

From the sale of equipment to the sale of **use** or **performance**

The story of companies that have transformed their business model

SUMMARY OF THE PROSPECTIVE STUDY - MARCH 2024



Equipment manufacturers or suppliers have since long evolved towards a logic where they focus less on the ownership of equipment than on their use and performance.

Several factors, now well known, have played a part in this evolution:

- the shift in value from equipment itself to services, where margins can be higher,
- customer demand for more added value around the equipment,
- the need to build differentiation with competitors, particularly those who produce and sell with lower labor costs.

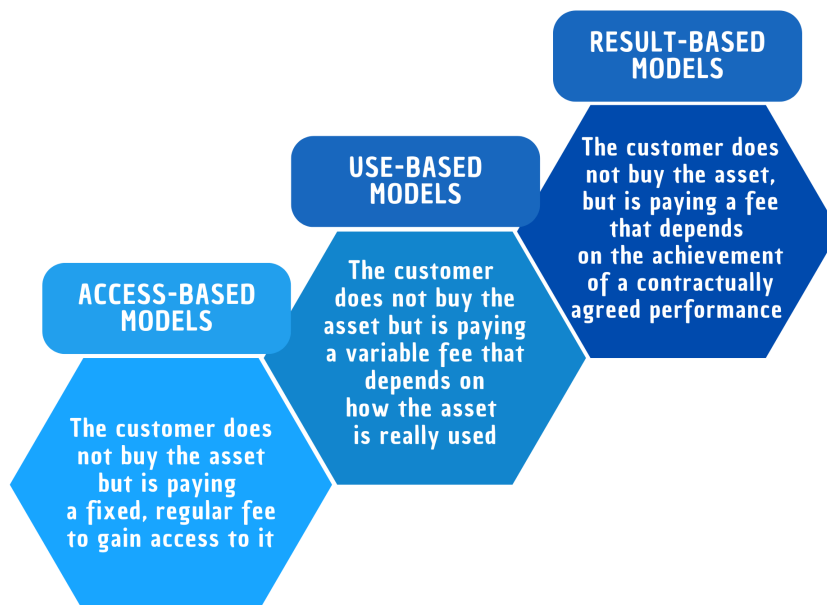
Today, **additional factors are strengthening the opportunities for selling equipment as-a-service:**

- on the one hand, the digitization of the production tool is opening the door to the sale of other associated and, above all, integrated services thanks to connectivity, augmented reality, artificial intelligence and data (on use and performance) that are collected on the equipment,
- on the other hand, customers are faced with a range of constraints (inflation, financing) that makes the acquisition of equipment more costly and difficult,
- lastly, the environmental issue is proving to be a strong incentive to switch to alternative sales models that are both efficient and circular.

There are two types of equipment-as-a-service models:

- a use-based model in which the customer is paying according to its real consumption,
- a performance-based model in which the customer is paying according to the expected result from the equipment and previously defined with the equipment manufacturer or supplier.

Equipment-as-a-service» models:
neither ownership nor rental, but use and result



Source: Extract from the typology developed by Ardolino, Marco, Federico Adrodegari, and Nicola Saccani (2015), "A structured business model typology for product-service systems in capital goods sector".

* Access-based models are rental models and are not part of the field of equipment as-a-service.

The advantages of these service models, for both the supplier and the customer, are now widely known and documented¹. However, **this trend towards selling equipment as-a-service** - also known as servitisation, or servicification - **is not developing as it deserves to** in France and other European countries. Even so, it is accelerating in new areas that are proving particularly eligible for this approach, and thanks to "companies such as Air Liquide, Schneider Electric and ZePlug that are outperforming on the B2B segment", observes Michaël Mansard, Director of Strategy (Zuora) and Director Europe (SUBSCRIBED INSTITUTE).

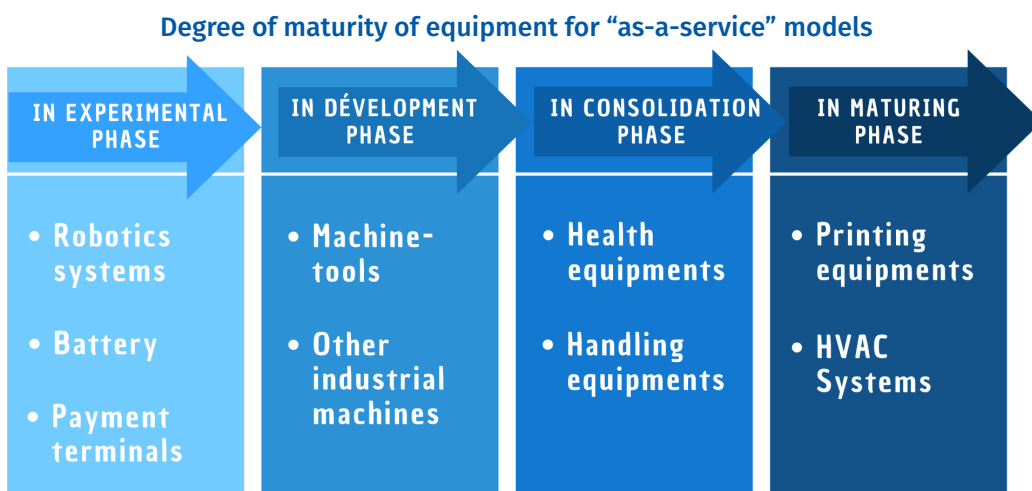
These are all situations that a Working Group of the Paris Region Chamber of Commerce and Industry, involving business managers, representatives of industrial federations, professors, and business advisors, analyzed over several months to identify the difficulties faced by companies that have innovated in this way and created greater customer value.

¹ See : Quand les produits se transforment en services - La révolution silencieuse des modèles serviciels, Chambre de commerce et d'industrie de Paris Ile-de-France, Etude prospective, Juillet 2022 & Les entreprises françaises au défi de la transformation servicielle de l'économie, Chambre de commerce et d'industrie de Paris Ile-de-France, Etude prospective, Février 2019.

1 | Recent developments in servitization

The areas in which these companies operate are relatively varied, but they do not benefit from the same maturity. We noticed that :

- **printing and HVAC² sectors** have gained a great experience and can sometimes move on to more advanced models,
- **handling equipment and healthcare equipment** are two very promising sectors,
- **machine tools and other industrial machinery** are still in need of reinforcement, despite significant expansion in Germany, for example,
- **robotic systems and batteries are in an experimental phase.**



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* Among the criteria measuring maturity, anteriority, penetration rate in various user sectors, number of businesses offering these models, number of customers, etc.

Among the user sectors, the top three are: manufacturing industries, which are the main customers, logistics and handling industries, which are faced with the challenges of massification and supply chain automation, and the construction industry.

This evolution towards servitization is taking place thanks to **equipments that share several characteristics:**

- required connectivity and/or automation,
- high removability, particularly in the use-based model,
- a standard and mature technology

Furthermore, it is easier to sell a machine “as-a-service” if it is **not at the heart of the customer’s business (‘core machine’)**. “The strategic nature of a Volvo battery makes multi-use difficult,” comments Mehdi Abidi, Lead Buyer (VOLVO GROUP PURCHASING).

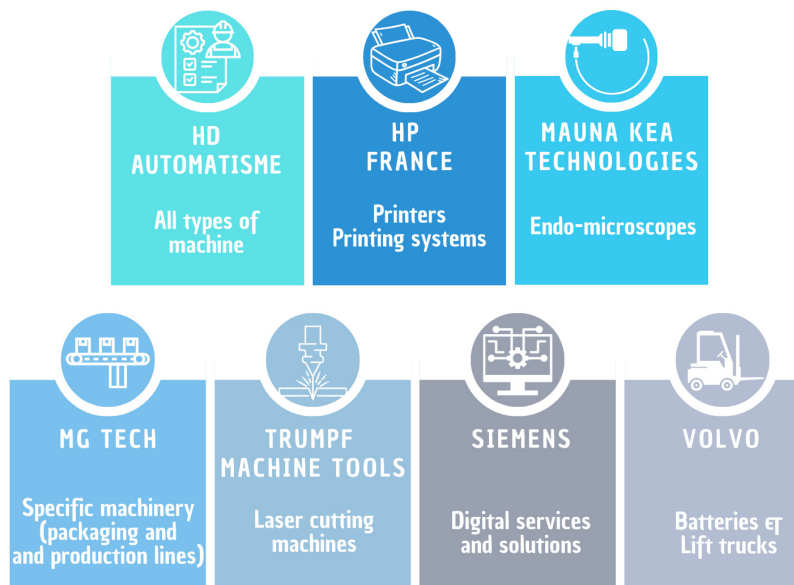
² Heating, ventilation and air-conditioning (HVAC) equipments are not covered in this study.

But it is now increasingly clear that the strategic nature of the equipment is not so much an obstacle to the adoption of these models by customers. “Businesses [customers] no longer want to have machine expenses on their balance sheet. And this may involve machines that are critical to their business. It’s less important for them to own them than to release cash for other investments”, notes Alice Bordenave, Head of Commercial Offering (SOCIÉTÉ GÉNÉRALE EQUIPMENT FINANCE). It is probably more important to be attentive to the sensitivity of an equipment through an issue like cybersecurity.

The progress of equipment-as-a-service business models is also closely linked to **market conditions**: saturated market, competition, size of customer companies, margins, (lack of) availability of manpower, customer’s operating model and regulatory constraints are all market specificities that condition postures from suppliers.

It is also important to bear in mind that **distribution networks vary considerably from one equipment to another**. Similarly, the balance of power between players (manufacturers, subcontractors, service providers and distributors) also varies greatly from one type of equipment to another. This is why the Working Group interviewed different supplier profiles. In addition, the perspective of a customer as a player encouraging a supplier’s transformation has provided a complementary perspective.

Businesses interviewed and types of equipment sold or operated



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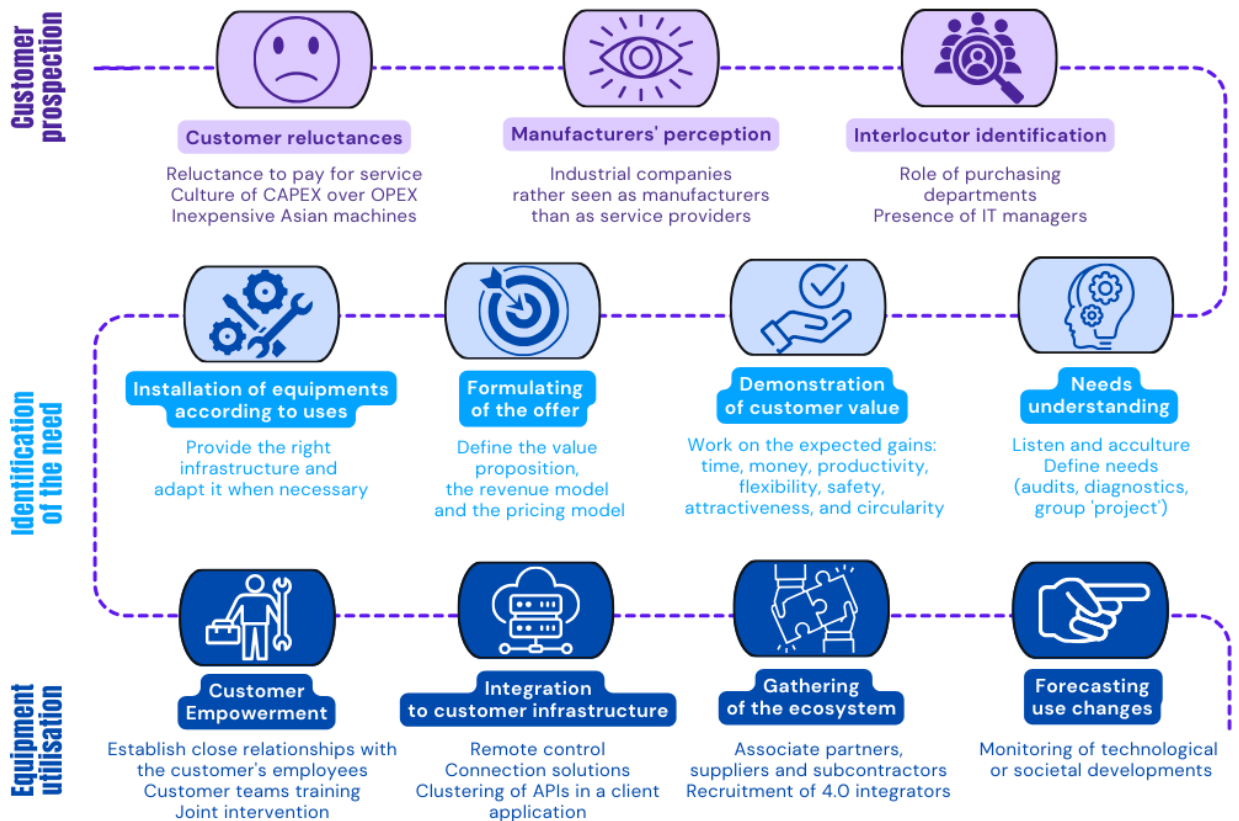
For these companies, it is also interesting to see the specific factors that have led them to switch to a use-based or performance-based model in addition to the overall factors identified above. In fact, on a supplier level, the triggering factors can be:

- historical or particular circumstances when a company is sold or bought,
- cyclical with inflation (price effect) or shortage (scarcity effect),
- structural, as a result of an innovation strategy.

2 | Difficulties experienced by the interviewed companies

The move towards these models is anything but natural. In addition, the operational implementation of the model is not straightforward. It would be an understatement to say that **the journey is not a smooth one**, despite the advantages available to equipment suppliers who decide to make the switch. What's more, the economic equation is particularly complex. Lastly, there are data and cybersecurity issues to contend with.

■ Three stages in the process with the customer are sources of difficulty



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• In the customer prospection phase

In many areas, **customers are still very reluctant**; some user sectors are absolutely unwilling to move away from the machine ownership. What's more, customers are still largely attached to the price factor: the possibility of buying low-cost equipment prevents them from taking advantage of parameters that would bring them more value. In addition, customers are still thinking in terms of capital expenditure (CAPEX). Purchasing departments are frequently still focused on CAPEX, whereas access to a machine in the form of a service would make it possible to switch to operational expenditure (OPEX). Depreciation allowance campaigns carried out during the pandemic also encouraged CAPEX expenditure.

The low digitization of industrial tools, particularly in very small and medium-sized businesses, also has a significant effect on the customer prospecting and identification stage. In the lack of a digital culture and digitized tools, it is difficult to offer a range of machine-related services. The absence of IT managers within a company will inevitably have an impact on the relationship and the value proposal from some equipment suppliers.

In addition, it is sometimes difficult to identify the right person to contact within a company, especially since the decision-making powers are different depending on the purchase thresholds. Lastly, manufacturers are not generally perceived as service providers.

- **In the phase of identifying the need and formulating the offer**

When formulating the offer to the client, it is essential for the manufacturer and/or supplier to **understand the customer's concerns**: if he doesn't want to buy a machine, does he want to buy its use or its capacity? Does he want to introduce new lines or improve productivity on an existing line? It's a question of familiarization.

"We put ourselves in the customer's position to try and produce these pieces, whereas in the past we used to think that he maybe needed some training, or a skills upgrade, if he wasn't making a good piece," explains Benedikt Braig, Head of R&D Management Services (TRUMPF MACHINE TOOLS).

This insight into the customer's problems will determine the performance indicators that are jointly defined, because the sale of "equipment as-a-service" is based on a relationship, not a transaction.

This involves co-building the offering – during the diagnostic phase – and even establishing a very close partnership, particularly in case of result-based models in which the stakeholders must agree on the performance indicators. During this phase, the supplier may need to engage its subcontractors and build an ecosystem of partners to provide the broadest offering.

Most importantly, the supplier must **demonstrate the value created for the customer**. "Making big savings is not enough. Customers want to know what's in it for them," says Régis Duboys de Lavigerie, Managing Director (AMV MECA). This issue of value innovation is even at the very heart of the story.

- **Financial gain:** reduction of costs related to a machine
- **Time savings:** reduction in breakdowns and machine downtime
- **Efficiency gains:** digitization of equipment enabling its operation and productivity to be adapted
- **Increased flexibility:** adaptations and updates to equipment, or new equipment
- **Improved safety:** equipment safety for employees
- **Environmental benefits:** reduction in CO₂ emissions, monitoring of energy and other materials during use, and life cycle extension through maintenance

• In the phase of use of equipment by the customer

Once the value proposition has been defined, the supplier must align the system with its real use. This may involve an observation or an audit phase, as printers do. "It's not because you offer it for free that the practitioner is going to use the system; you have to position the system in line with what it is actually going to be used for", explains Bruno Villaret, V.P International Sales - EMEA - APAC (MAUNA KEA TECHNOLOGIES). Once the equipment has been fitted, the supplier also must ensure that the actions are appropriate, so that there is no over- or under-utilization, or even mis-utilization, due to a failure to properly match needs. Changes in usage also need to be monitored or anticipated.

At this stage, we also need to ensure that the customer takes full control of the solution. It's a question of training/awareness, but also of collaboration and, above all, shared performance. Performance can only be achieved if all the stakeholders work together. "To co-build this solution, we involve the customer company's teams in maintenance», explains Frédéric Herduin, former Managing Director (HD AUTOMATISME).

This raises a crucial issue: the extent to which the supplier or service provider is integrated into the customer's infrastructure. "If you don't have a mechanism such as a remote-control centre to increase usage, there is no advantage", explains Benedikt Braig. This integration is often seen by customers as intrusive. The challenge for the supplier is to demonstrate the value of integration (including in environmental terms), to be pragmatic (by integrating no more than is necessary), and to ensure that the customer is given the opportunity to manage what it is particularly good at.

■ The economic model is complex but manageable

This involves the question of the business model and the revenue model, as well as the pricing model.

The first step is to find the right business model (maintenance, use, result, mix between sales and services), test it and draw lessons from it.

- For suppliers operating an output model, the risk can be great if the customer's machine does not produce parts.
- The supplier needs to determine and secure the source of revenue, and what it will pay for (depending on the source of margin and what the customer is prepared to pay).

The second step is to scale up. In these models which are designed to be relational not transactional, it's important to find the right customers and deepen the relationship with them. The stronger the service relationship becomes, the higher the customer retention is because a change will be expensive for the customer. "It's difficult to change the service provider; it's easier to change the equipment provider", observes Fabien Da Col, Print Category Director (HP FRANCE).

At this point, many suppliers are still operating on several feet, offering several models (sale and service). It is likely that more and more companies will adopt hybrid models in the future. For example, MG Tech reports that "machines sold on a contract basis account for 70% of its business. Standard machines, for which a proportion is dedicated to use, account for 30%", explains Éric Gautier, President, and CEO (MG-TECH).

A third step is to look to the longer term. When we look at the suppliers that have adopted such a model, we see that it is not necessarily the ultimate business model for them. On one hand, they are in the process of moving gradually from a pay-per-use model to a pay-for-result model. On other hand, they are largely engaged in an experimentation process that should lead them to come up with other models to help customers get more out of their services.

The question of the pricing model is also a major source of concern, as the graph below shows it.

The biggest challenges in an equipment-as-a-service model



Source : *Servitization : Manufacturers see the value in new pricing models*, Study carried by Industry Week in partnership with Conga for Endeavor Business Intelligence, 27 June 2023.

* Base: Respondents who have used a servitization model (n=92); multiple answers allowed.

The supplier must find pricing methods that reflect the value created for the customer (the study has identified different possibilities). It must also determine the price, even though it often has only a partial view of the value created for the customer.

■ Data and cybersecurity issues

Lastly, the company that adopts an equipment-as-a-service model comes up against legal and cyber-security issues that may result from internal factors, specific to its customer journey, or from external factors, or even more systemic.

On the first point, we see that **these models are very** (sometimes too much) **data intensive**. However, in some sectors (finance, health), access to the latter is regulated. In addition, the customer's consent is required to be able to collect and analyze this data. The risk of intrusion into the customer is not neutral. **This calls for a pragmatic approach** as data becomes the source of knowledge on the use and performance of machines: "The manufacturer is not there to control but to understand. The whole point of this is to have a macro vision of the client's activity," says Éric Gautier. It is also important to handle only data that are necessary for the activity.

On the second point, **risks are increasing in some sectors**, leading to a reduction in the implementation of this model. The solutions to be sought – particularly in terms of identifying vulnerabilities – involve partnerships with professionals (audits, advanced cyber-physical surveillance, digital twins, etc.) but also with institutions such as the ANSSI² in France (equipment certifications).

3 | Systemic difficulties

• The question of financing: an emerging offer

It must be acknowledged that **the supply of bank financing is still emerging**. It also varies depending on the type of financing. There is a real maturity of the leasing mechanism. This is not the case for other financial instruments.

- The offer is mature for rentals: leasing with or without purchase option (LTOP).
- It is in development on pay-per-use (PPU) on some equipments.
- It is in project on payment -per- result (PPO).

However, situations where the supplier solicits a third-party financier (bank, leasing company, insurer, etc.) are beginning to be developed by **French banks interviewed for this study**. In addition to banks, there are also players from other sectors (reinsurers, financing brokers, etc.) that can secure contracts and de-risk financing.

In this implementation, banks must be attentive to the issue of residual value (rapid obsolescence of certain equipments), the fact that customers are not the end clients/users and, therefore, the need to work with an ecosystem (bank, corporate client of the bank, user or final customer and other stakeholders).

As a result, **companies often continue to directly finance the customer**, which represents a high risk that they can pass on to others (insurance companies, reinsurance ones, etc.). In fact, the French financing ecosystem is not yet developed and mature, unlike in the German-speaking countries, where some players are completely dedicated to the financing of equipment as-a-service.

² Agence nationale de la sécurité des systèmes d'information (France).

- **The question of the industrial base: insufficient and little digitized**

The evolution towards “as-a-service models” face to **the weak industrial base in France**. In France, there are 4,000 machine manufacturers who represent €36 billion in added value and the third sector. In Germany, these manufacturers represent €136 billion in added value and are the leading sector.

In addition, **the implementation of “as-a-service” solutions is hampered by the age of the industrial park**. In France, machines have a lifespan of 17 years compared to 7 years in Germany. In such a context, manufacturers find it difficult to be productive and bring added value,” says Vincent Jauneau, Director, Digital Industries France (Siemens SAS). This old age of the machines obviously raises a problem of digital continuity.

In addition, **there is a lack of digital transformation of client companies**. “We need to modernize the industrial park before switching to servitization,” adds Vincent Jauneau. We need digitization solutions adapted to SMEs. In Germany, a more rapid evolution seems to be explained by the labelling of laboratories that are working on solutions and not on factory sites.

At last, businesses face **a skills problem to improve data analysis**.

- **The question of the imperfect sustainability of “as-a-service” models**

It is often said that these models contribute to the circular economy by increasing and sharing the use of a machine between different users. And it's true that these models extend the life of the equipment. “It is not possible to envisage the economy of use without a programmed sustainability,” says Christian Bruère, President and Founder (MOB-ION).

But above all, these are models of efficiency. They make it possible to produce more and better with fewer resources. The connectivity and digitization of equipment make it possible to closely monitor energy and material consumption.

There are three specific levers that make possible to move towards greater efficiency: maintenance, modernization, and digitization. “We focus on online updates, which allow us to update the machine's software and obtain new and improved functionalities,” says Frédéric Herduin.

These models do not aim at sufficiency in the sense of reducing production and consumption **but can contribute to it** by reducing the number of installed machines or by paying the supplier for the reduction of the client' consumption. It's not easy to build and sustain, but it's technically feasible.

In any case, this shows **the need to go further in demonstrating the sustainable value of these models which is insufficiently documented**; quantified business cases are still insufficient in the literature.

All of this ultimately raises the question of how these models can be scaled up.

- **On the supply side**, there is no doubt that the pressure for more sustainable and efficient machines, rising energy costs, volatile metal prices, labor shortages and industrial defragmentation (fewer industrial inputs per final product) will encourage the implementation of these models.
- **On the demand side**, the experience of the user, the ability of the supplier to optimize the offer of its own customers, the improvement of the comfort and safety of the equipment, etc. will be decisive.

But equipment as-a-service will only occur significantly in France under **four broader conditions**.

- If French businesses are accelerating the digitization of industrial tools (Industry 4.0).
- If the industrial base expands: to offer equipment as-a-service, equipment must be produced.
- If banks develop their offer more quickly and extend it to other equipment/services.
- If financial engineering innovation is furthered to reduce supplier risk.

“We need models that work as quickly as possible with economic indicators and not just focus on beautiful territorial experiments,” says Pierre-Emmanuel Saint-Esprit, Director of circular economy (MANUTAN).

Will all this be enough? It will largely depend on the speed at which the identified paths in this study are implemented, but also on **parameters that could change the supply of equipment and, ultimately, the face of the industry**.

In any case, it is relevant to anticipate the future of the manufacturing and equipment supply activities in the light of these transformations. Through this analysis on “as-a-service” models, we tried to **help businesses to think differently**.

Read the full study at the following address:

<https://www.cci-paris-idf.fr/fr/prospective/equipement-serviciel>

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