

Editor
Wilhelm Bauer (ed.)

Authors
Helge Spindler, Simone Martinetz, Daniel Friz

BWSHARE STRUCTURAL STUDY

Shared use of resources – opportunities and challenges presented by the sharing economy for established business in Baden-Württemberg

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For the sake of readability, the masculine gender has been taken as the generic form. Such instances may refer to men or women, and are not intended to imply any sort of gender discrimination; they are intended to include men and women alike.



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INTRODUCTION

The sharing economy has been booming for years as more and more customers discover the benefits of sharing over ownership. These days, all it takes is a few taps on your smartphone to find your nearest vehicle or overnight accommodation. We are also seeing consumers beginning to take on the role of service providers, becoming what are known as “prosumers.” Digital platforms connect private providers with those seeking their services on a grand scale, and some have become billion-dollar businesses. This trend is sweeping the globe, taking root particularly in the US, where start-ups are springing up like mushrooms. Hardly a day goes by without another report in the media on this unique manifestation of the digital economy.

Still, the voices of opposition are massing, with ever louder concerns about a system of “platform capitalism” that can bring unfair competition and precarious working conditions in its wake. Despite its name, the sharing economy is subjecting the digital sharing of goods and services – offered in the main by private individuals – to rampant commercialization. In mobility and tourism especially, global players have been able to grow at a remarkable pace, though their business models have drawn plenty of criticism along the way. Nevertheless, these brokerage platforms enjoy considerable popularity, among both users and the media.

So what impact does the sharing economy in all its facets have on traditional, sales-based business? How do companies deal with a marketplace in which prosumers can use digital technology to position themselves as competitors? And how do long-established industries react when new global players such as AirBnB or Uber are suddenly changing the rules in both regional and local markets?

Are the radical changes we are seeing in those sectors a precursor to similar developments and transformations in other areas of the economy? And how do established companies in a high-tech location such as Germany, and Baden-Württemberg in particular, position themselves in light of the digital economy’s drive towards sharing and the shared use of resources?

Baden-Württemberg’s thriving automotive industry, for instance, has been responding to these developments for some time now. Established companies in the mobility sector, in which the sharing economy has already gained a firm foothold, have already recognized the signs of the



times and adapted their business to the reality of a shared economy. I expect other companies and sectors to follow suit. Many of these companies have done much more than react to the trend, opting instead to play an active part in shaping the sharing economy of tomorrow.

In Baden-Württemberg, the state government has clearly recognized the significance of these developments for Germany as a place of business, and Baden-Württemberg in particular. Accordingly, this study, which looks at the challenges and risks presented by the sharing economy for established business, is sponsored by the Baden-Württemberg Ministry of Finance and Economics and is an attempt to trace the process of transformation from its very beginnings.

How are established companies to regard the sharing economy? A development of import or little more than media hype? Does it offer new market opportunities for traditional manufacturing companies? And what do these companies think of the sharing economy's competitive potential? These are all fundamental questions, now addressed by Fraunhofer IAO from the perspective of established business. And so we play our role in assisting our economy in its journey towards the sharing economy of tomorrow, whatever form that might take.

A handwritten signature in blue ink, appearing to read 'W. Bauer'. The signature is fluid and cursive, with a large initial 'W'.

Prof. Dr.-Ing. Wilhelm Bauer

1 POINT OF DEPARTURE

In the sharing economy, the business model that is currently emerging is based on the sharing of (generally private) goods and services. Driven and powered by modern digital technology, this sphere is subject to increasing commercialization and represents a potential competitive consideration for established companies.

This Fraunhofer IAO study, sponsored by the Baden-Württemberg Ministry of Finance and Economics, seeks to make a specific contribution to the topic by considering the sharing economy –not from a global perspective, but rather from the standpoint of established business, whose contact with the sharing economy has thus far been rather minimal.

2 AIM AND CORE ISSUES

This study sets out to examine the extent to which the sharing economy's concepts and approaches are having an impact on established business, and its business relevance for established companies now and in the future from their perspective.

To what extent could resource sharing concepts and models serve as a “sales projection surface” for established sectors within industry and commerce? Could the principles of the sharing economy facilitate new business models or help companies serve new market segments?

These questions arise from the assumption that the trend towards a sharing economy need not necessarily mean disruptive change in established branches of the economy, but might actually contribute in these areas by bringing diversity and development in the form of new business models and new areas of business.

With this in mind, our study examines the following core issues with a focus on established small and medium-sized enterprises (SMEs), the backbone of the economy in Germany and in Baden-Württemberg:

- Do established companies see value in or feel moved to action when it comes to implementing the mechanisms of the sharing economy as a way of doing business?
- Should we view the past and forecast development of the sharing economy – in both a positive and negative sense – as an overhyped trend or is it in fact a business reality in established sectors of the economy?
- Is the potential of the sharing economy and the developments associated with it limited to a few standard areas of application such as mobility, or do established companies expect this consumer and business model to permeate other sectors?
- Do these companies think that business might be neglecting or even responding too late to a relevant trend?
- Do the B2C or even B2B models of a sharing economy (see fig. 1) represent serious areas of business, strategically relevant to future planning?

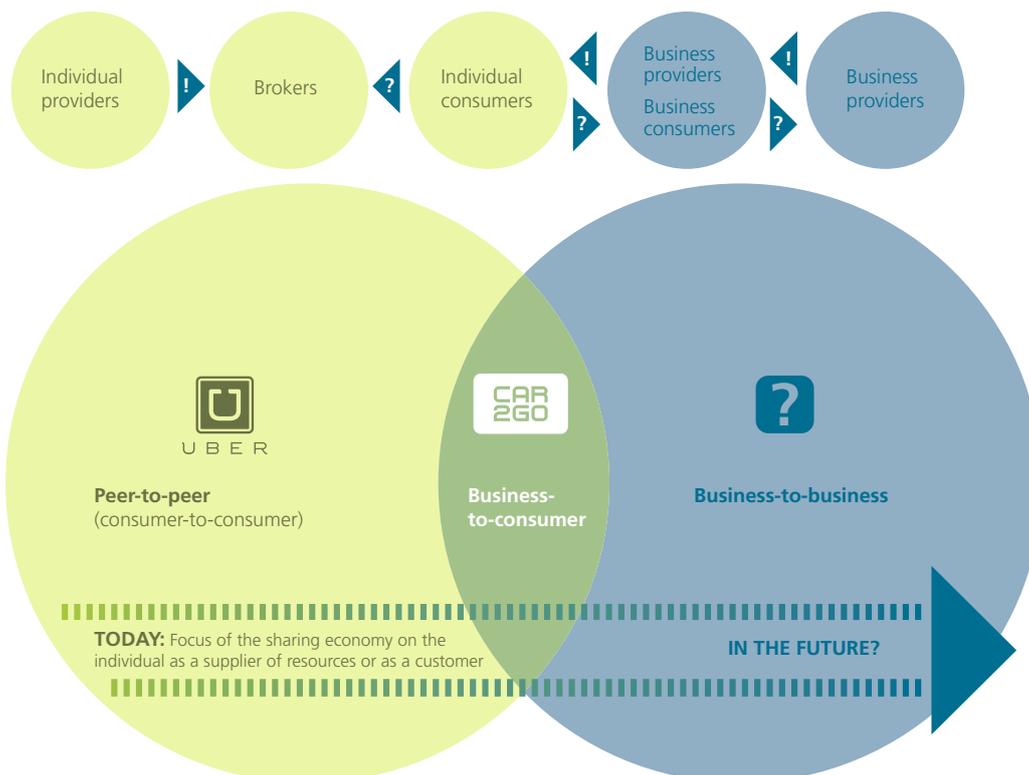


Fig. 1: The sharing economy about to take off?

3 FOCUS OF THE STUDY

The following analysis perspectives (see fig. 2) played a particular role in our inquiries:

- Do established businesses view the sharing economy as a relevant development?
- Does the sharing economy offer opportunities for established (e.g. manufacturing) companies as well?
- How do established companies assess possible risks presented to them by the sharing economy?

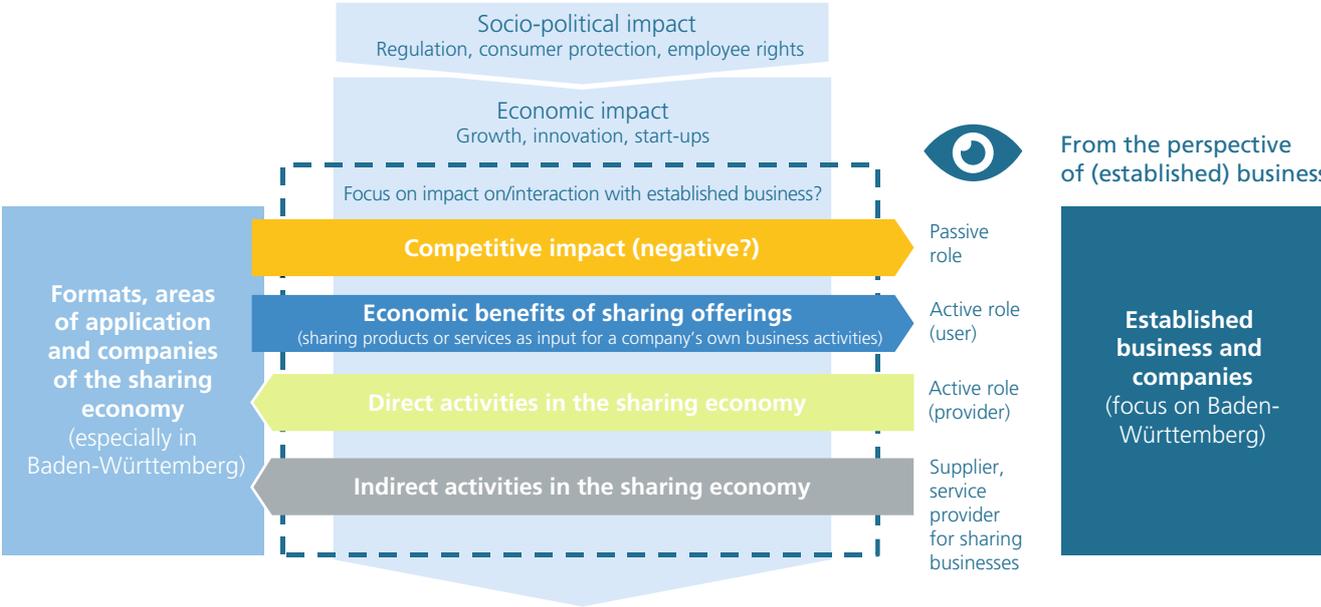


Fig. 2: Study focus on the interaction of the sharing economy and established business

4 METHOD AND APPROACH

Our study employed two empirical survey methods, a quantitative online survey and a series of qualitative expert interviews. Experts selected from business, research and politics were invited for in-person interviews. The quantitative survey is aimed at company representatives (primarily top management) and stakeholders from business, professional associations, politics and any other organizations relevant to the study. The scope of the survey is Germany-wide, though with a regional focus on Baden-Württemberg:

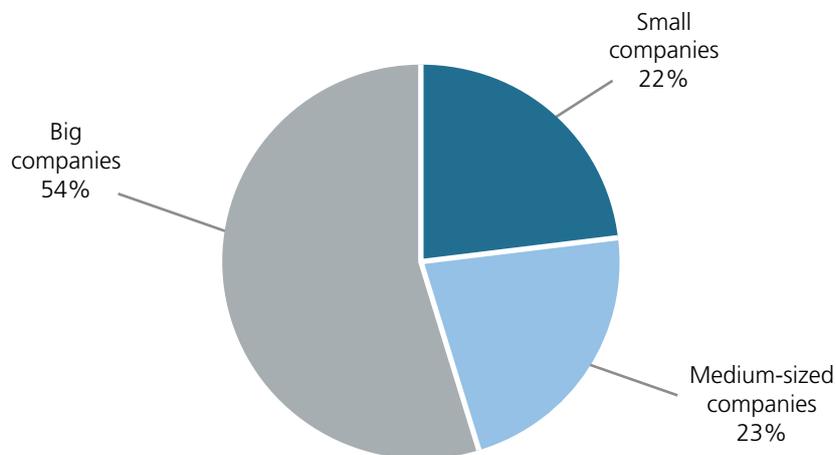


Fig. 3: Size of companies surveyed according to number of employees (N=107)

Survey participants were classified according to the size of the company (see fig. 3), following the standard division into small companies (1-25 employees), medium-sized companies (26-250 employees) and big companies (251+ employees).

5 KEY FINDINGS OF THE STUDY

- Established business's perception and assessment of the sharing economy is still heavily influenced by reports in the media and perceptions of the current P2P sharing economy based on the Anglo-American model (see fig. 1). Tourism (overnight accommodation) and mobility (personal transport) dominate public perceptions of the sharing economy.
- As yet there is no great knowledge among established businesses about how to deal with the sharing economy or even to get involved with it.
- The sharing economy has yet to reach many established sectors of the economy and is hardly perceived as a threat in these areas. *Exceptions: Areas of the economy in which the sharing economy in its current form is felt to have an overwhelmingly negative competitive effect, e.g. the overnight accommodation and personal transport sectors, as well as private services.*
- Established companies are ambivalent to the sharing economy, preferring to wait and see what will unfold. However, most of them recognize that they will have to address the topic sooner or later, even if not directly. Here, "The digitalization of business models" and "Personalization of products and services" are key elements and the precursors to a potential future sharing economy, even if its exact form is still largely to be determined.
- A majority of companies surveyed view the sharing economy as a competitive factor that must not be neglected by established sectors in the future.
- Established business is entirely open to the idea of sharing resources as a way to secure future competitive advantages and business success.
- Many established companies expect a general reinforcement of the trend towards pay-as-you-go billing and, more generally, sharing rather than ownership among both private and corporate customers in established sectors.

6 NEED FOR ACTION

6.1 Priority points

- There is still an urgent need to define and clarify the sharing economy for established business. Perceptions and conclusions drawn about the conceptual building blocks and success and risk factors of the sharing economy are too divergent (particularly when it is viewed more as a business model and less as a specific pattern of consumption).
- With the exception of a few sectors, the sharing economy has yet to make a mark on established business. This is true of B2C and especially of B2B domains. The finding applies to the sharing economy as a direct competitor to established companies, but also to the opportunities and strategic business options that could open up to established sectors in the future as a result of the sharing trend and the apparently unstoppable progress of digital business models.

6.2 Regulating a sharing economy

- Across sectors, established business's needs as to the legal structuring of the sharing economy and its potentially ambivalent mechanisms are still too hazy and divergent to be able to define clear legislative action:
 - On the one hand, the surveys yielded some demands that are restricted to the current P2P sharing economy and its competitive impact on a few sectors of the economy. These in turn are mixed with assessments that already look to future developments in the sharing economy, particularly those involving established sectors and alternative supplier-customer structures (B2C, B2B).
 - When it comes to data protection regulation, for instance, there is one camp that – not least because of its experience with the sharing economy in its current form – considers such regulation as absolutely important and necessary, while others view it negatively as a potential barrier to competitiveness in a globalized world of digitalized business models.
 - Some experts are also calling for a consideration of existing regulation weighed against the calls for new regulation. In other words, they put priority on examining the suitability of and adherence to existing regulations in the context of various sharing economy marketplaces before adding to the volume of regulation.

6.3 Options for established business

- For established companies to protect themselves against competition from the current sharing economy or even get actively involved with their own sharing business models, experts recommend that they:
 - Free themselves from the familiar models and offers of the existing P2P sharing economy in both their thinking and their planning;
 - Not only make the transition to service provider and build up the competencies this requires, but also be proactive in transforming into a software company with its competitive advantage of offering software systems for (sharing) platforms;
 - Be innovative in developing their own existing business models using relevant sharing concepts. The goal should be to break the rules themselves before others hurt them by doing the same;
 - Not to put all their eggs in one basket by risking everything on a specific sharing business model when entering the sharing marketplace – particularly if it is an SME with limited resources;
 - Make an effort to develop digital business models, in collaboration or independently; these should be informed by customers' resource usage and be based around "sharing-compatible" product/service packages and the necessary infrastructure and technology systems;
 - Companies should be much more active in trying out a range of approaches and business models on a small scale, expanding them if they prove successful and rolling them out to other areas of the business ("speedboat strategy");
 - Examples from practice suggest that utilizing the company-external opportunities and resources offered by the P2P sharing economy for use in a company's internal value chain could be a way to experiment and first test the waters of the sharing economy.

6.4 Future research priorities

- In the future, research and development activities (research and industry) and support for research (politics) should go beyond the manifestations, impact and predicted development of the current P2P sharing economy. Instead, they should also
 - Focus on the needs of established companies, particularly in Baden-Württemberg, with regard to B2C and B2B business models and service offerings
 - Consider the sharing economy as an interdisciplinary topic/potentially integrative field of application, i.e. anticipate the possibility that neighboring fields of technology, application and research could act as drivers or gateways for the future sharing economy with the active involvement of established companies.

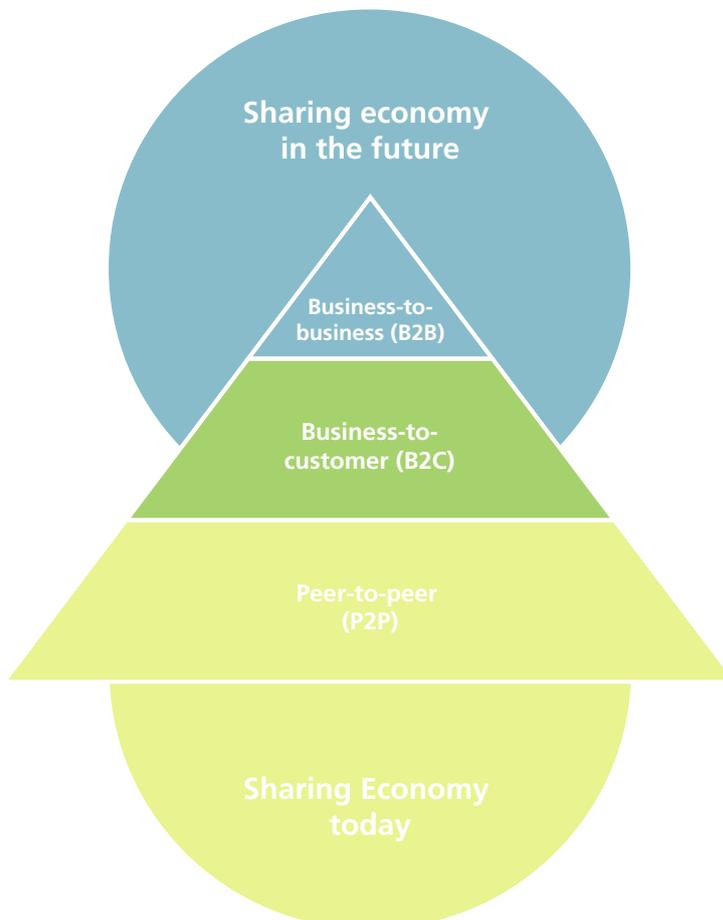


Fig. 4: Recommended general research focus for "Established business on its way to a sharing economy" as a continuation of the BWShare structural study

- The following are important (overarching) topic areas that touch on or overlap with the sharing economy, and which study findings indicate could provide the framework for defining relevant research activities:
 - Digitalization (particularly digital business models)
 - Goal:** Digitalize industrial value creation processes and allow for business models based on shared resource usage.
 - Industry 4.0 (plus in connection with the Internet of Things)
 - Goal:** Harness synergies between the consumption-oriented “sharing economy” research area and the manufacturing-oriented “industry 4.0” research area.
 - Product and service development
 - Goal:** Integrated development of “sharing-suitable” service offerings through combinations of products and services.

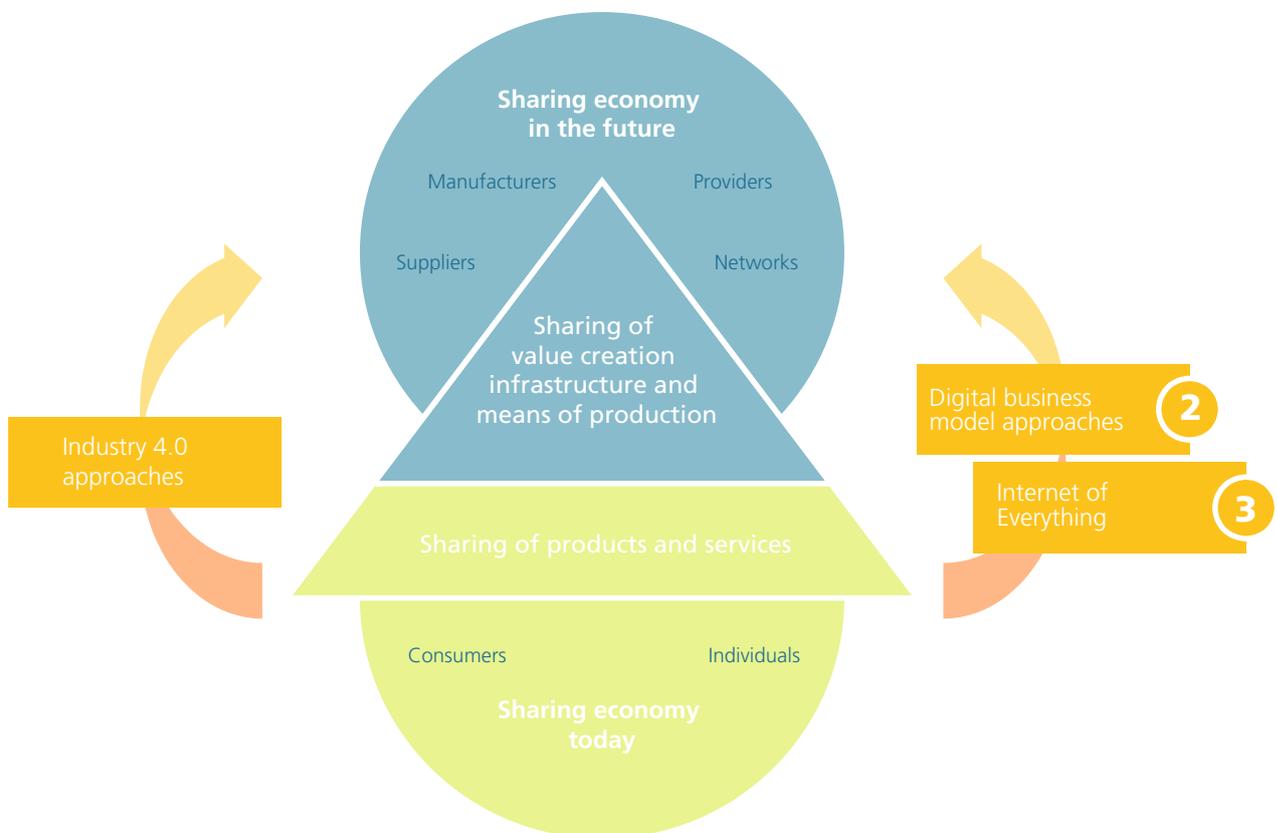


Fig. 5: Enablers of a future sharing economy for established business

7 EXTRACTS FROM THE SURVEY FINDINGS

Perceptions of the sharing economy among established businesses are highly focused and influenced by the media

The findings suggest that perceptions of the phenomenon of the sharing economy among established companies and business organizations are overwhelmingly dominated by the coverage and assessments of media reports (see fig. 6). This analysis is mostly restricted to a few specific areas of the sharing economy such as mobility and tourism, and a handful of prototype suppliers/brokerage platforms.

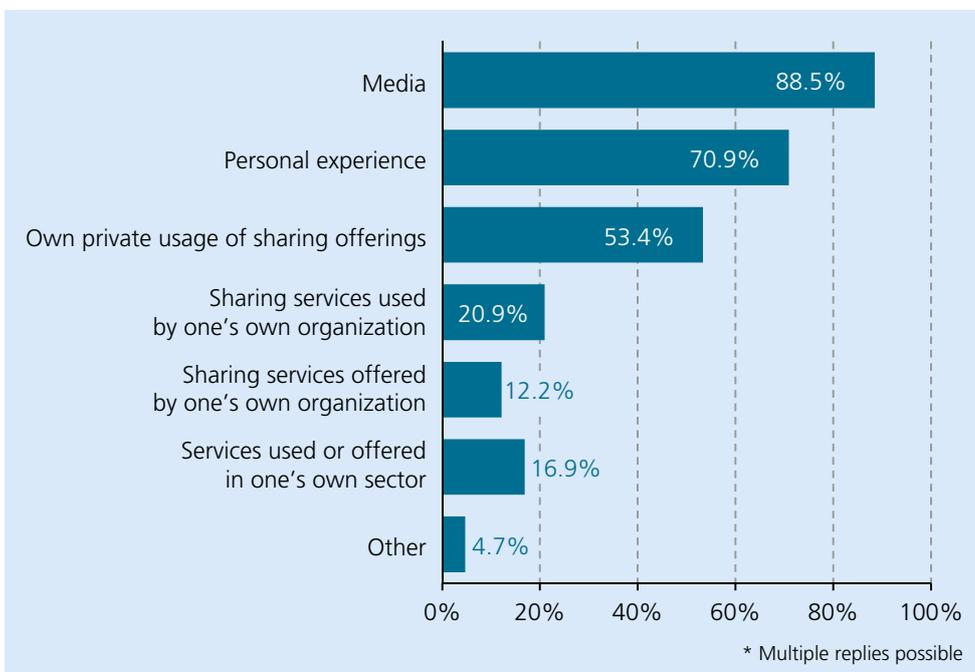


Fig. 6: Where have participants come into contact with the sharing economy? (N=148)

Media and personal experience represent a significant majority when it comes to sources of information about the sharing economy. This leads us to conclude that, in terms of its current form and impact on day-to-day business, the sharing economy apparently plays a marginal role outside of the mobility, tourism/accommodation and finance sectors.

Established companies remain quite inactive in the sharing economy

Almost two thirds of companies surveyed say they play no part in the sharing economy as either users or providers of corresponding products and services (see fig. 7).

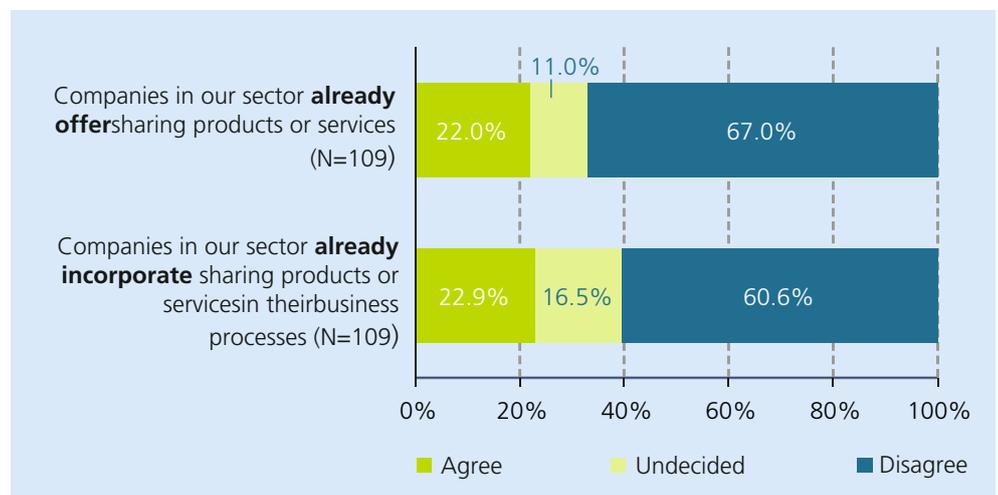


Fig. 7: Impact of the sharing economy on your organization/sector? (N=109)

Large portions of the established economy do not yet consider the sharing economy to be any great threat

Data from the online survey showed that some two thirds of respondents from companies do not currently view the sharing economy as a serious competitive threat within their own company or sector (see fig. 8). This is in contrast to the perceptions, set out above, that are held by business and the public regarding the competitive impact of the sharing economy, an impact the media at times represents as massive.

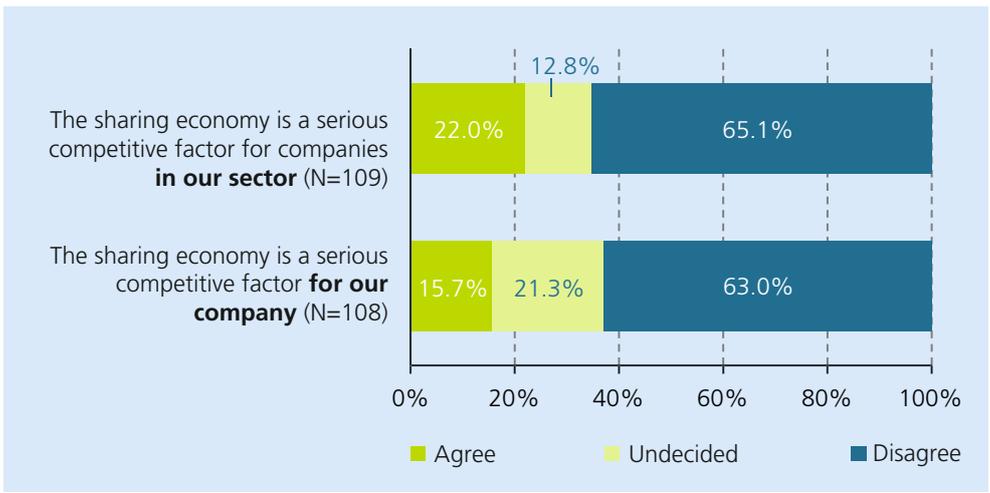


Fig. 8: What impact does the sharing economy have on organizations/sectors?

Even so, some two thirds of respondents expect competitive pressure from the sharing economy to increase in the future (see fig. 9).

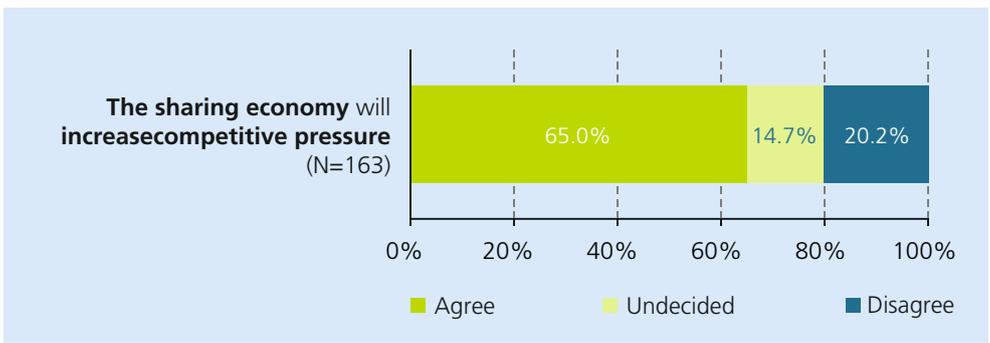


Fig. 9: How do respondents view the competitive pressure of the sharing economy for established business? (N=163)

Established companies are ambivalent about the sharing economy, preferring to wait and see what will unfold

While companies view the sharing economy as a comparatively disruptive way of doing business, and one which is on the advance, established companies seem to be extremely reluctant to confront the issue in day-to-day business. When questioned about the future impact of the sharing economy on business, however, a very different picture emerges (see fig. 10): two thirds of respondents expect the sharing economy to have a significant impact on business in the future. Only a tenth of respondents think that the sharing economy is a trend with little future impact on business.

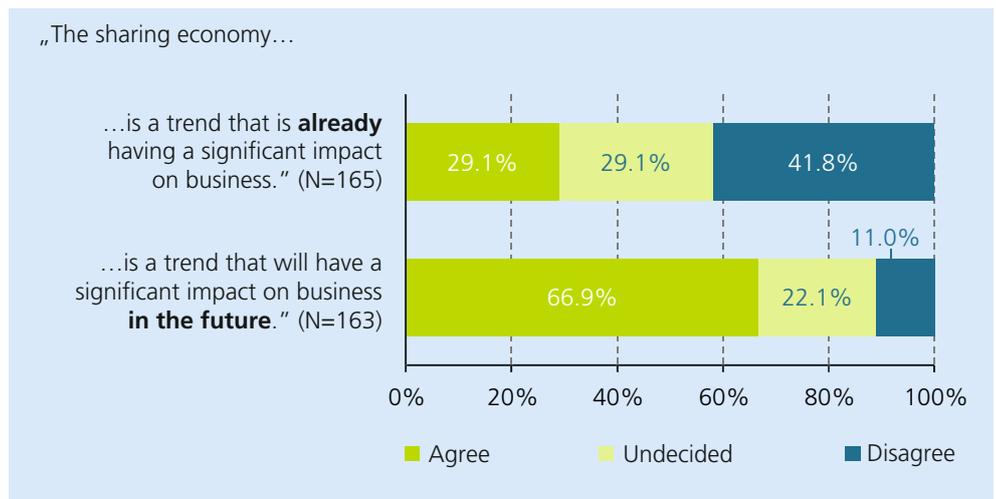


Fig. 10: The significance of the sharing economy trend? (N=165)

From production company to service provider

As a result, in our survey we wanted to investigate to what extent established companies and sectors are feeling pressured to change by the sharing economy. The sharing economy puts service at the fore and we wanted to find out whether companies have taken that on board – at least in terms of their strategy and planning. (see fig. 11).

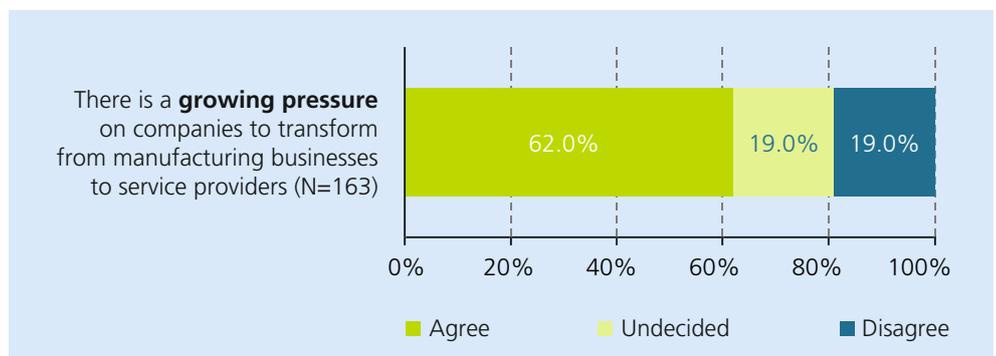


Fig. 11: Is the sharing economy transforming established business? (N=163)

Almost two thirds of respondents consider there to be a growing pressure for companies to transform from manufacturing businesses to service providers. This means that the majority of companies surveyed seem to be heading in the general direction of a sharing economy.

When it comes to the sharing economy, established companies are driven by the usual business concerns, not sustainability

General sustainability and resource efficiency seem to be low down on the list of priorities when it comes to reasons why established companies want to get involved in the sharing economy, including sharing approaches in the B2C and B2B domains. They seem more interested in the sharing economy's potential to cut costs by saving resources.

When asked about the benefits and motivation for getting involved with the sharing economy, companies most often cited the opportunities for growth in new business segments as a sort of compensation for saturated markets (see fig. 12).

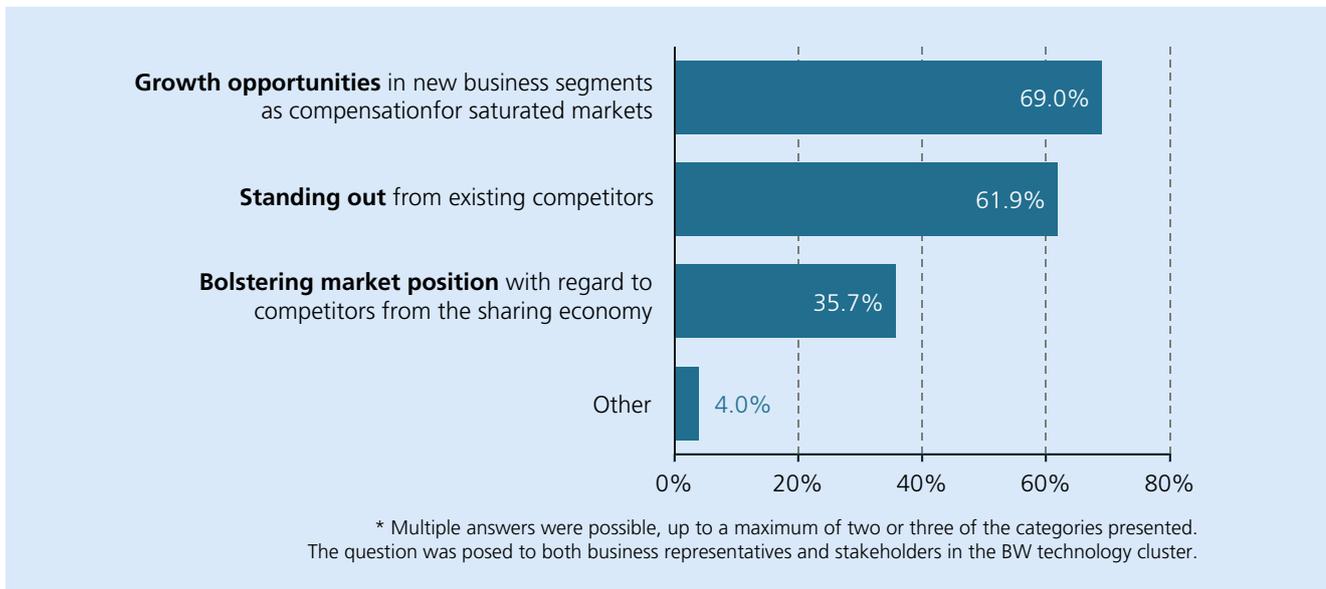


Fig. 12: What are the benefits and motivation for established companies to get actively involved with the sharing economy as providers? (N=126)

The majority of companies surveyed views the sharing economy as a way to secure their own business futures (as providers).

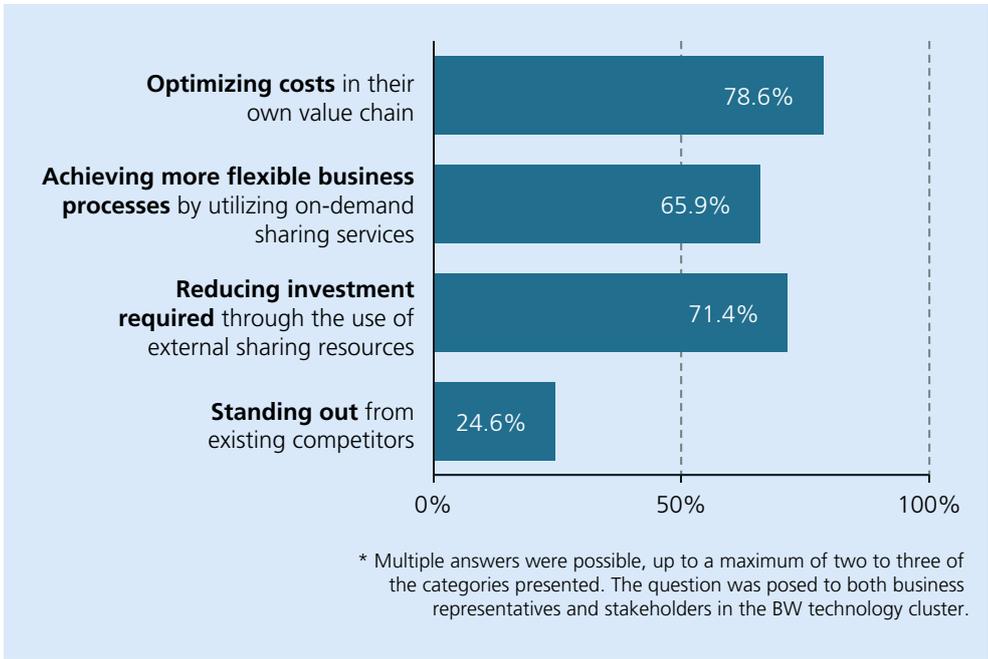


Fig. 13: What are the benefits and motivation for established companies to get actively involved with the sharing economy as users? (N=126)

In the sharing economy, market power is concentrated in the hands of those who possess customer information

The sharing economy is a bit of a rulebreaker, in that its successful business models are built around the presence and use of a globally available, “free” infrastructure – the Internet. Quite a few of the experts interviewed consider the sharing economy to represent a break in the correlation between infrastructure ownership and market power.

In other words, market power no longer resides with the infrastructure owner, but with the player who possesses customer information and the direct access to the customer that that brings.

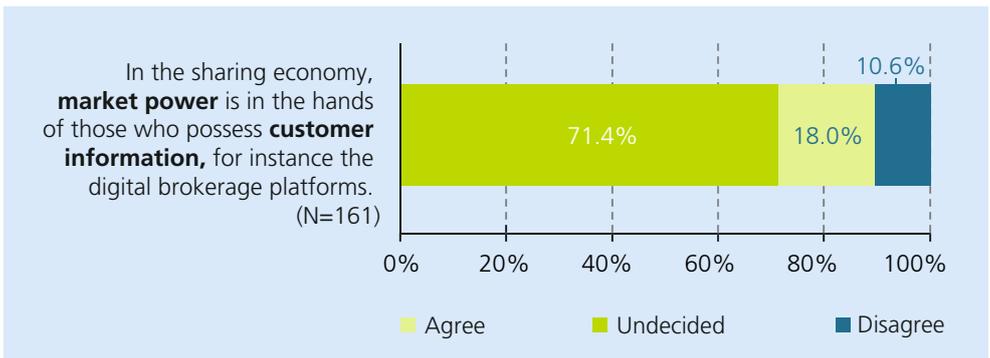


Fig. 14: What impact is the sharing economy having on society and the economy – market power? (N=162)

As we can see from figure 14, this isn't merely an abstract theory; of the companies and institutions surveyed, 71.4% said that, based on their own business experience, market power is now in the hands of companies or organizations who possess the information to access customers/ consumers, i. e. have control over the "last mile" to the customer.

The "use, not own" trend is here to stay

Three quarters of respondents expect to see growth in the demand for pay-as-you-go products and services (see fig. 15). Only a minority of respondents (9%) disagree with this prognosis.

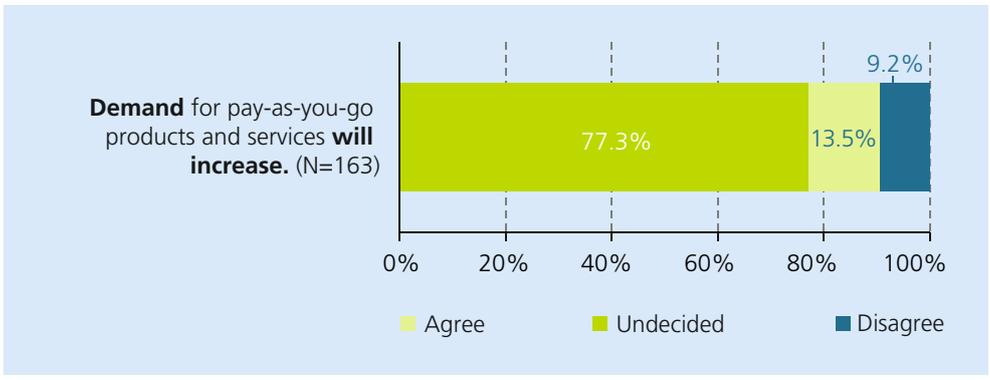


Fig. 15: What impact is the sharing economy having on society and the economy – demand? (N=163)

Our assessment of the key features of the sharing economy leads us to conclude that established companies will have to confront use-based service solutions sooner or later, if they have not already taken steps early on to do so proactively. This will allow them to equip themselves for the future and stay one step ahead of the competition.

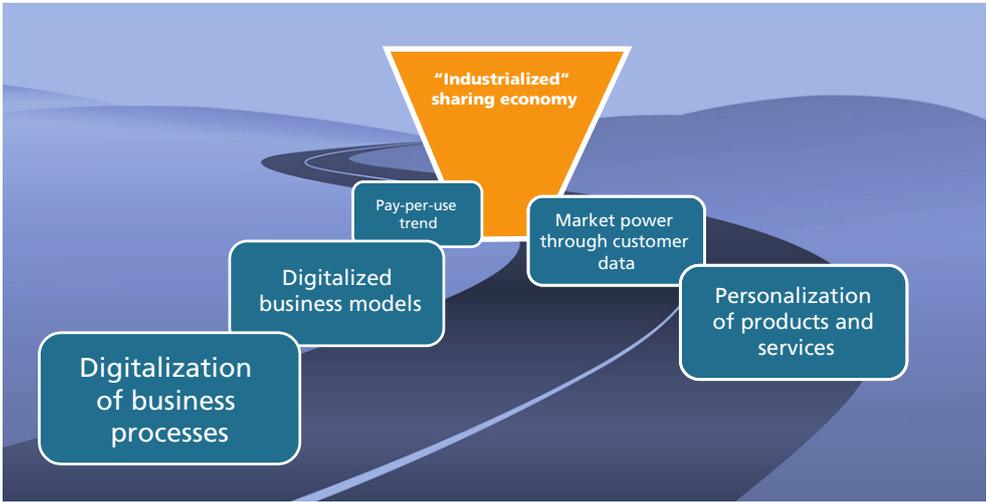


Fig. 16: Paving the way for a B2C and B2B sharing economy for established companies

Contact:

Fraunhofer Institute for Industrial Engineering,
Nobelstrasse 12, 70569 Stuttgart
www.iao.fraunhofer.de

Helge Spindler, Fraunhofer IAO
Phone +49 711 970-2267
helge.spindler@iao.fraunhofer.de

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In recent years, the sharing economy has seen start-ups spring up like mushrooms around the world. Sharing (mostly private) goods and services is the new business model – and one that has been subject to growing commercialization. Facilitated by modern information and communication technologies, global players have been able to grow at a remarkable pace in the mobility and tourism sectors in particular. Commercialized digital brokerage platforms enjoy great popularity among both users and the media.

Is the sharing economy a relevant development for established business, or little more than media hype? Can the principles of the sharing economy be transferred and applied in established companies, and could it offer new market opportunities for traditional manufacturing companies? Ultimately, it is of no little importance how these companies themselves currently see the sharing economy – and what they think of its future development. In this study, sponsored by the Baden-Württemberg Ministry of Finance and Economics, Fraunhofer IAO seeks to deliver the first answers to these questions from the standpoint of established business.