

The Circular Economy & Servitization: Two Trends That Will Redefine Field Service?





Revolutionizing Field Service Management with Circular Economy and Servitization Practices

As a senior field service management professional, you know that providing excellent customer service while managing costs and resources is vital to business success.

Additionally, in today's world, this also means considering the impact of your business on the environment and adopting sustainable practices wherever possible. In field service, these two overarching trends are most visible in discussions around servitization and the circular economy.

What is particularly interesting, however, is how closely these two concepts align.

Defining the Circular Economy and Servitization

While servitization and the circular economy are terms you are likely already familiar with as a field service management professional, let us take a moment to define these terms so we have a shared understanding across this paper.

The circular economy is an economic model that aims to keep resources in use for as long as possible, reducing waste and optimizing resource use.

Rather than the traditional linear take-make-dispose model, the circular economy seeks to create a closed-loop system where resources are used through repair, reuse, and recycling. This can involve designing products for repair and disassembly, encouraging consumers to repair and maintain their products, and creating new revenue streams through recycling and upcycling.

On the other hand, servitization is a business strategy that involves offering a combination of products and services to provide outcome-based solutions for customers. Instead of simply selling products, companies provide ongoing services and solutions that support their customers' needs.

This includes everything from maintenance and repair services to training, consulting, and financing. By offering services and solutions that deliver specific outcomes, companies can build stronger customer relationships, generate new revenue streams, and reduce their environmental impact.

Adopting Circular Economy and Servitization Practices

By adopting circular economy and servitization practices, field service organizations can extend the lifespan of their products, reduce waste, and generate new revenue streams through innovative business models.

Reducing Waste and Generating New Revenue Streams

For example, an industrial machinery manufacturer could implement servitization by offering machinery services and selling machinery. Rather than simply selling machines and leaving customers to maintain and repair them on their own, the manufacturer could provide ongoing maintenance and repair services and leasing or renting machinery to customers.

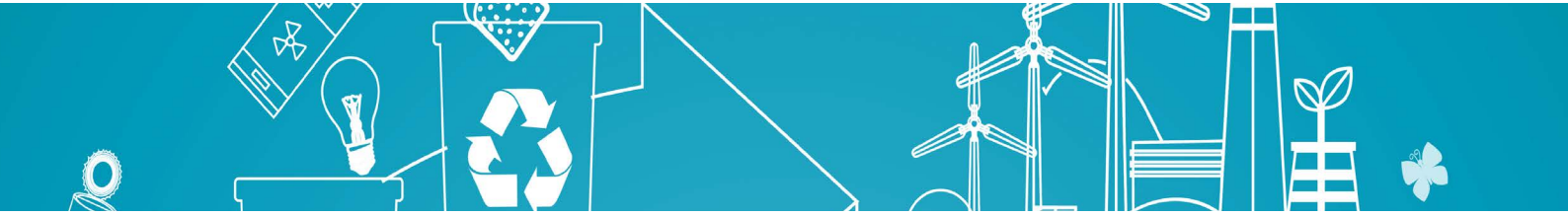
By offering these services and solutions, the manufacturer can not only reduce its environmental impact by extending the lifespan of its products but also generate new revenue streams through service contracts, leasing, and renting.

Creating More Sustainable Business Models

In addition to reducing waste and generating new revenue streams, servitization can help companies create more sustainable business models by reducing reliance on resource-intensive manufacturing processes. By shifting the focus from products to outcomes, companies can rethink their value proposition and find new ways to deliver value to customers while reducing their environmental impact.

Challenges and Opportunities for Field Service Organizations

Combining the circular economy and servitization offers exciting opportunities for field service management professionals to create more sustainable and



profitable business models. By adopting circular economy and servitization practices, companies can reduce their environmental impact, generate new revenue streams, and build stronger customer relationships.

However, there are also challenges to implementing these practices, including the need for new skills and capabilities, changes in business models, and the need for new partnerships and collaborations. Then there is the particularly thorny question of what these trends will mean for spare parts revenue, which in many cases makes up the lion's share of service revenue.

The purpose of this paper

This paper will explore the relationship between the circular economy and servitization and analyze the practical implications of these concepts for field service management professionals.

We will take a closer look at the principles of the circular economy and servitization and provide examples of companies that have successfully

implemented servitization in a circular economy context.

However, this is not a straightforward path for field service organizations, so we shall also discuss the challenges and opportunities for field service organizations to adopt circular economy and servitization practices.

By the end of this paper, we hope to give you, as a field service management professional, a better understanding of the impact of the circular economy and servitization practices on field service operations and to help you be better positioned to develop sustainable business models that benefit both their bottom line and the planet.

However, the journey for each organization is of course, different so rather than try to provide you with magic bullet answers in the conclusion, we shall instead provide you with a series of reflective questions to help you start establishing a better understanding of the how these trends will impact your field service organization and how you can begin developing practical plans to adapt.

We hope you find this paper of use on this critical topic.

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The Circular Economy and Servitization in Practice

As we saw in the previous section, the circular economy and servitization offer exciting opportunities for field service management professionals to create more sustainable and profitable business models.

In this section, we will take a closer look at how companies worldwide have implemented these concepts.

Principles of the Circular Economy in Practice

The circular economy seeks to create a closed-loop system where resources are kept in use through repair, reuse, and recycling. The circular economy can reduce waste, optimize resource use, and create new revenue streams through recycling and upcycling.

In practice, companies can adopt a variety of circular economy practices to achieve these goals.

The concept of a circular economy is not new, and the idea of an economy that aims to minimize waste and maximize the use of resources has been around since the 1960s. However, it has gained greater traction in recent years as the world has become increasingly aware of the environmental impact of our linear “take-make-dispose” economic model.

The last decade has seen a growing recognition of the need for a more sustainable economic model. The circular economy is now recognized as a critical enabler of sustainability and has been adopted by companies and governments worldwide.

Its principles are being applied across various industries, from automotive and electronics to fashion and food, to reduce waste, increase resource efficiency, and create new business opportunities.

One example of circular economy practices in action is the concept of product as a service (PaaS). PaaS involves leasing or renting products to customers rather than selling products outright.

This model incentivizes manufacturers to design durable products that can be easily maintained and repaired, as they are responsible for the products’ upkeep during the leasing period. PaaS can create new revenue streams for manufacturers while reducing waste and extending product lifetimes.

Another example of circular economy practices is the concept of closed-loop supply chains. In a closed-loop supply chain, products are designed for disassembly and recycling, with manufacturers responsible for taking back end-of-life products and recovering materials for reuse.

By doing so, companies can reduce their reliance on virgin materials and create new revenue streams through recycling and upcycling.

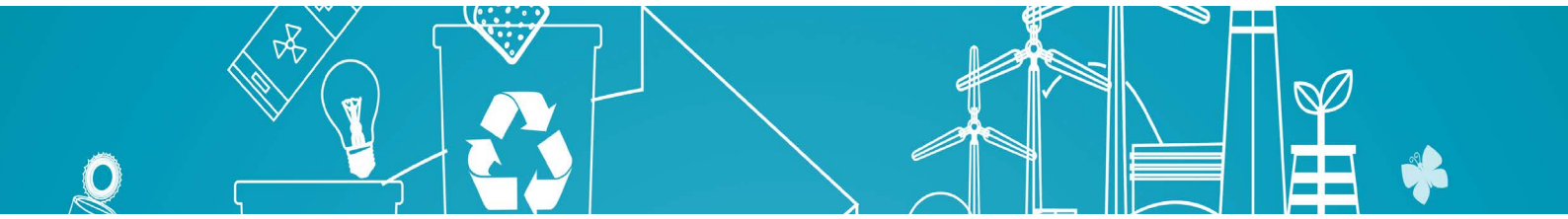
Principles of Servitization in Practice

Product as a Service (EaaS) and servitization are closely aligned, as both concepts emphasize delivering outcome-based solutions through a combination of products and services. Indeed, under some definitions, they are even used interchangeably.

PaaS provides a technology platform for companies to develop, deliver and manage these solutions, while servitization focuses on delivering the outcomes and services that support customers’ needs. These concepts offer exciting opportunities to create more sustainable and profitable business models in the field service industry.

Servitization involves offering a combination of products and services to provide outcome-based solutions for customers. By doing so, companies can build stronger customer relationships, generate new revenue streams, and reduce their environmental impact. In practice, companies can adopt a variety of servitization practices to achieve these goals.

One example of servitization practices in action is the concept of product-service systems (PSS). PSS involves offering a bundle of products and services to deliver specific customer outcomes rather than simply selling products.



This model incentivizes manufacturers to focus on delivering outcomes rather than just selling products and can create new revenue streams through ongoing service contracts.

Another example of servitization practices is the concept of outcome-based contracts. In an outcome-based contract, manufacturers are responsible for delivering specific customer outcomes, such as uptime, rather than simply providing products.

This model incentivizes manufacturers to design reliable and easy-to-maintain products, as they are responsible for ensuring the products deliver the desired outcomes.

Circular Services: Combining Circular Economy and Servitization Practices

Companies can create even more sustainable and innovative business models by combining circular economy and servitization practices.

For example, a company could offer product as a service (PaaS) with closed-loop supply chain principles, meaning the company leases durable products to customers and takes them back for recycling and upcycling at the end of their lifetimes. By doing so, the company can reduce waste, extend product lifetimes, and create new revenue streams through recycling and upcycling.

Another example of combining circular economy and servitization practices is the concept of circular services.

Circular services involve offering outcome-based services designed to promote circular economy principles, such as repair and maintenance services extending product lifespan. By doing so, companies can create new revenue streams while reducing their environmental impact.

Examples of Circular Economy and Servitization in Action

Many companies worldwide have successfully implemented circular economy and servitization practices to create more sustainable and profitable business models.

One such company is Philips, which has embraced circular economy and servitization practices in its healthcare business. Philips has shifted its focus from selling products to providing services and solutions that deliver specific outcomes for its customers, such as improved patient outcomes and reduced healthcare costs.

By offering solutions that deliver these outcomes, Philips has built stronger

customer relationships, generated new revenue streams, and reduced its environmental impact.

Another example is Caterpillar, a heavy equipment manufacturer for the construction and mining industries.

Caterpillar has implemented a range of circular economy and servitization practices, such as offering remanufactured components for its equipment and leasing equipment instead of selling it outright.

By remanufacturing components, Caterpillar has been able to extend the lifespan of its equipment and reduce the need for new raw materials. By offering equipment leasing, Caterpillar has created new revenue streams and reduced its products' environmental impact.

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These examples demonstrate the potential of circular economy and servitization practices to drive sustainability and innovation in the field service industry. We shall look in further detail at these and European carpet manufacturer Desso later in this paper.

What is evident from such examples is that by adopting these practices, field service management professionals can create more sustainable and profitable business models while delivering better outcomes for their customers and the planet.

In the next section, we'll discuss the challenges and opportunities associated with adopting a circular economy and servitization practices in field service management.



Challenges and Opportunities for Field Service Organizations to Adopt Circular Economy and Servitization Practices

As we've seen in the previous sections, adopting circular economy and servitization practices presents significant opportunities for field service organizations to create more sustainable and profitable business models.

However, it's essential also to recognize that implementing these practices presents challenges that must be addressed and overcome. In this section, we'll explore some challenges and opportunities that field service organizations may face when adopting circular economy and servitization practices.

Shifting from Reactive Maintenance to Proactive Maintenance and Product Optimization

One of the critical challenges that field service organizations may face when adopting circular economy and servitization practices is shifting their focus from reactive maintenance to proactive maintenance and product optimization.

Traditional field service models have often focused on repairing products only when they break down rather than taking a proactive approach to maintenance and optimization. However, in a circular economy model, it's essential to maximize the lifespan of products to reduce waste and optimize resource use.

Field service organizations may need to invest in new technologies, such as predictive maintenance and analytics, to take a proactive approach to maintenance and optimization. By analyzing data on product usage, performance, and wear and tear, field service organizations can identify opportunities to optimize products for longevity and sustainability, reducing the need for reactive maintenance and repair.

Indeed, while it is important to note that while moving from reactive to proactive maintenance doesn't require servitization or circular economy, it can be deemed an important step in the same direction. There is certainly, a correlation between the approaches, if not necessarily causation.

Transitioning from Selling Products to Offering Services

Another challenge that field service organizations may face when adopting circular economy and servitization practices is transitioning from selling products to offering services. This shift requires a fundamental change in business model, from one based on selling products to one based on providing ongoing services and solutions.

To make this transition successful, field service organizations may need to invest in new skills and capabilities, such as service design and service delivery. They may also need to develop new pricing models that align with a service-based model, such as offering subscription-based services or performance-based contracts.

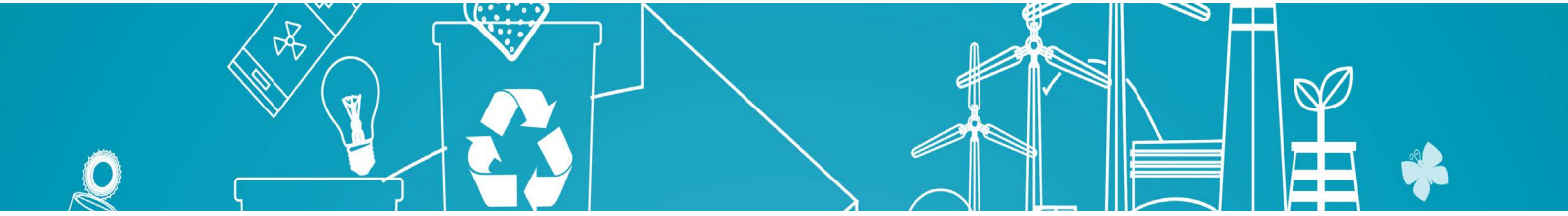
Leveraging Data and Analytics to Optimize Products for Longevity and Sustainability

Field service organizations may face challenges in leveraging data and analytics to optimize products for longevity and sustainability. While data and analytics can provide valuable insights into product usage and performance, field service organizations may lack the expertise and resources to analyze and act on this data effectively.

To overcome this challenge, field service organizations may need to invest in new technologies and partnerships to help them leverage data and analytics more effectively. This may include partnering with data analytics firms, investing in machine learning and AI capabilities, or developing in-house data analysis and optimization expertise.

Challenges and Opportunities for Field Service Organizations to Adopt Circular Economy and Servitization Practices

As we discussed in previously in this paper, servitization involves a shift towards providing services rather than simply selling products, which can create new revenue streams for companies.



However, this shift can also challenge traditional revenue streams, particularly spare parts revenue. Similarly, the circular economy, which aims to keep resources in use for as long as possible, often involves using recycled and refurbished parts rather than purchasing new parts.

This challenges field service organizations that rely on spare parts revenue to sustain their business.

According to research, spare parts can make up 70% of service revenues on average among manufacturers. However, companies can open new revenue streams and create more sustainable business models by embracing the circular economy and servitization.

To address this challenge, field service organizations can explore new revenue models that align with the circular economy and servitization principles. For example, companies can consider offering repair services and refurbishing parts to extend the lifespan of products.

Additionally, companies can explore new pricing models that incentivize customers to purchase products with longer lifespans and lower maintenance costs.

Another solution is to embrace digital technologies that enable more efficient service delivery and reduce the need for spare parts.

For example, predictive maintenance algorithms can help field service technicians detect potential issues before they become significant problems, reducing the need for costly spare parts replacements.

This can also help field service organizations shift their focus from reactive maintenance to proactive maintenance and product optimization, further extending the lifespan of products and reducing waste.

Finally, field service organizations can explore new partnerships and collaborations to support their circular economy and servitization initiatives.

By partnering with suppliers, customers, and other stakeholders, field service organizations can create closed-loop supply chains that enable the reuse and recycling of products and materials.

This can help organizations reduce waste and maximize the value of resources while also creating new revenue streams and business opportunities.

In conclusion, while the shift towards a circular economy and servitization presents significant challenges for field service organizations, it also offers tremendous opportunities for innovation and growth.

By taking a proactive approach to maintenance and optimization, transitioning from selling products to offering services, leveraging data and analytics effectively, and exploring new revenue models and partnerships, field service organizations can create more sustainable and profitable business models that benefit their bottom line and the planet.

By embracing the circular economy and servitization, field service organizations can drive significant innovation in the industry and become leaders in the transition towards a more sustainable future.

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Case Studies: Successfully Implementing Servitization in a Circular Economy Context

In this section, we will examine three case studies of companies successfully implementing servitization in a circular economy context.

By combining product and service offerings into a servitized business model, these companies have reduced waste, optimized resource use, and created more sustainable and profitable business models.

We will explore the strategies and best practices these companies have employed to achieve success and distill the lessons learned for other organizations looking to adopt circular economy and servitization practices.

Case Study One: Philips Lighting:

Philips Lighting is a company that has successfully implemented servitization in a circular economy context. The company shifted its business model from selling lighting products to offering lighting as a service. This enabled the company to keep ownership of the products and optimize them for energy efficiency and longevity, reducing waste and increasing profitability.

The product they initially sold:

Philips Lighting is a leading global lighting company specializing in producing and selling lighting products. The company has a long history of innovation in the lighting industry, and its products are used in various applications, from commercial and industrial lighting to residential lighting.

How they combined product and service into a servitized business model: In recent years, Philips Lighting has shifted its focus from selling lighting products to offering lighting as a service. Under this model, the company provides lighting solutions to customers on a subscription basis rather than selling products outright.

Customers pay a monthly fee for access to the lighting solutions, and Philips Lighting is responsible for maintaining and optimizing the lighting products.

This servitized business model enables Philips Lighting to keep ownership of the lighting products and optimize them for energy efficiency and longevity.

The company can reduce waste and increase profitability by providing customers with a more sustainable and cost-effective lighting solution.

How this fits into the circular economy philosophy:

The shift towards a servitized business model enables Philips Lighting to align with the principles of the circular economy.

By keeping ownership of the lighting products and optimizing them for energy efficiency and longevity, the company can reduce waste and maintain resources in use for as long as possible.

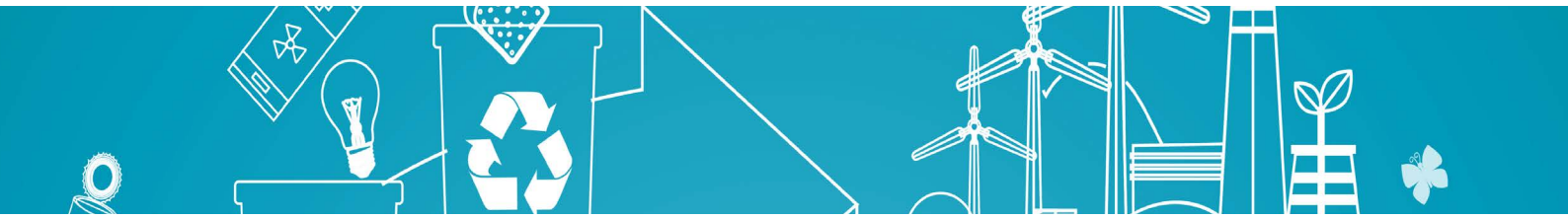
This also enables Philips Lighting to create a closed-loop system that takes back used lighting products and recycles them into new ones. The company can reduce waste and create a more sustainable business model by doing so.

Benefits to the company and its customers:

The shift towards a servitized business model has significantly benefited Philips Lighting and its customers.

This model has enabled the company to not only reduce waste but also increase profitability while creating a more sustainable business model. This model provides customers with a more cost-effective and sustainable lighting solution while reducing the need for maintenance and repair.

Overall, the shift towards a servitized business model has enabled Philips Lighting to create a more sustainable and profitable business model while also providing customers with a more cost-effective and sustainable lighting solution.



Case Study Two - Caterpillar:

Caterpillar is another company that has successfully implemented servitization in a circular economy context. The company implemented a remanufacturing program, refurbishing used products and selling them as like-new, extending the products' lifespans and reducing waste. This program is supported by a service-based model emphasizing maintenance and repair services.

The product they initially sold:

Caterpillar is a leading manufacturer of heavy equipment, engines, and power generators for various industries, including construction, mining, and agriculture. The company is known for its high-quality, durable products designed to last many years.

How they combined product and service into a servitized business model: Caterpillar implemented a remanufacturing program to extend the lifespan of its products and reduce waste.

Under this program, the company removes used products, disassembles them, and rebuilds them using new and refurbished parts. The refurbished products are then sold as like-new at a lower cost than new products.

This servitized business model is supported by a service-based model emphasizing maintenance and repair services.

Customers can purchase extended service contracts, which provide ongoing maintenance and repair services for their Caterpillar products. This helps ensure that the products are optimized for longevity and sustainability, reducing waste and resource use.

How this fits into the circular economy philosophy:

The remanufacturing program implemented by Caterpillar enables the company to align with the principles of the circular economy. By taking back used products and refurbishing them, Caterpillar can keep resources in use for as long as possible, reducing waste and maximizing the lifespan of its products.

This also enables Caterpillar to create a closed-loop system that takes back used products and recycles them into new ones. The company can reduce waste and create a more sustainable business model by doing so.

Benefits to the company and its customers:

Implementing a remanufacturing program and service-based model has

provided significant benefits to Caterpillar and its customers. This model has enabled the company to reduce waste and increase profitability while creating a more sustainable business model.

This model provides customers with a more cost-effective and sustainable solution, reducing the need for new product purchases and the associated waste.

Implementing a remanufacturing program and service-based model has enabled Caterpillar to create a more sustainable and profitable business model while providing customers with a more cost-effective and sustainable solution.

Case Study Three: Desso:

Desso is a leading European carpet manufacturer that has successfully implemented servitization in a circular economy context.

The company shifted its business model from selling carpets to offering them as a service. This enabled the company to take back used carpets and recycle them into new products, reducing waste and creating a closed-loop system.

The product they initially sold:

Desso is a leading European carpet manufacturer that produces various carpet products for commercial and residential applications. The company has a long history of innovation in the carpet industry, and its products are used in a variety of applications, from office buildings and hotels to residential homes.

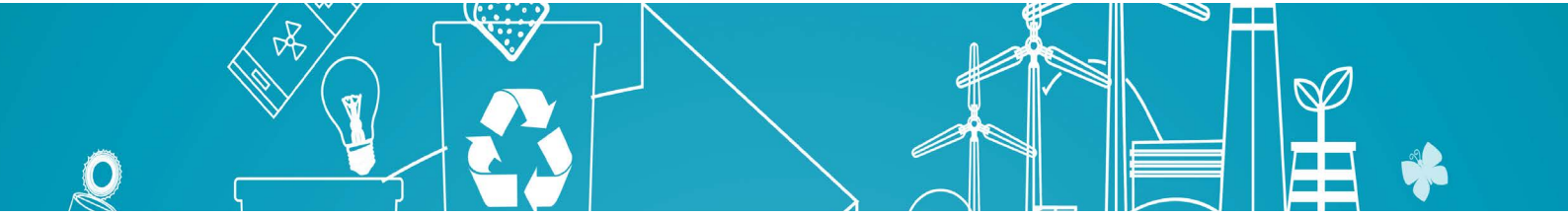
How they combined product and service into a servitized business model:

In recent years, Desso has shifted its focus from selling carpets to offering them as a service.

Under this model, the company provides carpets to customers on a subscription basis rather than selling products outright. Customers pay a monthly fee for access to the carpets, and Desso is responsible for maintaining and refurbishing the carpets.

This servitized business model enables Desso to take back used carpets and recycle them into new products, reducing waste and creating a closed-loop system.

The company can reduce its environmental impact and create a more sustainable business model by doing so.



How this fits into the circular economy philosophy:

The shift towards a servitized business model enables Desso to align with the principles of the circular economy.

By taking back used carpets and recycling them into new products, the company can keep resources in use for as long as possible, reducing waste and creating a closed-loop system.

This also enables Desso to create a more sustainable business model, as the company can reduce its environmental impact and create a more circular and sustainable product lifecycle.

Benefits to the company and to its customers:

The shift towards a servitized business model has significantly benefited Desso and its customers.

For the company, this model has enabled it to reduce waste and create a more sustainable business model while also providing new revenue streams through

the provision of services. For customers, this model offers a more sustainable and cost-effective carpet solution while reducing the need for disposal and replacement.

The shift towards a servitized business model has enabled Desso to create a more sustainable and profitable business model while also providing customers with a more cost-effective and sustainable carpet solution.

After examining case studies of the successful implementation of circular economy and servitization practices in field service organizations, it's clear that these practices offer significant benefits in sustainability, profitability, and customer satisfaction.

However, successfully implementing these practices requires a shift in mindset and business model and investment in new skills, capabilities, and technologies.

In the next section, we will explore some of the critical considerations that field service organizations must take into account when adopting circular economy and servitization practices, and provide recommendations for how to navigate these challenges.

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Conclusion and Reflective Questions: How Can Your Field Service Organisation Embrace Circular Economy and Servitization

The shift towards a circular economy and servitization presents significant opportunities for field service organizations to create more sustainable and profitable business models.

By taking a proactive approach to maintenance and optimization, transitioning from selling products to offering services, leveraging data and analytics effectively, and exploring new revenue models and digital technologies, companies can reduce waste, create closed-loop systems, and increase profitability while reducing their environmental impact.

However, this shift also poses challenges that field service organizations must be aware of and address in order to make this a success.

These challenges include shifting from reactive to proactive maintenance, transitioning to service-based models, and addressing the potential loss of traditional revenue streams such as spare parts revenue.

Overcoming these challenges will require investment in new skills, capabilities, and technologies, such as predictive maintenance algorithms, machine learning

and AI, and data analytics.

Indeed, forward looking solutions providers such as our partners on this paper, Syncron, have been working closely with their clients to support them as they embrace digital transformation.

With a sophisticated tool set that can help service organisations align planning, pricing and service, Syncron are expertly positioned to help service organisations move forward with many of the concepts we have discussed in this paper.

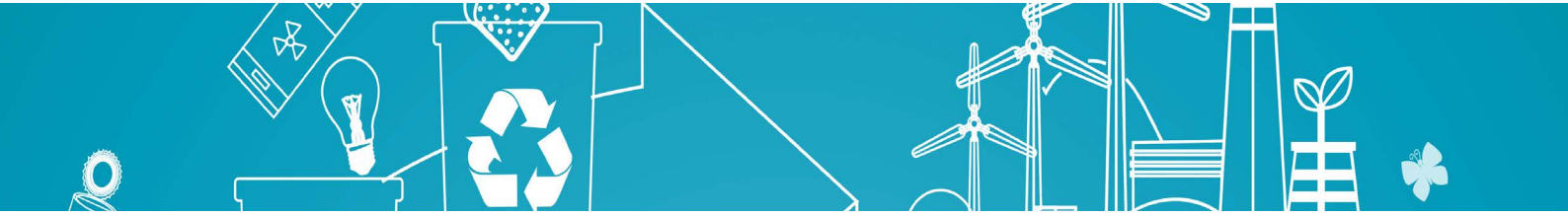
Ultimately, the benefits of the circular economy and servitization far outweigh the challenges. By adopting these principles, field service organizations can create more sustainable, profitable, and resilient business models that benefit both their bottom line and the planet.

It's up to field service management professionals to take the lead in driving this shift towards a more sustainable and profitable future for their organizations and the world.

Reflective Questions:

The following are a selection of initial questions to prompt you in your thinking as a field service management leader to move their organizations closer to embracing the circular economy and servitization, creating more sustainable and profitable business models while reducing their environmental impact.

1. How can we transition from a product-based business model to a service-based business model? What skills and capabilities do we need to develop in order to make this transition successfully?
2. How can we leverage data and analytics to optimize our products for longevity and sustainability? What technologies and partnerships do we need to invest in to make this happen?
3. How can we overcome the challenge of spare parts revenue in a circular economy and servitized business model? What new revenue models and pricing strategies can we explore to align with the principles of the circular economy and servitization?
4. How can we establish a closed-loop system for our products, in which we take back used products and recycle them into new ones? What partnerships and technologies do we need to invest in to make this happen?
5. How can we leverage technology to facilitate more efficient service delivery and reduce waste? What technologies, such as predictive maintenance algorithms and machine learning capabilities, do we need to invest in to optimize our service delivery and product lifespan?



About Synchron

As the service economy evolves, your Service Lifecycle Management (SLM) strategy needs to evolve with it. With Synchron's connected suite of SaaS solutions, you can secure a competitive advantage through exceptional aftermarket service experiences while simultaneously boosting profitability, optimizing working capital, and enhancing customer satisfaction.

Synchron CSX Cloud is an industry-leading, AI- and ML-driven platform built to help manufacturers and service organizations transform their approach to SLM. Our SmartBlox™ technology allows you to select from a range of different products.

From solution-specific options to enhancement services such as our analytics-based Insights and additional portals, you're equipped to provide a truly bespoke, targeted customer experience. SmartBlox product modules can be incrementally deployed, as your business needs dictate, to help you deliver the tools your customers need when they need them.

Additional links for further insight:

- Read more insights from Synchron and how they are helping fieldservice companies drive improvements in customer satisfaction and increasing operational efficiency [here](#)
- [Arrange a consultation](#) to find out how Synchron can help your field service business grow
- [Watch](#) Kris Oldland, Editor-in-Chief, Field Service News, Justin Konopaske, Director of Industry Solutions and Alex Brenner, Managing Director & Partner at Boston Consulting Group discuss Sustainability in Field Service

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