





LabelBlue

Labelled Products | Scheper.Co – Engineering & Consultancy

We feel at home in a business that values quality, which is essential for monitoring our LabelBlue products. These products have distinctive characteristics and strike an appropriate balance between efficiency, conceptual thinking, new necessities and/or better alternatives.

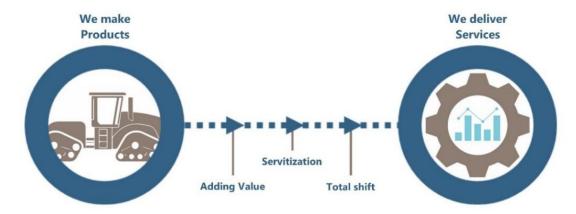




Make your Product Strategy Future Proof

Transform your daily business from 'PRODUCT MANUFACTURER' to 'INTEGRATED SOLUTION PROVIDER' with 'Products-as-a-Service'.

OEM's (Manufacturers), Asset owners and Service companies will experience a transformation in the coming years, where 'pay-for-use' will become one of the important aspects of the daily business (Product-as-a-Service). These companies gradually shifting their focus from only sales or purchases of (new) products, towards a product offering with an operational lifecycle and additional services called 'Servitization'. Here an attempt is made how to govern value-added services, or extend the lifecycle and to optimize, or to shorten it, in the context of durability, efficiency, and value²



Servitization¹ generates different opportunities between Asset owners, OEM's and Service Providers and forms an interesting economic model. Services are also sold more quickly and offer more stability, they are less susceptible to economic fluctuations.^{3,5} Because the operational- (life)cycle usually knows a long life and will contribute to the associated lifetime costs. ^{see also page 16} This method is also more sustainable and very suitable for (ad hoc) adjustments and improvements, given the exponential trend of technological developments.⁴

of Selling Products.

UPTIME per HECTARE
for highest yields,
POWER by the HOUR,

CUBIC METRES of coal MINED.

AIR by the MINUTE and



Strategic Benefits

Just-in-Time maintenance (uptime) → Maximum availability, at a lower cost, with fewer people.

Fit-for-Use (performance) → Smart integrated designs, maximum delivery, and more value.

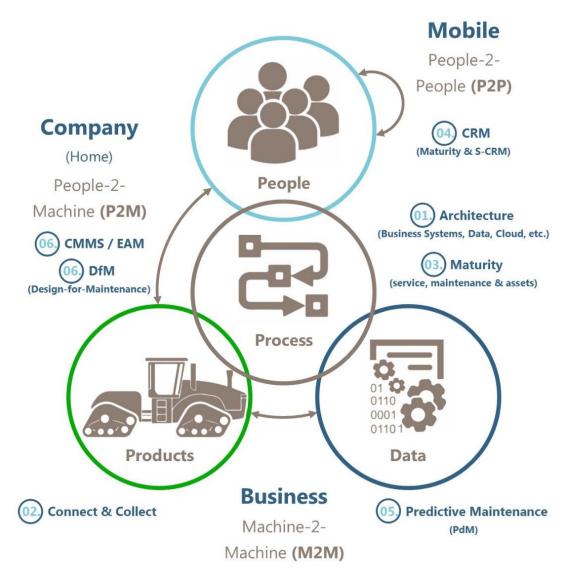
Smart-Workforce (quality) → Coordination back to basics, increasing uniformity of processes.





Bridge between 3P's

We have 6 focus areas for Servitization and offer different proven solutions for the applications 01. until 06. (see below). We see different elements in our Servitization program that switch between internal- and external processes and they all have specific requirements⁶.



Overall we focus on <u>3P's+AI</u> within this program and like to connect <u>People(P1)</u> in a way that makes more value and is more relevant. We prefer to use easy workflows and generate powerful insights from your data, and generate value that is driven by its people. For this, we align Processes(P2) by delivering the right information to the right person or machine and use the right information from the people and machines at the right moment. We Convert Data, from big data into smart data, then decision making becomes easier, and we are able to Connect Products(P3) by physical machines and objects so your products (things) become smart if this leap is still a struggle.^{7,8}



How can we execute this?

We believe in closing the gap between; people, processes, and products(data/it) '3P's'. The full profile (01. until 06.) of needed applications can be offered to start with 'Adding value' and 'Servitization' if there is nothing available yet. If you have already installed systems, we can start directly with analytics around your existing systems, and extend this with other necessary applications. By experience and field knowledge we can execute this quickly, with powerful visualizations and interactive dashboards. Resulting in business optimization, more efficiency, and new value-added services business models.

Empower your process with smart designs_

Consulting steps_

✓ Workshop

Develop a hypothesis

✓ Assessment

Engagement and Consult, AS IS and TO BE concept 3P's

✓ Canvassing the roadmap

Template with a Digital Framework (Performance and Value) A.I.

Analytics-as-a-Service steps_

After we defined the Digital framework, we can start with the Servitization journey, together with our **Digital Transformation** services, based on small increments, and if necessary supported with additional elements (mentioned above). Within this topic we need to align about; Sense, Understanding, and Act to generate the first Value and provide a powerful acceleration.

✓ Diagnostic

Find Fast or Fail Fast

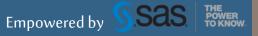
✓ Industrialize

Execute success criteria

✓ Scale

Scale analytics-as-a-Service, per unit/machine, per tag, etc.

Please, check out the following pages with the specific *Servitization Capabilities* and how we can transform this into a *Business model*. Challenge your next product that has more value, by improved reliability and increased revenues. We can offer you customized solutions and prefer the outcome-driven instead of a software-driven approach.





Transform the Servitization-journey into a business model

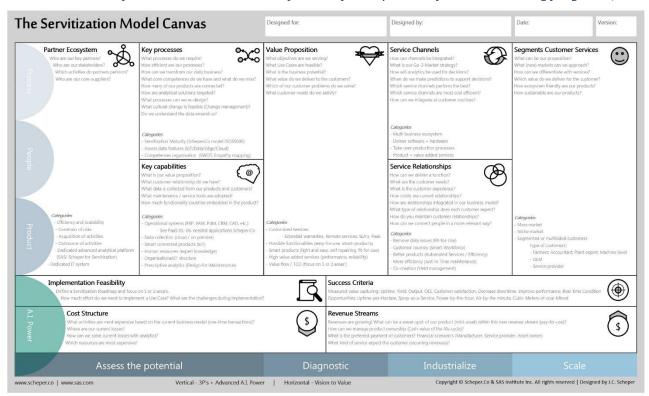
Execute the Servitization journey and turn this into a business model!^{11, 12}

The *Servitization Model Canvas* below comprise the journey, based on a one-slider. We can start with small increments or provide the ability for building a complete framework, with Advanced analytics (A.I.) and involved (Processes, People, and Products) **3P's**. The canvas provides ideas and questions, how to build new business models based on Servitization. The full framework is further supported within the above **Consulting Steps_** and **Analytics-as-a-Service steps_** see above page 4

We can plan short- or long term objectives within this journey by canvassing a specific roadmap for service bundles. We can start with an assessment of the potential for your organisation, to define the capabilities and necessary digital transformation enablers.⁹

Or we can even start with a workshop as the first attempt if companies would like to find out more about the topic from a strategic point of view.¹⁰

"A business absolutely devoted to service will have only one worry about profits, they will be embarrassingly large!" Henry Ford



Check the link for the free Canvas

Servitization Model Canvas

Scheper.Co

Check the link to find out more about 3P's+A.I.

Digital Transformation
Advanced Services

Please, find out more at the next pages about the *Key-capabilities* and *Key-processes* enablers, for the Servitization journey!



Escape the ordinary_

We can start this Servitization journey by delivering a case-by-case custom set of services and software displayed in a nutshell, supported with the most important Servitization Key-capabilities and included Key-processes in a set of the 6 stones presented below. If they are already available than we can leap with our analytical applications, that support value-added services quickly.



Key note_

Research (McKinsey - Deloitte) has shown that equipment manufactures with at least 20% of their turnover from services realize an average of 10.7% (2010-2014) more margin EBIT (earnings before interest and tax), compared to companies with a lower service share with an averaged 8,3% margin in the same period. ^{13, 14}

The average EBIT margin of product sales was 2.3% (Roland Berger study of 200 companies), while margins on spare parts, maintenance, training, consultancy know an average of 11%.

In 2018 was Ronald Berger even claiming that manufacturers are missing 55% of revenues potential in Services. 15, 16

- More profit from Services -

The average EBIT profitability (operating result after depreciation) of **services** is at many companies a **factor of 2 – 5** higher compared to only product sales¹⁷

- Increasing market value -

Outcomes from a long-lasting US research appeared that stock-listed **companies that execute Servitization** have an increasing value (large spread on results)¹⁷

- Dominate Business -

75% of manufacturing companies expect that Servitization will dominate their future¹⁷

- Servitization strategy -

Less than 30% of manufacturing companies have a Servitization strategy¹⁷

- Higher margin -

Companies that switch their business model into Servitization are reporting an **increasing** margin, between **15-35% profit from services**¹⁷

Servitization Blue - Edition A - 2020 | Scheper.Co

www.scheper.co © 2020

Page 6 - 19

- How to succeed: Strategic options for European machinery, McKinsey&Company, VDMA, June 2016
- Fabrikanten missen 55% aan omzet potentieel op het gebied van Services, Roland Berger, FD 15 December 2018
- Downturn in Production Systems, 2009, Roland Berger

 17 NIBC Whitepaper Servitization, February 2018, sources PA Consulting Group, Praetimus





Architecture

Align your software architectur vith our Best-of-Breed solution The most important thing about architectury You need to align your Data, People, Processes, and Product (Things) together with your current maturity and get the picture for the new maturity alignment.

If we know your maturity, you can align our solutions, with your hardware-enablers and current software systems and extend this winew software systems if needed.
The basic idea behind this is to share and inform information between different

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.









Architecture

Align your software architecture with our Best-of-Breed solutions

Enrich this for the

System of Systems

With connected products (things), companies can build and support complete new technology-infrastructures.²⁰ We find below a complete overview example from the technology-stack. This includes multiple layers about; product hardware, embedded software, connectivity, product cloud, security tools, gateways for external information resources and integrations with enterprise business systems.²¹

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.

Servitization LabelBlue
Product as a Service









Connect & Collect

Make your products smart and connect them to the Cloud. Ready for connected OEM's manufacture equipment that keep the world running.
But the world is changing and OEM' have to deliver beyond initial sales.

Think about earlier mentioned

- Maintenance
- Support
- Performance Guarantee (SLA)
- > Data monitoring (through the life-cycle)

Please request the White Paper with Scientific resources included by the link below,

and ears over all your equipment all the time.

Consider the timely needed information

team, insights about availability

Servitization LabelBlue
Product as a Service

Inspired? Do you want to Canvas your opportunities and possibilities?

Let's go Digital together! Get in touch, how we can help you!

a field agent. We Connect your equipment at the

cloud and transmit data securely to Contact Scheper.Co

or through Wi-Fi or a 4G network. Y

(Big)-data wherever you want.

When your equipment is connected you are able to;

- > See remote utilization and increase asset availability
- Predict problems and solve them before they occur.
- Identify many opportunities (A.I.) and improve your designs
- Make revenues with new services (Servitization)
 - o Monitoring
 - Maintenance
 - Warranty programs (SLA)
 - Parts Repair

The investment will have a fast ROI. Benefits; Improve productivity (Overall Equipment Effectiveness),





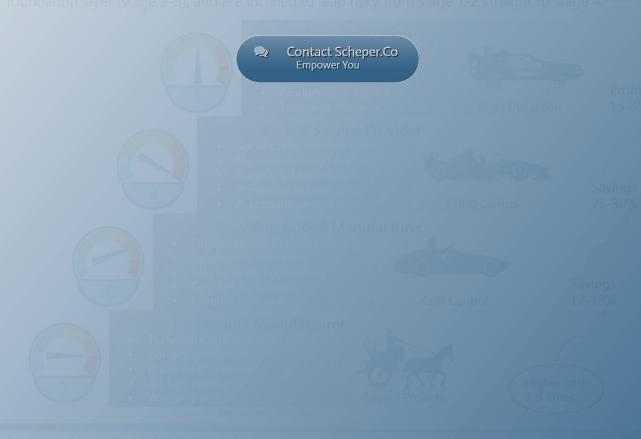
Maturity

Get a picture from your currer situation. Set your own goals know what you're planning

We don't provide a 'Spaceship' at our clients which need a more 'Sporty car' first. Of course, you can make bigger steps within Iol topics and Servitization, but the value and ROI's could be achieved earlier at a lower risk. We support Servitization with a scan that provides an overview of your 'Service, Maintenance & Assets' Maturity. This provides you many useful details and illustrates a picture for planning and linking

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.

Servitization LabelBlue
Product as a Service







CRM

Strategy and work back towards the chnology. Measure digital and physical

People-2-People. Customer loyalty, needs, and behaviour need to be monitored in an overall Customer Experience (CRM) during the complete lifecycle of products. Custom acquisition costs an average of 5 to 7 times the customer retention. However, delivering services has a much longer scope. Because the needy the added value and retention will change the relationship between companie

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.













Develop digital capacity for Social CRM

Since the connected revolution, the behaviour of customers and the needs for products are dramatically changed. Companies need to adapt their customer experience strategy by Measuring physical and digital touchpoints and map their overall Customer-journey.³¹

Some key elements for this definition are

- 1) Strategy and innovation

 Focus on future value, driven by experimentation.
- 2) Customer Decision Journey

 Understand how and why customers make decisions
- Please request the White Paper with Scientific resources included by the link below, and Check Out for more.
- 4) Organisation

 Agile, flexible, and collaborative processes.
- 5) Technology
 Scrum supporting IT technology

Servitization LabelBlue
Product as a Service

Use relevant customer analytics, tied to goals









Predictive Maintenance

Get the crystal ball in the machine of the crystal ball in the crystal ball in the machine of the crystal ball in the cry

Zero unplanned downtime! Important subjects for Servitization are about availability (uptime), performance, quality sustainability, and security. 'High-quality maintenance' is an important activator for this, which needs to be supported by a real-time *Machine-2-Machine* connection Predictive Maintenance (PdM) is a tool that needs to be integrated into your architecture and processes, to gather

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.

Servitization LabelBlue
Product as a Service







Predictive Maintenance

Get the crystal ball in the machine s

We are going for ZERO

unplanned downtime!

We offer flexible *PdM software systems* that are fitting for your product. In our opinion, it's very important, that you remain the owner of your data, at your own chosen data warehouse. This *next-generation Predictive Maintenance software* needs, No new sensors, No hardware. Just create value in a better way of analysing data. It's important to consume, supervise, *Collect*, and *Learn* any unstructured and structured

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.











EAM

How to monitor the right KPI's and get the job done? Use best-practices for product management. Get the maximum value out of your products and Design-

CMMS / EAM

(Computerized Maintenance Management System or Enterprise Asset Management). We call this Machine-2-People process. These systems handle (predictive) maintenance and asset management data and processes on multiple levels and can goperating (condition) insights. The value of

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.

Servitization LabelBlue
Product as a Service

Inspired? Do you want to Canvas your opportunities and possibilities?

Let's go Digital together! Get in touch, how we can help you!



organizes, and tracks all your maintenance activities. This CMMS is an important application, that controls Maintenance/Sevice processes, both for smaller companies and very large companies.³⁷ It's fast, better and for less CMMS software, compared to old-fashion complicated and expensive software systems. The benefits of this CMMS / EAM system is a distinctive combination between asset (fleet) management and maintenance and also supports many necessary functions:

- ➤ Lifecycle functionalities → Customized management solutions
- ➤ Advanced generated reports → User dashboards, VDM control, Maintenance insights
- ➤ Customer report generator → KPIs, OEE, SLA
- ➢ 3rd party integrations
 → API integrations, Connect, Get Updates, Integrate
- ➤ Fine interfaces → Check schedules, Plan technicians, Work Order coordination
- ➤ Easy for use → Add asset/equipment from scratch
- ➢ Offline SaaS functionality → Field Services, phone/touchpad, GPS locations
- ➤ Inventory controlling system → Tools, Inventory, Other assets, OR-codes







Please request the White Paper with Scientific resources included by the link below, and Check Out for more.

Servitization LabelBlue
Product as a Service









Design for Maintenance for an 'Installed base'?

Example

An OEM who has direct insights into the operation of 2000 connected products/machines, will get much more accurate knowledge and information about his product and end-user (asset owner) that ever before, compared to a Service provider (for this OEM) who is maybe servicing only 25 machine in a specific area. Preventive and predictive maintenance tasks and inspections must be organized, documented, and planned before functions are lost. Maintenance knowledge makes Products more efficient and eliminates the effects of (bad) services and losses within the first launch. Useful application and uniform processes are important to get control of the product lifecycle.

Please request the White Paper with Scientific resources included by the link below, and Check Out for more.



around Design Inspired? Do you want to Canvas your opportunities and possibilities?

Let's go Digital together! Get in touch, how we can help you!



Condition Indian Indian

mentioned; higher margins and more stable revenues, with increasing loyal customers. Indeed in many sectors! A product will consume 3-4 times its original purchase during operational life in terms of spares and consumables (rule of thumb)







Front-runners

Before summarizing this Whitepaper we also would like to share some practical Servitization industry examples (12). It gives a reflection about the possibilities, and there might be changes over time. By our research, we've noticed within manufacturing companies that approximately 5-10% of their clients might have an interest in Servitization offers (innovators, early adaptors)⁴⁵. Excluded are Servitization concepts provided by for example; Netflix, Starbucks, etc. who know a large bunch of clients up to 100% which are using value-added services.

studies, but more important also practical cases. Earlier we mentioned the possible savings and nervenue growth within stages, but these frontrunners and their customers already experience the

value of Please request the White Paper with Scientific resources included by the link below, g and successful examples. Based on the OSand Check Out for more.) were 12,331 useable samples of

many companies are still struggling. But we can provide them a leap within this subject!

	Servitization LabelBlue Product as a Service
Inspired? Do you want to Canvas your opportunities and possibilities? Let's go Digital together! Get in touch, how we can help you!	
	Contact Scheper.Co Empower You
	First KONE could only self elevators at a specific hotel chain. At this moment, KONE can Servitize their elevators by optimizing the movements in specific areas. ACC KONE may guarantee and verify how smoothly and conveniently movements are made. Results; Proactive identification of faults +60, Reduction in callouts -28%





We tried to explain that Servitization will rise above many internal and external stakeholders, and should become a 'state of mind' across complete company processes and cultures.

When you will integrate our focus areas, you're able to generate value-added services. Overall, your product/process becomes more sustainable and improved, and your revenue stream is growing.

This whitepaper is a brief explanation about our vision and <u>solutions</u> of Servitization starting with the 6 displayed and explained key-capabilities and key-processes (focus areas). Changing your daily business from 'Product manufacturer' to 'Integrated Solution Provider' is like a journey. Companies like Rolls Royce, Kaeser, Kone, AGCO, John Deere, CAT, Philips, and GE have already started shifting their current business from 'Product manufacturer' to 'Integrated Solution Provider'. For other (manufacturing) companies it's important to choose new ways and get more value out of their current products and think about their current delivered expertise in systems and solutions.



"DO you want to survive as a company? Doing what you're doing now, is not the right strategy"

Inspired?
We'd like to hear from you!

Website: www.scheper.co
Mail: info@scheper.co
+31-6 5555 8834





References & Use Cases_ Agrifac Machinery AGCO | Fendt | Challenger Wasse Farmax

Check out the link for more about 3P's+A.I., and Digital Transformation.



This White Paper contains many links with more background information. White Paper 2 – Servitization Blue – Edition A – 2018 (updated with latest insights in July - 2020) White Paper 1 – Technical Servitization Blue – Edition B – March 2017 (1^{st} edition)

© Scheper.Co, J.C. Scheper | 2020

This communication is intended for the use of the addressee only. You are hereby notified that any disclosure, distribution, or copying of this communication may be prohibited by law and might constitute a breach of confidence.

No part of this document may be disclosed in any matter to a third party without the prior written consent of the author Chris Scheper | info@scheper.co Neither Scheper.Co may be held liable for any inaccuracies in this publication. The stated views and forecasts simply reflect our perspectives and may be changed without notice.