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Digital:
A buoy to servitization

Accelerating servitization at scale for Fortune 500 companies

White Paper

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Foreword

Companies are looking for new business models to protect their customer base and differentiate themselves as the manufacturing industry gets commoditized. Manufacturing companies are rushing to transition from selling products to solutions and outcomes to gain a competitive advantage. This is because service-based competitive advantage may be more sustainable as it's less visible, less tangible, more difficult to imitate , and frees firms from competing only on cost.

While no one size fits all, we have analyzed over 150 customer landscapes and figured the common trends, challenges, and best practices that organizations can adopt for an easier transition to the anything-as-a-service (XaaS) model. We also recommend not to view an organization through a single lens since different business units are at different maturity levels and need specific solutions to help them succeed.

We thank our customers and partners for providing their valuable inputs. We expect this white paper to help you better understand how digital enables servitization.

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Key takeaways

1. Servitization is imminent

2. One size does not fit all

3. The servitization maturity model has distinct stages

4. Digital technologies help enable servitization

Current state of the manufacturing industry and servitization

According to Richard Wise and Peter Baumgartner, traditionally, the manufacturing industry was based around three significant themes:

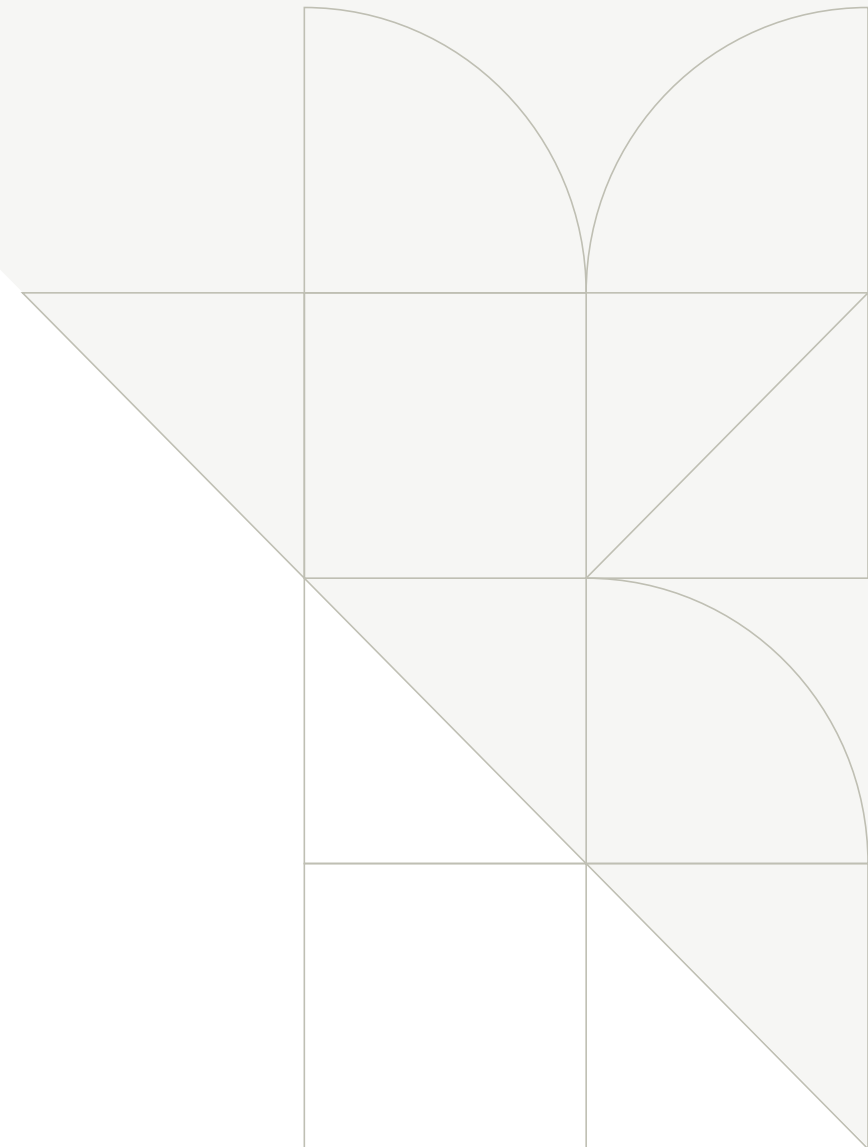- Vertical integration of supply chain

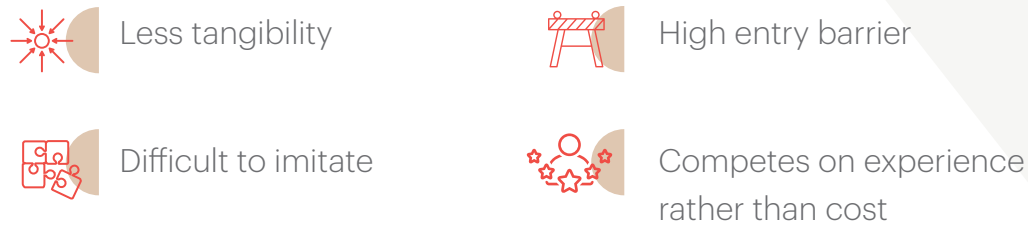- Investment in research to own products superior to the competition

- Creation of market position to strengthen economies of scale

However, when we look at the Standard & Poor's data over the years, only one in a thousand large-scale manufacturers have outperformed the S&P 500 index, creating a demand for newer business models that reshape value chains and create new revenue streams.

Manufacturing companies are moving from a product-centric to a product-as-a-service approach. Servitization promises to take the industry to new heights by bringing strategic financial benefits and addressing plateauing business growth. Signify (formerly Philips Lighting) manufactures energy-efficient lighting products and provides smart systems for its products. The company introduced "light-as-a-service" (LaaS) as an offering, allowing customers to pay for the light they use and leave equipment and maintenance costs to the manufacturer.

Some of the advantages of servitization are:

- Less tangibility
- Difficult to imitate
- High entry barrier
- Competes on experience rather than cost

Although revolutionary, servitization has particular challenges, as explained by Wanrong Zhang and Sujit Banerji of Warwick Manufacturing Group in their research paper:

- Organizational structure
- Business model
- Development process
- Customer management
- Risk management

Mature Players

Servitization Maturity Index

Full Servitization

Full-Service Provider

Value Added Manufacturer

Product Manufacturer

Early Adopter

Fig – Servitization Maturity stages

These fundamental challenges pose a risk to the value realization of the emerging business model adoption, paving the way for solutions to help mitigate them.
A significant change in the business model and mission of the firm is needed, whereby the service business serves as a growth engine for traditional manufacturing firms.
As going digital empowers businesses, we expect an ecosystem to support manufacturing companies to move to the XaaS model.
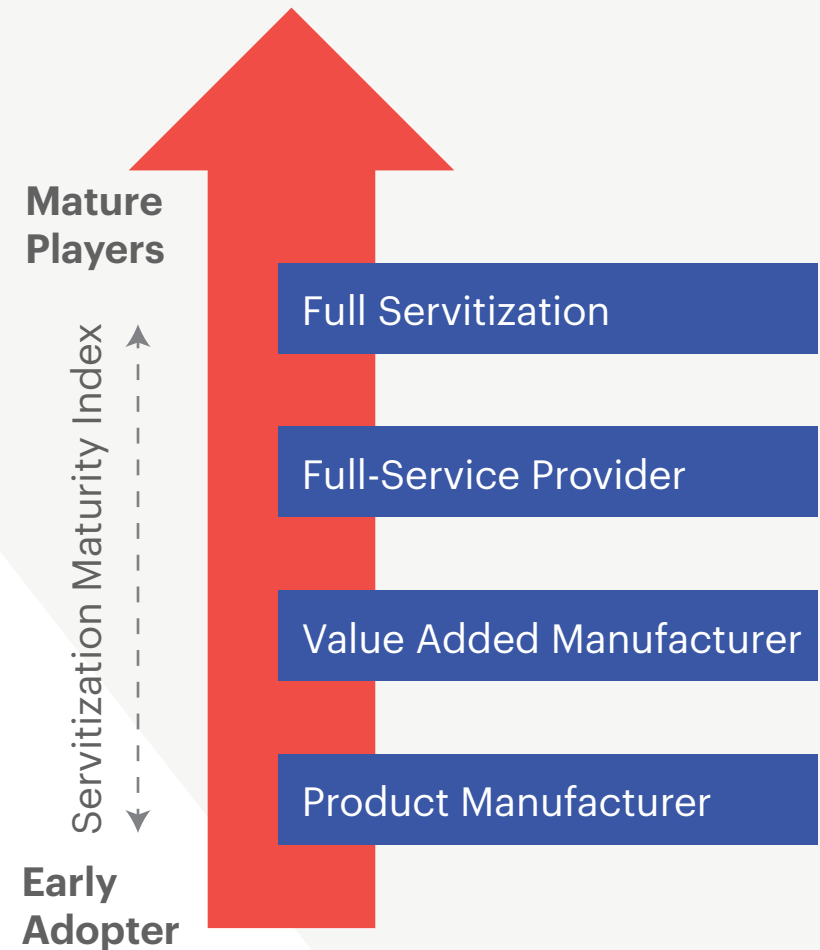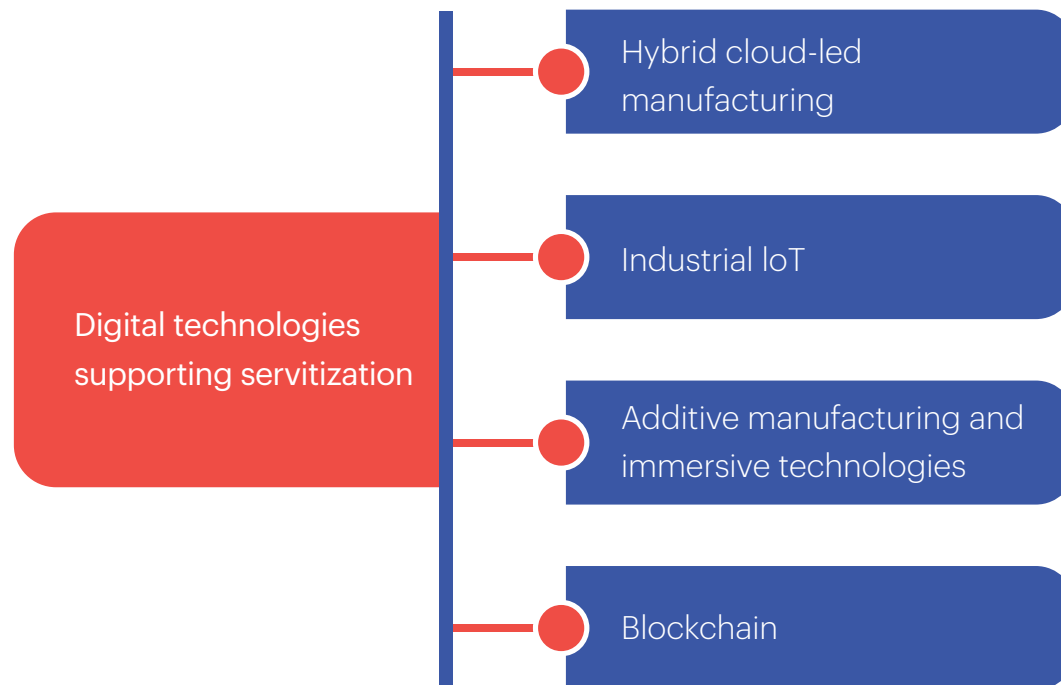
Digital technologies buoying servitization

Digital technologies have disrupted industries, revolutionizing how business is done, and servitization is no exception. Technologies such as artificial intelligence and machine learning (AI/ML), blockchain, and cloud are revolutionizing how companies adapt, thrive, and succeed with servitization. The manufacturing industry embraces advanced technologies such as AI/ML, cloud-driven manufacturing, internet of things (IoT), business management solutions, data and analytics, digital supply chain, etc., to transition from a product to a product-service model. It is altering servitization from only a concept to a winning business model.

Digital technologies supporting servitization

- Hybrid cloud-led manufacturing
- Industrial IoT
- Additive manufacturing and immersive technologies
- Blockchain

Hybrid cloud-based manufacturing

While delivering an "as-an-outcome" value proposition, hybrid or multi-cloud infrastructure is necessary. The rise of verticalized cloud solutions such as Microsoft Azure, Google Cloud Platform (GCP), and Amazon Web Services (AWS) allows provisioning the infrastructure with one click of a button, enabling accessibility and delivery of service outcomes anywhere anytime.

Industrial IoT

Industrial IoT leverages technology to connect siloed manufacturing industry segments and customer assets. It enables businesses to digitally converge their assets across the value chain, enhance mobility, and allow real-time data production. This data is then input into AI/ML-driven intelligent forecasting models to predict the future performance of the field assets. The forecast is utilized by manufacturing companies to provide just-in-time services to their clients, gaining customer confidence and retention. The data also offers experience-driven hyper-personalization while curating specialized solutions suited to clients' needs.

Blockchain

Servitization is based on the solid foundation of connected assets and processes, opening the floodgates to cyber-manipulation that may potentially cause more damage to companies. Blockchain leverages its distributed ledger technology to provide a seamless, authentic, and connected experience for managing processes across the manufacturing value chain. It enables reliability, verifiability, and transparency across each process stage.

Additive manufacturing and immersive technologies

Immersive technologies (AR/VR) and additive manufacturing, also known as 3D printing, enable manufacturing companies to produce customized and high-value parts with little effort, thereby enabling customization and preventive maintenance. Augmented reality (AR) enables an immersive experience for customers and associates. When combined with simulation technologies such as real-time digital twins, augmented reality and virtual reality (AR/VR) create scenarios needed to monitor and service the assets at client locations. With real-time data available due to IoT sensors, companies can utilize additive manufacturing to design critical components while simultaneously reducing energy consumption, enhancing product life, and outperforming SLAs.

Conclusion

Servitization in the manufacturing industry has become a boardroom discussion across geographies. It has opened new revenue streams for an industry that traditionally competes on cost and economies of scale. However, to realize value with the new business models, there is a need to change the operational mindset and technological adoption. New and emerging technologies such as hybrid cloud, AI/ML, blockchain, and additive manufacturing augment the servitization model and help the manufacturing industry realize return on investments.

References

1. Managing the transition from products to services, International Journal of Service Industry Management, vol. 14, no. 2, 160-172.

2. https://hbr.org/1999/09/go-downstream-the-new-profit-imperative-in-manufacturing

3. https://www.zensar.com/insights/blogs/servitization-next-big-business-model

4. https://pdf.sciencedirectassets.com/271714/1-s2.0-S0019850117X00072/1-s2.0-S0019850117302079/main.pdf

5. Servitization: A contemporary thematic review of four major research streams

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