



JOINT STUDY

How resilient is your service and product business?

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BearingPoint®

Impressum

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Introduction

Industrial manufacturers faced and mastered several economic challenges and disruptive changes in the past. In particular, changes to business models emerge very slowly, whereas crises such as the banking crisis or covid-19 outbreak lead to significant short-term effects and are difficult to manage.

Over the past year, the world experienced an unprecedented form of disruption due to the global covid-19 pandemic. Compared to former economic crises, the implications of social distancing, lockdowns, and supply chain shortages triggered a rapid economic and societal disruption at a global scale, which impacted all sectors and levels of society.

For a holistic understanding of the impact of the current and former crises on industrial manufacturers, the Institute for Industrial Management at RWTH Aachen and BearingPoint conducted a survey as well as expert interviews to investigate the scope and type of affects for industrial manufacturers with a strong focus on service business. Based on this a framework to successfully address these new challenges and – also – opportunities was developed.

“Companies with an established range of digital services benefited not only from a general ability to support customers in the current crisis, but also from greater efficiency in their day-to-day business compared with their competitors.”

*Jana Frank,
Head of Department Service Management,
FIR at RWTH Aachen*



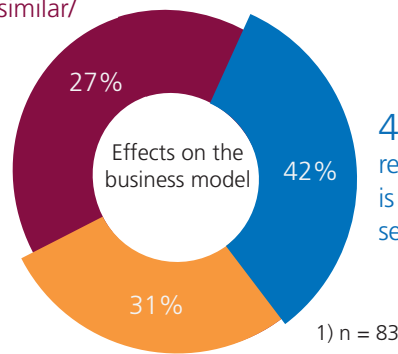
Results & Trends

Our research showed that both, the service and the product business (manufactured goods), were affected by the crisis. The majority (42 percent, see question I) recorded stronger affects in the service unit. However, the advantage of flexibility comes into its own: Only one third of the effects were negative (decrease in service demand). Another 38 percent of companies reported either an increase in service demand or were able to adapt their service portfolio or business model flexibly (see question II). This means that the effects of the crisis were both negative (lower utilization of machines result in a decreased after-sales service demand) and positive (adaptation of business models and service offerings) as illustrated in question II.

Thus, contrary to common understandings, our research showed that the crisis' affects were not all negative. It led to both, new challenges and new opportunities and revealed the strengths as well as

I) How have crises changed the strategic orientation of your company?¹⁾
One possible answer

Both very similar/
 the same

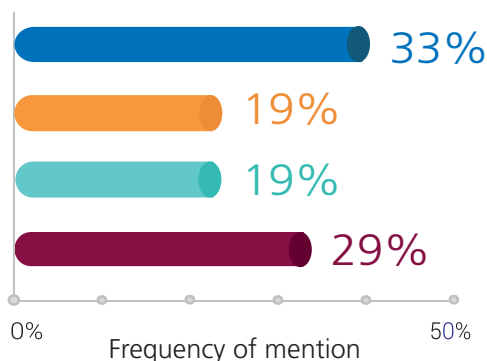


42% of the companies report that the service business is and has been affected more severely by crises.

Product business

the weaknesses of established business models. For instance, clients utilized the production downtimes for retrofitting, upgrades, and replacements of equipment, resulting in an increased service demand for companies that could react quickly.

II) How have crises affected your service business?²⁾
One possible answer



2) n = 73

One third observed a short term decrease in service demand.

19% observed even an increase of their service portfolio during or post crises.

Another 19% of the companies had to adapt their service business model due to effects of crises.

29% of the companies reported, that their service business was not affected by current or past crises at all.

“The crisis highlighted the various advantages of our long-term service contract models, amongst others better planning security and liquidity.”

*Dr.-Ing. Jan Siegers,
Head of Product Line Hardware Service,
Scheidt & Bachmann GmbH, Fare Collection Systems*



Furthermore, it becomes clear that digitalization and long-term service contracts proved as major strengths regarding the resilience of a company’s business model. The latter provided better planning security, but also reduced the administrative effort for adapting or expanding the service scope (for example the introduction of flexible hygiene solutions).

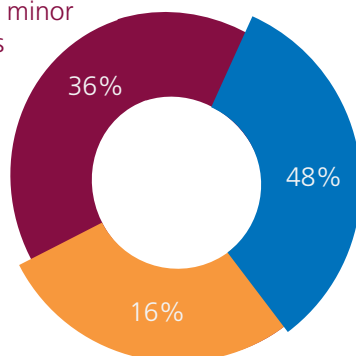
Since services are more flexible than the market of produced goods, organizations could implement these changes fast enough to respond to acute disruptions and thus minimize the negative effects of the crisis. This same flexibility also allows for a faster ramp up of services compared to the sale of machinery and equipment, once the economy begins to recover (see the

different waves during the current pandemic). This results in generally a greater ability of service business to overcome and faster recover from a crisis, as we were able to confirm during our research.

In summary, for most companies (67 percent), sales of service either remained stable, the go-to-market was adjusted, or there was even an increase in demand. Here, the service design is key for turning challenges into opportunities. In the next chapter, we will illustrate – based on selected industry examples – how three key characteristics of service can enable you to successfully overcome any disruption caused by the current or future crisis.

III) Has your service or your product business recovered faster after crisis?³⁾ *One possible answer*

No or only minor differences



Services business recovers faster more often compared to product business.

³⁾ n = 58

Product business

Service Success Factors

Digitization of process steps was and still is an option for responding quickly to changing conditions as well as a prominent option to reduce process costs. Of course, field service is strongly impaired by the social distancing measures. Customers can no longer be reached on site as usual, for example for giving approvals or signing a service job report – even in the case of mobile apps and digital service reports. But our benchmark showed that companies with an already high level of digitization, for example those with remote maintenance services and facilities for digital collaboration with stakeholders, suffered significantly fewer negative effects.

A broad study in Italy conducted during the first major lockdown supports these results and reported that more and more organizations are transforming their current service process through digitalization. The flexibility of service business not only allows for a variety of directions to pursue but also for a comparably faster transition (than for producing and selling goods).

Service models entail a great flexibility for adaption and innovation.

In addition, there were also effects on the planning of resources and tasks. Measures of planned maintenance were postponed due to stopped or reduced production activities. While some companies responded flexible to this situation to carry out major repairs or refurbishments together with their customers, others experienced a significant drop in the utilization of employees and equipment. In the current situation, where infrastructure projects and CAPEX related/intensive measures have often been halted or at least reprioritized, it was an adjacent chance to perform such service-projects under existing service contracts.

Supply & demand of services is independent from capital-intensive investments.



"In the future, innovations increasingly focus on the serviceability of products."

*Frank Duscheck,
Partner,
 BearingPoint*



Traditional asset sales cycles are typically long, and we have seen it again in this crisis that spending in machinery and equipment have been cancelled or reprioritized. In addition to the described short-term options, such as the well-known "as-a-service" business models have proven to be resilient: On the asset side, liquidity can be secured by selling of the asset to a lessor, whereas on the customer side, performance-based billing provides the basis for flexibility and closeness to the end-customer. Companies offering this business model confirmed to us that they have been able to profit accordingly with the dynamic ramp-up of supply chains and production after the lockdown.

Another positive aspect of these business models is to bring the equipment manufacturer and end-customer into an integrated and collaborative relationship. Through deep process knowledge, the supplier of the equipment-based service can often further increase the added value of a service, as well as leverage efficiency gains based on his technical expertise combined with data generated in the field.

Services create an opportunity for strong customer relationships.

"The crisis proved those companies right, that invested in digitalization initiatives. Automation and end-to-end digital service processes enabled them to manage this crisis successfully."

*Benedikt Moser,
Managing Director,
Center Smart Services*





Service Design Framework

As industry experts in industrial manufacturing branch, the Institute for Industrial Management at RWTH Aachen and BearingPoint developed a two-step approach centered around services to overcome a crisis and to develop more resilient business models. The first step focuses on the identification and implementation of short-term measures addressing the volatile market environment.

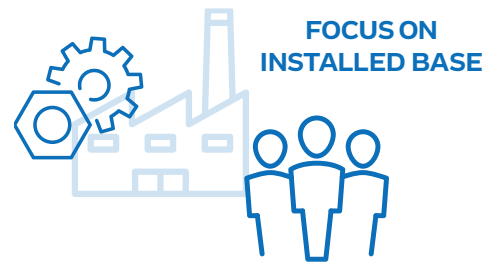
Ad-hoc crises response

The foundation for a successful business model is not the manufactured good or service itself, but rather a profound understanding of what clients needs. But as the crisis showed us, what is needed can change very quickly. On the other hand, the capabilities and resources of an organization are comparably stable. Therefore, it is crucial for the management to quickly identify the changed or new needs and how these can be met by the existing capabilities and resources with minimal adaptations. This may result in creating completely new business offerings and thus demands an entrepreneurial mindset. Compared to traditional management approaches where strategic pillars and measures are defined and planned along a roadmap to achieve a predefined vision, entrepreneurial management begins with the competencies at hand and derives adjacent business model potentials from there. The key question is no longer what needs to be done but rather what can you do and what customer needs can you meet? And thus, what services and products can you offer to your existing and potentially new client base.

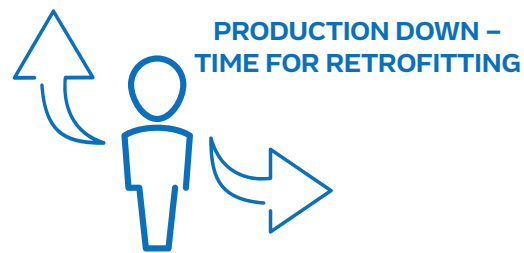
To successfully answer the latter questions, an assessment approach based on the logic of selected entrepreneurial principles was developed.

The entrepreneurial principles:

1. Identify your means and strengths – What client needs are you able to meet?



2. Leverage contingencies – View your client's challenges as your opportunities.



3. Form partnerships – View your complete network as new potential partners.



4. Focus on what one can control – Instead of predicting a post-crisis world, shape it with the ideas you develop during the crisis step by step.

INNOVATION STEP-BY-STEP



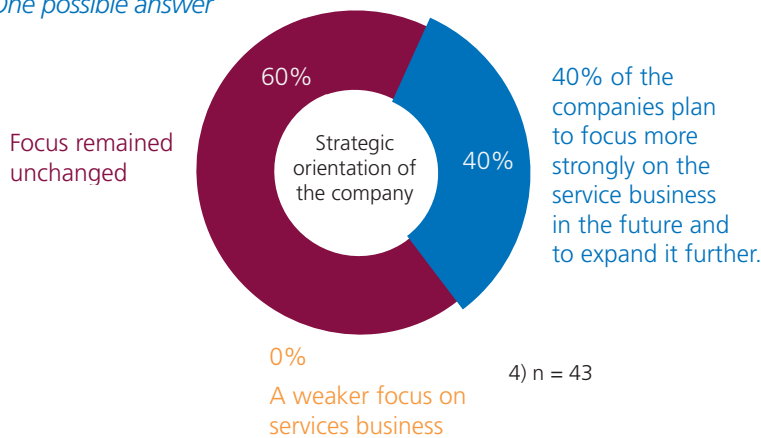
Building sustainable resilience

The second long-term approach will create sustainable resilience for your organization by putting the service unit at the core of your business strategy. Furthermore, since this crisis has put a strong focus on the digitalization measures, we summarize the core aspects of our perception: Companies in the machinery and plant manufacturing sector are too hesitant trying out new service business models. Only around 40 percent of companies are focusing on the shift to business models with the benefits of flexibility and recurring revenues. Asked specifically about digitization initiatives, half of the companies surveyed reported that they recognize the focus must be on "servitization". However, seeing the overall picture it is also clear in this respect that, in addition to strategic prioritization, there is a lack of concrete planning on dependencies and measures.

In summary, a well-designed service portfolio can strengthen your organizations resilience and can furthermore increase your organizations long-term success. But these promising effects are only possible if services become a central aspect of the overall company business model. Recent studies showed that service offerings must account for at least 20 to 30 percent of revenue for the described resilience and success factors. At this level, an organization usually offers not only basic after-sales services, like maintenance and spare part sales, but has a strategic portfolio including specialized and customized services to generate additional value for their customers as well as for themselves. Based on our observation, we now see companies with around 50 percent share of service business, which are managing the effects of the current crises better than their industry peers. This strategic perspective on the service portfolio is key when it shall serve as resilience and long-term success factor.

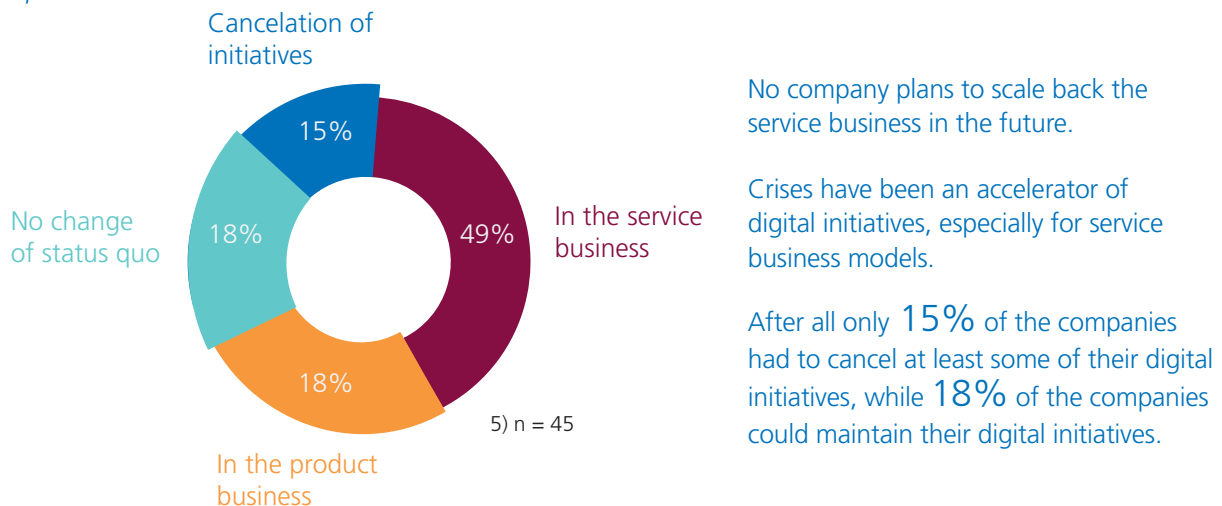
IV) How have crises changed the strategic orientation of your company?⁴⁾

One possible answer



V) In which business have crises led to an increase in digital initiatives?⁵⁾

One possible answer



We are happy to support you with these challenges

BearingPoint, as a management and technology consultancy, and the Institute for Industrial Management at RWTH Aachen combine a holistic understanding of technical solutions and the successful implementation of service business models.

We are happy to support you in developing an innovative product concept focused on customer value, creation of a roadmap for execution or kicking off an MVP.

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BearingPoint

BearingPoint is an independent management and technology consultancy with European roots and a global reach. The company operates in three business units: The first unit covers the advisory business with a clear focus on five key areas to drive growth across all regions. The second unit provides IP-driven managed services beyond SaaS and offers business critical services to its clients supporting their business success. The third unit provides the software for successful digital transformation and regulatory requirements. It is also designed to explore innovative business models with clients and partners by driving the financing and development of start-ups and leveraging ecosystems. BearingPoint's clients include many of the world's leading companies and organizations. The firm has a global consulting network with more than 10,000 people and supports clients in over 75 countries, engaging with them to achieve measurable and sustainable success.

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FIR at RWTH Aachen

The Institute for Industrial Management FIR is a non-profit, intersectoral research and educational institution at RWTH Aachen University concerned with business organization, information logistics and corporate IT with the aim to establish the organizational basis for the digitally integrated company of the future. The institute provides research, qualification programs and lectures in the fields of service management, business transformation, information management, and production management.

In the field of service management, the focus is on the consistent orientation towards customer benefit in terms of the service dominant logic. By combining smart products with physical and digital services into hybrid service offerings, superior value is created for the customer. The aim is to establish digital business models that are essentially characterized by scalability and forecasting capability.

Since 2010, the managing director of FIR, Professor Volker Stich, has also been heading the Smart Logistics Cluster on RWTH Aachen Campus. In a unique form of collaboration and using a state-of-the-art infrastructure, consisting of innovation laboratories and a demonstration factory, representatives from industry and research dedicate themselves to questions relating to the integration of IT systems, their interconnection and integration, and the implementation of new business models.

www.fir.rwth-aachen.de



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