consider the overall value you can bring to others using this strategy. At IFS, we call this a Moment of Service; the point where everything you do comes together, culminating in positive outcomes for others.

Analysts predict that by **2029 the Circular Economy will be the only economy.**

The Circular Economy is happening.

Take a look at the following pages to see how you can embrace it, then learn more about how IFS Cloud for Manufacturing can make it happen, using state-of-the-art enterprise resource planning, asset management and service management, in one product, deployed in the Cloud or on-prem—it's your choice.

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It's not about being 'green' or being an ECO warrior –although the environmental benefits are there—it's about good business sense and fundamentally delivering more value to the bottom line.



Opportunities for growth, efficiency, and profit

Establish new revenue streams

- New by-products from recovered waste
- Repairs, remanufacture and reselling
- Servitization—sell the outcome not the product

Build more profitable relationships

- Increase your offering to existing customers
- Increase brand reputation
- Attract forward-thinking employees and investors

Drive customer loyalty

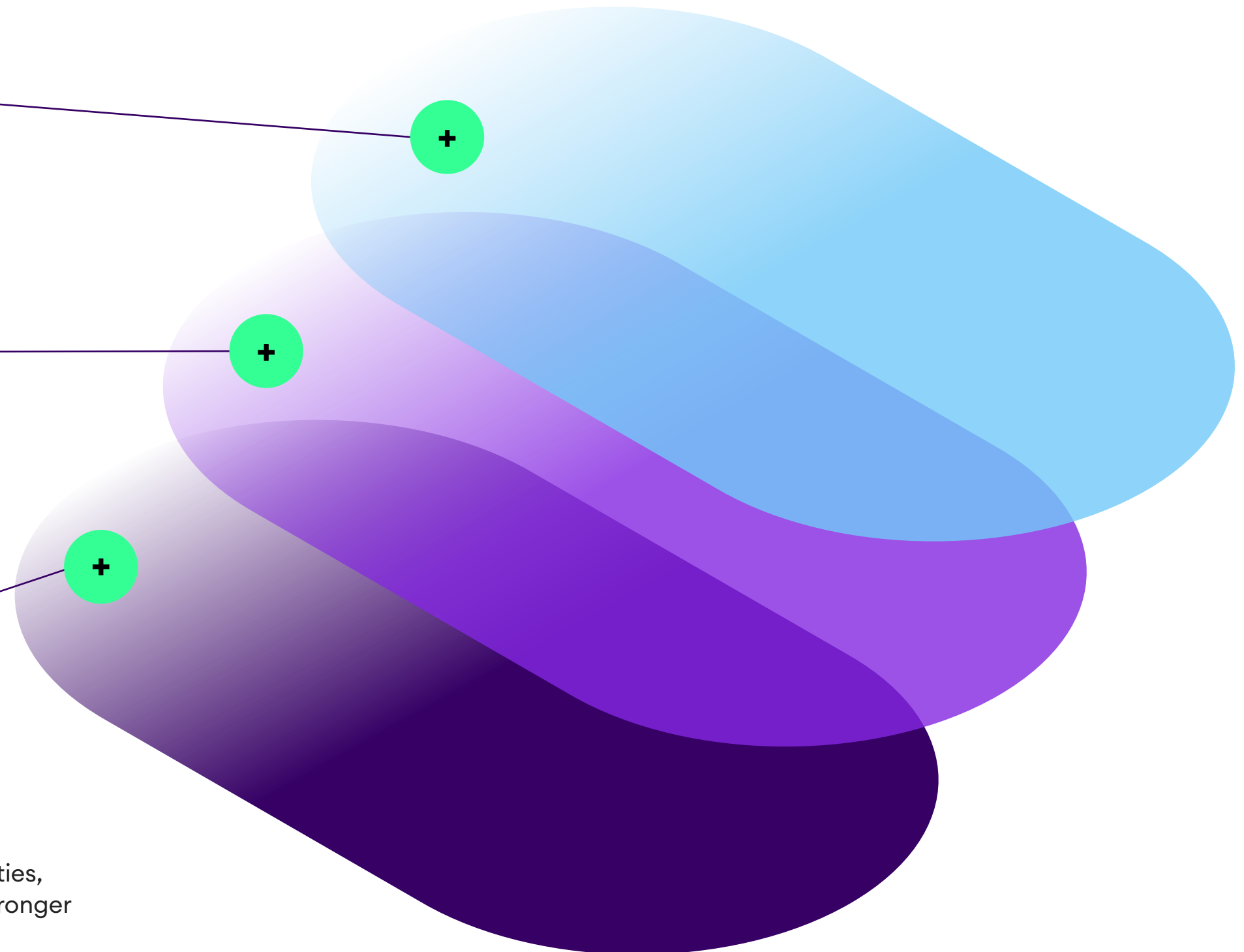
95% say that a successful repair makes them more likely to buy another product from that company.³

And as we know, acquiring new customers costs between 5 and 25 times more than keeping existing ones.⁴

³ iFixit community survey (2019)

⁴ Harvard Business Review (2014) The Value of Keeping the Right Customers

Embracing the Circular Economy can help you create new profit opportunities, reduce costs—thanks to lower virgin-material requirements, and develop stronger relationships with customers.



Think of The Waste Hierarchy

The Waste Hierarchy ranks the importance of Circular Economy practices and provides a well-ordered checklist.

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We are moving to an economy that uses things, rather than uses them up.

Reduce

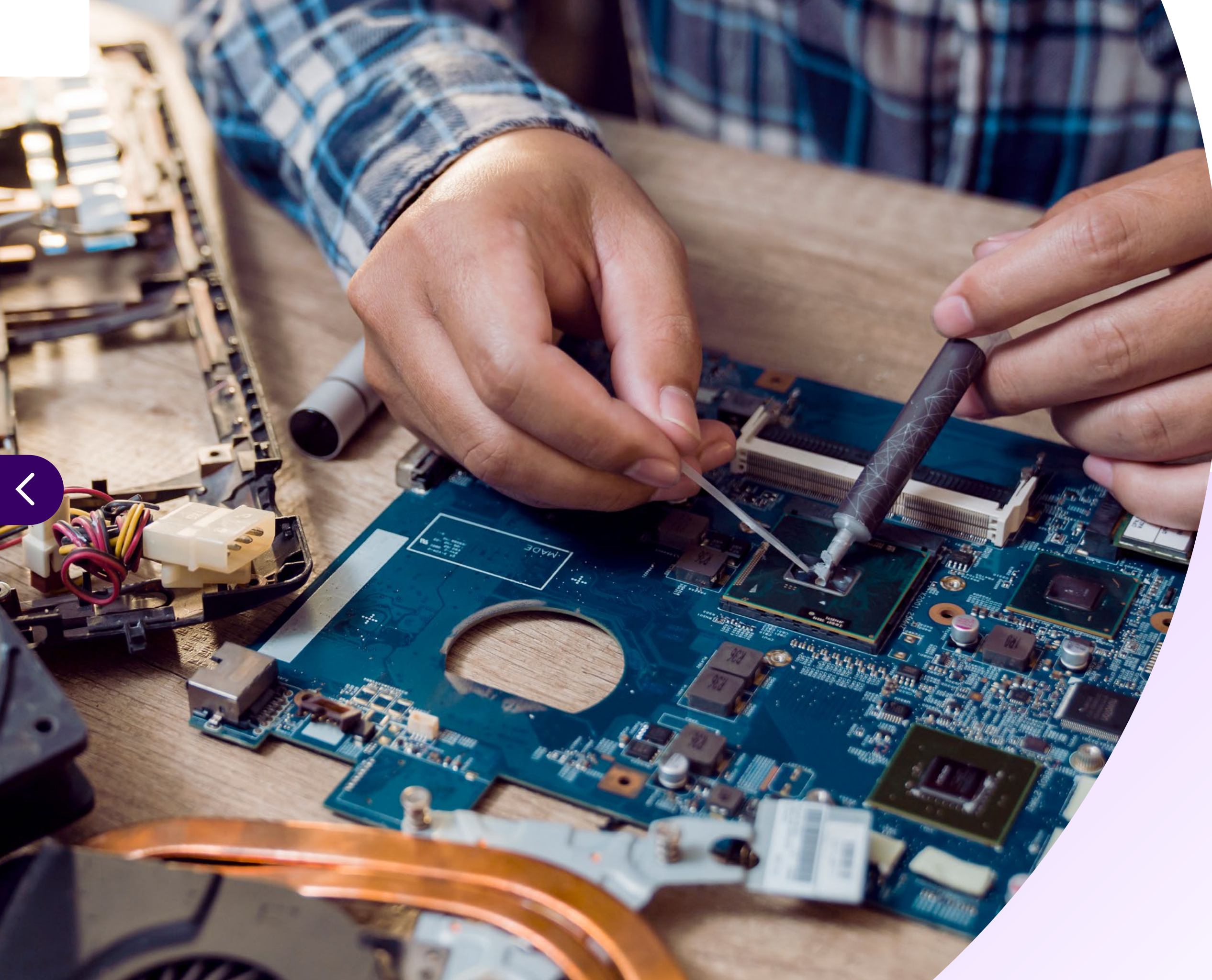
Reuse

Repair and
Remanufacturing

Recycle

Recover

Dispose



For example, one of the world's leading PC brands now produces a laptop using techniques that reduce build materials and avoids harmful substances such as mercury. It's designed for **reuse**, with standardized fasteners and no glues or adhesives, making it easy to access and disassemble. Its modular design also makes it simple to repair or **remanufacture** parts, including a removable battery. And its circuits include gold **recovered** from used electronic products.

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In 2019 alone, over 2 billion metric tons of waste was generated. If we continue at the same rate, that figure will rise to 3.40 billion by 2050—an increase of 70 percent.

Three ways to benefit

The business case for designing and manufacturing for the Circular Economy is a solid one.

01

Firstly, if a company can reclaim old products and easily reuse some or all raw materials, they will be able to massively reduce its costs.

02

Secondly, to align your brand to customer expectations. Research shows that we are growing to distrust brands when forced to throw away products that can't be upgraded or repaired. And we expect greater durability. For example, the expected life of a washing machine is 12 years, yet the actual average is just 7.⁵

⁵ Green Alliance (2016),
Better products by design

03

Thirdly, to help you adopt a servitization strategy—selling outcomes not products, where the aim is to keep a product in service for as long as possible, to deliver the best possible profitability.



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It's estimated that 65% of the manufacturing industry will switch focus from product to service-based revenues.

The Manufacturer, 2017

Powering
growth through
smarter service.

Tackling scarcity and disruption

Recent Gartner research⁶ shows that 51% of supply chain professionals expect that the focus on their circular economy strategies will increase over the next two years as a result of two main drivers. Firstly, consumers may not be willing to make big purchases, resulting in product as a service (PaaS) models becoming more attractive. Secondly, a circular economy has the potential to improve raw material security from end of life products. Chief supply chain officers (CSCOs) can use circular economy strategies to increase their organization's raw material security in times of disruption.

⁶ <https://www.gartner.com/en/newsroom/press-releases/2020-09-22-gartner-survey-finds-more-than-half-of-supply-chain-professionals-expect-a-greater-focus-on-circular-economy-strategies-over-the-next-2-years>

Circular Economy products are...

- **future proof** for endless performance and adaptability
- with **disassembly** to allow re-use
- easy **maintenance** for optimal performance
- with a modular design to **remake** products and optimized for **recycling** at end of life



Is your future in remanufacturing?

The themes discussed so far culminate in an area that will see explosive growth over the next few years: remanufacturing.

In other words, the rebuilding of a product to specifications of the original manufactured product using a combination of reused, repaired and new parts or materials.

Of course, remanufactured products usually cost less to produce than new products. The differential varies from sector-to-sector and also within product lines but, usually, a remanufactured product demands between 50% and 90% of the cost of a new product.

The bigger issue here is that to embrace this way forward, manufacturers need to become more service-led.

A tried and tested strategy

The world leader in construction equipment introduced a remanufacture department in 1972. Almost half a century later, it brings thousands of refurbished parts back into the marketplace every year. Its rebuild programs provide customers with longer-lasting equipment with product updates for a fraction of the cost of buying a new machine. While the company itself can continue to generate revenue while protecting the loyalty of its customer base.

Adopting a similar strategy can seem like a tall order, but IFS can support you at every step with a single product and a commitment to deliver a delightful experience. Our huge depth of experience in manufacturing and ability to offer best-in-class solutions make it all possible—across the product lifecycle, as well as service and customer engagement.

Transparency is the key

Transparency is the key to unlocking almost every practical aspect of circular economics, because it's all about having the data you need at each stage of a product's life—easing the path for it to be reused, repaired, remanufactured or refurbished.

For example

Imagine being able to scan a serial number on a laptop or a washing machine, then seeing:

- Exactly which components are inside
- How many items can be recovered for further use
- How many are scheduled to be remanufactured or recycled

IFS Cloud gives you a 360-degree view of your supply chain and manufacturing business, bringing you end-to-end traceability and transparency.

This level of functionality is provided as a single solution—not as separate modules, add-ons or proofs of concept that need lengthy, expensive trials.



It all culminates with a Moment of Service

A sign of circular economic success is
when you achieve a positive outcome
such as those listed here.

A moment of service...

...in chemical

manufacturing is
when you mix a
legacy paint, and
the color match
is exact.

...in finance

is when the CFO
closes the books
on time.

...in food and beverage

manufacturing is when
the customer tastes the
new product and licks
their lips.

...in fresh produce

manufacturing is
when the last pallet of
the day is loaded on
the truck.

...in life sciences

is when the FDA
auditor signs
the audit pass
certificate.

...in industrial

manufacturing is when
the prototype exceeds
expectations.

...in heavy equipment

manufacturing is when
you turn the key and
it starts.

...in high tech

manufacturing is
when your product
is easy to set up and
works, first time.

...in garment

manufacturing
is when you fulfill
a uniform order
on time.

...in automotive manufacturing

is when the part you
bought fits.

It's the future

There's no doubt that there are multiple major business benefits for manufacturing companies taking a circular approach, including:

Improved efficiency

Greater public appeal

Higher shareholder and investor approval

Better employee retention

Reduced risk of losing share to market disruptors

In fact, it's essential to maintain market value. Recent Boston Consulting Group analysis found that companies with materially higher carbon footprints are already experiencing a valuation discount in the marketplace. As a result, major names are setting ambitious goals, in some cases planning for zero net emissions.

Moreover, as we hope this guide shows, the Circular Economy presents numerous business opportunities—practical operational steps that you can take to improve your bottom line.

Those companies who still consider these trends as mostly placative 'window dressing' will put themselves at risk of being spun out of the Circular Economy.

Next steps

The Circular Economy is transforming manufacturers' operations. The need for a new model driven by sustainability means the use of technology needs to evolve. Systems and processes need to be connected to provide the right data and insights. IFS Cloud brings together state-of-the-art industry capabilities into one product, with connected data and connected processes to provide one version of the truth.

About IFS

IFS develops and delivers enterprise software for companies around the world who manufacture and distribute goods, build and maintain assets, and manage service-focused operations.

Within our single platform, our industry specific products are innately connected to a single data model and use embedded digital innovation so that our customers can be their best when it really matters to their customers—at the Moment of Service.

The industry expertise of our people and of our growing ecosystem, together with a commitment to deliver value at every single step, has made IFS a recognized leader and the most recommended supplier in our sector.

Our team of 4,000 employees every day live our values of agility, trustworthiness and collaboration in how we support our 10,000+ customers. Learn more about how our enterprise software solutions can help your business today at **ifs.com**.

#MomentOfService

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Production: twogether Creative, April, 2021.

