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University**

## **Sharing City**

A Co-Created Magazine on the Sharing Economy of Cities and Local Communities

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# Sharing City

A Co-Created Magazine on the Sharing Economy  
of Cities & Local Communities

## Danish Sharing Economy and New Business Models

— Mark Lorenzen &  
Emmy Laura Perez Fjalland

## April Rinne

— Global Perspectives on  
Sharing Economy

## Opportunities for Better Mobility with Sharing Economy?

— Søren Riis



**READ:** 24 New Sharing Economy Start-Ups / **Annika Agger:** On Sharing – Yours, Mine and Ours?  
**PERSPECTIVE:** Rethink Resources Within Your Business / **TOPIC:** What Role Should Municipalities Play in the Sharing Economy? / **TOPIC:** Scope of the Sharing Economy in Denmark / **Resources for Further Thought**

# **Sharing City**

## A Co-Created Magazine on the Sharing Economy of Cities & Local Communities

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## FarmBackup

farmbackup.dk

### What is FarmBackup?

FarmBackup is Denmark's first digital marketplace for farm equipment rental and contracting services. The marketplace makes it easy for farmers and contractors to offer available equipment – both with and without a driver. Customers include equipment lenders, who are mainly either farmers or contracting firms, and farmers seeking rentals. It's absolutely free to search on FarmBackup.

FarmBackup's core competence is therefore in connecting lenders with renters so surplus equipment and labour capacity can be used optimally. The biggest challenge FarmBackup faces is demographic – many farmers and contracting firm owners are getting up there in age. The media habits of this older demographic tend more towards the analogue, compared with younger generations, so they are a little more difficult to reach

via digital marketing. Therefore, FarmBackup employs a combination of digital marketing via Facebook, the Danish farming news website landbrugsavisen.dk and Google, along with print ads in the farming newspaper LandbrugsAvisen.

The founders Anders Bram Knudsen and Søren Iver Knudsen grew up on farms and therefore are very familiar with the industry. In addition, FarmBackup has entered into various partnerships with Shape A/S, which is responsible for the technology behind FarmBackup, and DM&E (the trade group for contracting firms and small business owners), so DM&E's members benefit from being both on FarmBackup and LandbrugsMedierne's farming-related media, providing excellent exposure to FarmBackup's target group. These partnerships have helped turn FarmBackup into a real force in the market.

### What Are the Sharing Economical Aspects of FarmBackup?

FarmBackup provides the individual farmer with more cost-effective machinery, which means a more healthy economy for farmers everywhere. The company firmly believes that when capacity utilisation improves, so does our use of precious resources. Thanks to the sharing economy, we no longer need to manufacture as much farming equipment. In addition to helping farmers and contracting firms achieve a more efficient utilisation of their equipment and resources, FarmBackup will also bring together farmers from far and wide to assist one another during peak seasons. An example of this was when farmers in Jutland were under pressure due to persistent rains in the autumn of 2016. They used FarmBackup to find available harvesting capacity in Zealand so they could quickly harvest the crops once dry weather returned. ■





GRØN  
OMSTILLINGSFOND

**RUC** Roskilde Universitet

**CBS**  COPENHAGEN BUSINESS SCHOOL  
HARVEY M. MILLER

Bird & Bird

**RAMBØLL**

RAINMAKING  
INNOVATION

## The Sharing City Partnership

This magazine was developed as a result of the knowledge and experience gained from the *Sharing City partnership project*. Sharing City is a national Danish knowledge and communicative project conducted between August 2015 – December 2016. The partnership project aimed to make the Danish population more familiar with sharing economy and explore potential impacts of different variations of sharing economy to improve our cities, urban and rural communities. The Sharing City project has drawn together municipalities, businesses, associations, innovators, residents and researchers in order to jointly come up with new ideas and business models within the scope of the sharing economy. These ideas and business models have the potential to play a significant role in optimising our use of resources to help improve our cities and environments.

The Sharing City project is financed by the Danish philanthropic foundation Realdania and the Danish Business Authority through the means of the Green Business Development Fund.

The Sharing City project partnered with seven Danish municipalities: Frederikssund, Copenhagen, Lejre, Middelfart, Nyborg, Slagelse and Sønderborg municipalities. Midway in the process, 24 sharing economy innovators also got involved in the partnership.

Rambøll Management Consulting and Rainmaking Innovation were advisors in the Sharing City project.

Media partners include Politiken and Kommunen.

The Sharing City project was developed and operated by the Danish Architecture Centre.

### Sharing City Innovators




BrainShare	87
Byhøst	41
Cook with a Local	99
Cph Volunteers	78
deemly	123
Del Dit Landskab	86
Donkey Republic	135
e-loue	122
FarmBackup	3
FriRUM Lab	35
GoJoin	19
GoParkMe	98
GreenDriveThinking	144
Grønt Hus i Frederikssund	111
Hegnsholt Hønseri	24
Kompostbudene	121
Local Sharing Middelfart	134
Min Landsby	78
Multikant	34
Naboskab	26
OPI Grejbank for alle	145
SnappCar	153
Spaceflex	129
Underbroen	17



# Contents

3	FarmBackup
8	Preface
11	<b>Article: A Co-Created Magazine on the Sharing Economy of Cities and Local Communities</b> — Emmy Laura Perez Fjalland & Anne Grave
16	<b>Q&amp;A: Sharing Economic Thought Process Deals with Site-Specific Qualities and Local Communities</b> — Interview with Anne Skovbro, Director of Philanthropy, Realdania
17	Underbroen
18	<b>Q&amp;A: Business Ambitions for the Sharing Economy</b> — Interview with Anders Hoffmann, Deputy Director of the Danish Business Authority
19	GoJoin
21	<b>Article: Sharing Cities</b> — April Rinne
24	Hegnsholt Hønseri
26	Naboskab
29	<b>Article: A Sharing City Laboratory — Can We Share Our Way to Better Cities?</b> — Emmy Laura Perez Fjalland & Anne Grave
34	Multikant
35	FriRUM Lab
37	<b>Expert Perspective: The Sharing Economy — Keep it Local</b> — Mark Lorenzen
41	Byhøst
43	<b>Expert Perspective: What Do We Know About Airbnb in Copenhagen?</b> — Lars Pico Geerdsen, Ditte Håkonsson & Ismir Mulalic
51	<b>Article: Urban Development and Planning in a Sharing Economy Context</b> — Brian Landbo
54	Frederikssund Municipality
56	Copenhagen Municipality
59	Middelfart Municipality
60	Slagelse Municipality
62	Sønderborg Municipality
65	Lejre Municipality
66	Nyborg Municipality
69	<b>Expert Perspective: Should Municipalities Take Responsibility for the Sharing Economy?</b> — Ida Bigum Nielsen
75	<b>Expert Perspective: Sharing Economy and the Welfare State</b> — Bent Greve
78	Cph Volunteers
78	Min Landsby

- 
- 81 **Article: Community in Sharing Economy**  
— Emmy Laura Perez Fjalland
- 86 **Del Dit Landskab**
- 87 **BrainShare**
- 89 **Expert Perspective: On Sharing - Yours, Mine and Ours: Citizen Involvement as a Catalyst for Sharing Economic Activities**  
— Annika Agger
- 93 **Expert Perspective: What Nobody Sees! — The Value of Co-Creation in Urban Development**  
— Jesper Kofoed-Melson
- 98 **GoParkMe**
- 99 **Cook With a Local**
- 101 **Expert Perspective: Breaking Up with Habits — Consumer's Eye on Sharing Economy**  
— Ann Lehmann-Erichsen & Emmy Laura Perez Fjalland
- 111 **Grønt Hus i Frederikssund**
- 113 **Article: New Business Models — Chickens, Chocolate and Vinegar**  
— Emmy Laura Perez Fjalland & Mark Lorenzen
- 121 **Kompostbudene**
- 122 **e-loue**
- 123 **deemly**
- 125 **Expert Perspective: Law in the Sharing Economy — Challenges That Sharing Economy Projects Run Into**  
— Martin von Haller Grønbaek & Morten Bernhardt
- 129 **Spaceflex**
- 131 **Article: Elements of Green Transition in the Sharing Economy**  
— Emmy Laura Perez Fjalland
- 134 **Local Sharing Middelfart**
- 135 **Donkey Republic**
- 137 **Expert Perspective: Exploring Green Potentials of Sharing Economy**  
— Charlotte Fischer
- 141 **Expert Perspective: The Technological Fix is Not a Solution!**  
— Malene Freudendal-Pedersen
- 144 **GreenDriveThinking**
- 145 **OPI Grejbank for alle**
- 146 **Article: Mobility Aspects of Sharing Economy**  
— Brian Landbo
- 149 **Expert Perspective: Mobility in the Future**  
— Søren Have
- 153 **SnappCar**
- 155 **Expert Perspective: Better Mobility and the Sharing Economy**  
— Søren Riis
- 159 **Article: Findings and Openings — Which Changes Are Sharing Economy Creating?**  
— Emmy Laura Perez Fjalland

# Preface



**Kent Martinussen** heads the Danish Architecture Centre (DAC), a public-private partnership between the Danish government and the private Realdania Foundation that serves as the Danish Government's primary agent in the development and promotion of architecture and urban planning. Besides his role at the DAC, he serves as a member of a number of national and international committees and boards for both awards and grants, including the international jury panel of the Architecture Biennale in Venice and the steering committee of the Mies Van der Rohe Award. He is also an advisor to governments, municipalities and corporations.

Danes mainly live in towns – in cities, provincial towns and small towns in the countryside.

In a number of different variants, urban societies and local communities serve as the primary backbone in most Danes' lives.

There are good reasons for this: the dynamic town life and the connection to the globalised world's other urban societies, cultures and markets creates the wealth and well-being we regard as the foundation of a modern, humanistic life view; that the world will continue to be a better place to live for an increasing number of people.

Thus there is a reason to be on the leading edge of new developmental trends that set the agenda for urban economies in order to promote and optimise the benefits inherent in these trends. The sharing economy is one of these trends.

According to experts, the origin of the sharing economy is closely related to and partially derived from urgent global issue, such as climate change, sustainability and new digital developments disrupting practices and norms. Resource awareness and sustainability paradigms encourage a focus on new ways to create value and improve our quality-of-life, while carefully protecting our available resources.

Also the explosive growth in digital technologies assists the business-related potential due to technology's most fundamental value creator – sharing!

# “The goal of the sharing economy is to get the most out of the resources we have available”

**Billie Howard**

Marketing Strategist

Knowledge, Products, Services and Communities. Notice also that the global financial crisis has encouraged a paradigm shift away from the “Me and My” society and toward the “We and Our” society – something that’s not foreign to Danish culture, where over 100 years ago we coined the phrase “til fælles bedste” (“for the common good”), which crosses over geographical, political and economic boundaries in our population.

Growth and well-being is achieved in Denmark, as in all other open, democratic societies, by our ability to produce relevant products and services that are in demand, creating income, exports and jobs.

Financed by the Realdania Foundation and The Danish Business Authority’s Fund for Green Business Development, the Danish Architecture Centre has taken the initiative to orchestrate the Sharing City project in cooperation with the municipalities of Sønderborg, Middelfart, Nyborg, Slagelse, Lejre, Frederikssund and Copenhagen, along with Danish and international experts working within the field of sharing economy.

In partnership with the municipalities and financial sponsors, the Sharing City project has selected 24 sharing economy stakeholders to take part in a facilitated incubation process aimed at knowledge acquisition and business development with a focus on expanding new sharing economy business opportunities – i.e. new “green” jobs.

The Sharing City project was carried out in parallel to the efforts of the Ministry of Business and Growth to develop a new policy for the sharing economy, and this publication is a collective contribution to the necessary knowledge, debate and business development Denmark needs in order to assess the economic, social, and resource-related potential of the sharing economy in a timely manner.

While writing this, commercial development of the global sharing economy is booming. As the world-renowned American sharing economic advisor April Rinne, who has participated in the Sharing City project, writes in her foreword to this edition, the mandate is here now to make things sustainable – “perhaps no place more so than in Denmark”!

Thanks to all the parties who were involved. Enjoy the reading, debate and inspiration for new commercial development!



**Kent Martinussen**

Managing Director Danish Architecture Centre



Editorial

# A Co-Created Magazine on the Sharing Economy of Cities and Local Communities

**Emmy Laura Perez Fjalland**, Ph.D. Fellow, Roskilde University and Danish Architecture Centre  
**Anne Grave**, Senior Project Manager, Danish Architecture Centre



**O**n behalf of the partnership the Danish Architecture Centre (DAC) has orchestrated the Sharing City project. Architecture, urban planning and development cannot be interpreted through the lens of the build environment alone. Rather architecture, planning and development of cities and local communities should be viewed within the context of societal development including social, environmental, cultural, and economical aspects. This is one of the reasons why the DAC Cities-programme has taken the initiative to run a project on sharing economy and its potential for Danish cities and local communities.

Whether you regard the emergence of sharing economy as a reaction to the global financial crisis, a reaction to climate change or a technological disruption of business models, it plays out in cities *for* and *among* people. It is thus in the interaction between people that the distribution of time, resources and knowledge is based, and not just via technological platforms as the media might get you to believe. It is the close, trust-based relationships that contribute to drive the development forward, and this promotes reciprocal learning between urban and rural areas that yields benefits in the form of a more sustainable society.

### **Sharing Economy**

In Denmark, we began to talk about ‘sharing economy’ around 2014, but as we have seen it within the Sharing City project, sharing economy can be said to have existed since the time humans lived in tribes and clans, and needed to share resources among themselves to survive. We share the air, the ground and energy sources; transportation corridors and welfare institutions; libraries, public bath houses and coin-operated laundries. Both cities and life itself are created from the movements and exchanges of materials, resources, energy, data, money and consumption, both *in* places and buildings and *by* and *between* people. Life seems shared, and practices of sharing economy exposes these movements. From this perspective, *sharing* can be said to set the table for the existence of cities and society.

Grasping what sharing economy is and conceptualising it, we found that in Danish, the word for “sharing” (“dele”) can be used to describe separating, distributing, giving, participating, exchanging, and sharing. Consequently, we cannot talk about one ‘true’ sharing economy, and on the whole, we decided to consider sharing economy as an umbrella term that includes various types of transactions, capital, objectives, channels, organisational forms and territories. With urbanisation, large cities are becoming increasingly more compact, polluted and polluting, as a result of the highly concentrated traffic and consumption and ever increasing social segregation. The arguments in favour of more sharing are many, and potentially, aspects of sharing economy could in the future further democratise access to space, resources and raw materials. Additionally, sharing economy is also projected to change our economic basis, manufacturing times, workplace and the spatial orientation of urban space.

**“Sharing economy can be more closely examined and used as a launching pad to discuss how the cities and societies of the future can develop.”**

#### **Cities and Local Communities**

Already now, we share transportation in the form of public buses, undergrounds and trains; we share residences through housing co-ops, communal housing and dormitories; we share gardens in our city's parks and open spaces; we share books and office space in the city's libraries, etc. These are places that primarily belong to city centres since people live more closely together and in less space.

But sharing economic initiatives also contribute towards additional opportunities for mobility, labour and leisure activities in places with a low population density. For example, in farming, sharing economy initiatives can revolve around the sharing of machinery, leftover products and nutrition. And in the areas of manufacturing, business and industry, surplus products and knowledge can be better distributed and the transport of people and goods can be optimised. This is just some of the potential of sharing economic initiatives.

Sharing economy appears to be of relevance in both urban and rural areas since different sharing economic initiatives help us rethink and recreate the way we manufacture, consume, work, live, travel, and commute. Seen as a whole, everything that mobilises, shapes and enables our everyday lives - everyday lives that are largely lived in places known as cities and towns. Simultaneously, this sheds light on the fact that our cities and communities in many ways already possess variations of sharing economy and holds a very long, almost ancient, tradition for sharing.

#### **The Foundation**

The Sharing City project has existed for one and a half years (August 2015 - December 2016), and in that time, sharing economy has grown locally, nationally and globally, both as a concept and a

real-world phenomenon. The Sharing City project has functioned as a type of laboratory – an experimental investigation – where partners and participants, individually and collaborative, have investigated the various practices of sharing economy, and how it could be conceptualised and contextualised to a Danish context. 24 start-ups, established business and organisations working with sharing economic (within the project called “*innovators*”), seven Danish municipalities, and a knowledge building group have been the ones accumulating and collecting experiences and data throughout the project. You can read more about the “lab” at page 29)

This Sharing City Magazine ought to represent the experienced diversity and plurality, evident in the Danish examples of sharing economy related to planning and development of cities and communities in both urban and rural environments. On a broader level, the magazine deals with resources – material and human – how these can be brought to light, in what framework and organisational form and with what goals. Altogether, sharing economy, resources and the city and communities shapes the heart of this magazine and all the articles, profiles and perspectives relate to this. In this way, sharing economy can be more closely examined and used as a launching pad to discuss how cities and societies of the future can develop.

### **The Magazine**

Due to the diversity and variety of initiatives and practices, our ambition in publishing this magazine is to present a cross-section of the microcosm of sharing economic initiatives and activities we’ve encountered and been involved with, along with a thematic focus on several unique derivative aspects such as communities, sustainability and business.

In the spirit of sharing, we felt it was natural to make this a co-created magazine instead of a formal final report. The more resources we pool together, the more we, individually and collectively, will benefit from the insight we gain from one another. A number of experts, including researchers and professionals, have been selected to participate and contribute with their observations on the sharing economy based on their unique knowledge and experience. These are named “*Expert Perspectives*” in the index.

Aside from the *Expert Perspectives*, we’ve undertaken a number of qualitative interviews with each of the seven participating municipalities. We discussed their specific initiatives and how sharing economy has applied/applies to them before, now and in the future. In addition, we carried out a fairly large survey of the 24 sharing economic innovators. Both the municipalities (indexed as *Municipal Profiles*) and the sharing economic innovators (indexed as *Innovator Profiles*) are portrayed in the magazine, and we’ve provided articles that have taken a closer analytical look at the Sharing Cities and the Sharing City Innovators – these are indexed as *Articles*.

In and of itself, the magazine does not provide the whole picture of the sharing economy in Denmark or make a statement on the complete potentials of growth and sustainable transition in Denmark. Our ambition is to describe the extract of the manifold sharing economy activities that we have met within the Sharing City project, and consequently, focus thematically on new shades and variations of communities, sustainable transition, and business development. All aspects of a sharing economy agenda, and aligned with the *Expert Perspectives*, the aim is to nuance the story about sharing economy in Denmark. Additionally, Bent Greve (Professor, Roskilde University), Mark Lorenzen (Professor, Copenhagen Business School) and Martin von Haller Grønbæk (Partner, Bird & Bird Law Firm) have assisted the knowledge building and helped qualify both methods and writings.

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→ Finally, we want to express our deep gratitude to everyone who in various, valuable ways have made *Sharing City: A Co-Created Magazine on the Sharing Economy of Cities & Local Communities* possible. ■



**Emmy Laura Perez Fjalland** is a Ph.D. Fellow at Danish Architecture Centre's Cities-programme and the Doctoral School 'Space, Society and Technology' at Roskilde University. Emmy holds a Bachelor in Planning and Communication, and a Master of Arts in Planning and Geography, both from Roskilde University. Emmy is board member in the international research network Cosmopolities, and has research experience from 'Gehl – Making Cities for People' and Danish Architecture Centre. Emmy is the co-editor of the anthology "Networked Urban Mobilities: Practices, Flows, Methods" (to be published in 2017 by Routledge, Taylor & Francis Group), and has been the editor in chief of this Sharing City Magazine.



**Anne Grave** is Senior Project Manager at Danish Architecture Centre, and holds a Master of Arts in Anthropology from University of Copenhagen, Denmark. Anne is responsible for the project management of the Sharing City partnership project, and her professional background is particularly centred around citizen involvement, democracy and urban planning. Anne has previously worked with the media and architectural event "Build It Up" ("Byg det op"), a collaboration with the Danish Broadcasting Association ("DR"), and was the project manager of "DK2050", a simulation project where she was responsible for a number of workshops and moderated political debates between city councils and residents.



# Sharing Economic Thought Process Deals with Site-Specific Qualities and Local Communities

Interview with Anne Skovbro, Director of Philanthropy, Realdania

## Why is Sharing Economy of Interest for Danish Urban Development?

Concomitant with rising urbanisation and the need for sustainable future solutions, there is a need for new solutions in urban development. Sharing economy may be the answer for better utilisation of existing resources and help strengthen social cohesion in cities. As sharing economy looks right now from a commercial standpoint, there are both challenges and opportunities. There is a need to develop and challenge our current thinking about the sharing economy so we can create sustainable, dynamic urban societies, while simultaneously promoting a sense of security and community in the cities.

Some of the most obvious opportunities where sharing economic thinking can be put to work in the cities are in the areas of resources, well-being and urban quality. Specifically, it can be applied to city spaces and attractions where land and buildings are shared and used in new ways, but also to how residents (e.g. activists and volunteers) can participate in the city's development and urban life in new ways. In order to develop these opportunities, it is critical that we work hands-on with the sharing economy in municipalities as well as the public and private sectors. Only by doing this can we develop the relevant local potentials of the sharing economy, and only by doing this can we identify a Danish approach to this global phenomenon.

## How Can Sharing City Contribute to Urban Development?

The Realdania foundation has joined and supported the Sharing City partnership project in order to support the acquisition of knowledge and experience in order to gain more insight into the potentials of the sharing economy in our cities. Sharing economy is a megatrend, and we need to sort the hype from what can actually enrich our society. If we can discover how sharing economic initiatives can contribute positively to our cities, it's important that we test out different solutions and gain knowledge on this.

## What Are the Most Interesting Results from Realdania's Perspective?

Sharing City has demonstrated that some of this is new and some of this is already well-known, but what's critical is that we identify what is important for our cities. Even though we talk about a globalised world, we live our lives locally. Sharing City has shown that the sharing economy is far from just a digital or a metropolitan phenomenon. It is also a phenomenon that is alive and well in our remote areas and rural districts. And it may just be in these areas that we find the Holy Grail for building healthy neighbourhoods, communities and co-created city spaces that really work. ■

# UNDER BROEN

Underbroen



## Underbroen

underbroen.com

### **What is Underbroen (*Under the Bridge*)?**

Underbroen is a maker space; a workshop full of modern, digital manufacturing technology that offers businesses, entrepreneurs and private individuals the use of machinery and a variety of facilities. But Underbroen is more than just a workshop. It also offers hands-on seminars, classes and advice about manufacturing and the maker-culture. Underbroen also helps connect customers with potential manufacturers.

Underbroen's maker space is financed by its members, so you need to be a member to use the manufacturing equipment that's located in the workshop. The members and users of the workshop include various entrepreneurs, such as designers, architects, craftsmen, students and individuals. The buyers of Underbroen's other services include municipalities in connection with the manufacturing of prototypes or furnishings for ur-

ban cityscape projects. Companies and organisations are also among the customers that purchase various classes and workshops. Underbroen is located under Langebro bridge in Copenhagen, so its users are primarily from the Greater Copenhagen area.

Members have been active participants in the founding and development of Underbroen, and the workshop reflects this creative collaboration. Underbroen not only provides its members access to various modern facilities, but also gives them access to a vast network of different disciplines where knowledge-sharing takes centre stage. Underbroen is therefore a meeting place for people with different professional backgrounds and a platform where creating tangible prototypes and products becomes the launch pad for conversation and new solutions.

Underbroen has an extensive network of partners, including Danish Design Centre, Copenhagen Solutions, BLOXHUB,

KU, Danish Architecture Centre, Roskilde Festival and a variety of other workshops and "fab labs" in Copenhagen and other parts of Denmark.

### **What Are the Sharing Economical Aspects of Underbroen?**

Underbroen participates in the sharing economy by allowing its members to share resources consisting of machinery and knowledge. This type of group sharing promotes the optimal use of resources and enhances innovation since more people get an opportunity to create and develop their ideas without failing due to prohibitively expensive equipment or the lack of specific knowledge. At the same time, Underbroen's creative community creates a network between members that might need each others' competences. For Underbroen, it's not just about providing machinery, it's about providing flexible, distributed manufacturing that will revolutionise the way we manufacture and the equipment we acquire. ■



# Business Ambitions for the Sharing Economy

Interview with Anders Hoffmann, Deputy Director of the Danish Business Authority

## What is the Political Vision Regarding Sharing Economy in Denmark?

The government has a goal of creating growth through sharing economy. Sharing economy has a number of good qualities that can benefit consumers, businesses and the public sector. Recent surveys show that when consumption in sharing economy increases, it can benefit our social economy through the emergence of new business models, increased growth and employment. Sharing economy also has a number of positive effects on the environment since we use our resources more effectively. Thus the government would like to create an efficient market for sharing economy with favourable terms for trust, choice and competition.

## Why Does the Danish Business Authority Support a Project Such As Sharing City?

The Danish Business Authority supports the government's goal of creating new jobs and intelligent public solutions through the sharing economy. By supporting the Sharing City partnership project, the Danish Business Authority would like to help expand the level of knowledge in municipalities, organisations and businesses regarding opportunities from sharing economy based on the experiences of the Sharing

City's innovators, partnerships and collaborations between municipalities and innovators. Furthermore, we would like to promote more innovative partnerships across the public and private sectors, which can lead to even more sharing economic projects based on Sharing City.

## What Are the Most Interesting Results from the Danish Business Authority's Perspective?

The Sharing City partnership project has provided insight into the specific challenges new sharing economy businesses face when they try to grow their businesses. It has been confirmed that there is a rising municipal interest in exploiting sharing economic opportunities better, which has, among other things, led to the launch of a number of specific sharing economy projects around the country. The projects are often locally-based in rural areas and show that sharing economy is not just an urban phenomenon. The collaboration has also shown that there is still a lot to be done when it comes to the municipalities who are actively working to promote growth through sharing economy. For example, municipalities can easily work on sharing their excess capacity and supporting new transportation solutions via sharing economic digital platforms. ■





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## GoJoin

gojoin.dk

### What is GoJoin?

GoJoin is a platform that enables and supports cross-discipline knowledge-sharing. The business model behind this knowledge-sharing is centred around the idea that individuals with special knowledge can create an activity or a course and possibly set a price for it, and people who are interested can enrol in these courses or activities. The platform for this connection consists of either a website or mobile app.

GoJoin works with two kinds of users on the platform: Organisers and participants. These include private individuals, but GoJoin also provides municipalities with added-value services that support knowledge development and user-driven activities in the local community. Additionally, a number

of municipalities and trade unions are partnered with GoJoin.

GoJoin believes that knowledge-sharing not only promotes enhanced knowledge among its participating partners, but that the platform also encourages them to meet, exchange ideas and create new communities.

GoJoin is available throughout Denmark but primarily operates in the Greater Copenhagen area.

### What Are the Sharing Economical Aspects of GoJoin?

GoJoin's business is part of the sharing economy through the platform that it has created for user-driven production of knowledge and opinion-shaping, thus focusing on sharing between individuals as opposed to sharing between larger organisations. GoJoin's

sharing economy platform likewise contributes to creating knowledge communities based on this sharing, so the social aspect is also strongly represented. ■





Outlook

# Sharing Cities

**H**ad I been invited even two years ago to write a foreword for a national Sharing Cities initiative, I'm not sure I would have believed it. Of course I would have been thrilled, but such a milestone seemed far away.

Yet, this report by the Danish Architecture Centre is a testament to how quickly and tangibly the sharing economy and cities have converged (and some might say, collided). Cities around the world are now looking at the sharing economy with a combination of enthusiasm and concern, ideas and questions, vision and unknowns. On the one hand, this is a conversation that is long overdue. On the other hand, it is still very early – and the most interesting developments are yet ahead.

We are living in the urban millennium. Globally, we are urbanizing – moving into cities – at the rate of one Copenhagen every week. Urban environments everywhere face an astounding range of challenges, from sustainable growth to loneliness, sprawl to resilience, inclusive access to climate change. Add to that changing demographics – youth populations exploding in much of the world, and increasing burdens on social safety nets – and new technologies that enable us to connect with more people in more ways than ever before, and it is clear that new solutions are not only needed, but possible.

The sharing economy and Sharing Cities concept can help address these challenges and rethink resources, markets and partnerships in new ways, across public, private and social sectors. There are myriad overlaps with Smart Cities, Green Cities, Resilient Cities and Sustainable Cities initiatives. And yet, we still lack a shared definition for what is in or out of scope; this diversity is both our strength and, all too often, a common tripping point.


This report represents an important step in the journey towards clarifying those gaps and honing in on the opportunities available. It marks, I hope, a shift from investigation to implementation. It should be applauded for several reasons, including its focus on cities beyond Copenhagen and its detailed survey of Danish sharing economy companies. In my experience advising around the world, I am routinely reminded of the fundamental importance of *local* sharing economy ecosystems. The media often focus on a few large global players, however that is only one piece of the pie; long-term success – and the deepest insights – are found more often in “glocal” efforts.



April Rinne is a Canadian seasoned strategic and policy advisor who builds bridges that enable better business, help more people participate in today's economy, and ultimately transform society. Within the sharing economy, focus areas include cities, policy, travel & tourism, the future of work, and emerging markets. She has successfully developed and scaled global initiatives, advised start-ups, Fortune 500 companies, governments, think tanks and investors worldwide.

April is also a globetrotter with insatiable wanderlust; her work and curiosity have taken her to 93 countries at last count. In 2011 she was named a Young Global Leader by the World Economic Forum.

April's mission is to bring people, ideas and resources together in ways that say “wow, that's what the world needs.” And then make it happen.



**“We must be careful  
as we move forward  
– to foster rules that  
ensure fundamental  
fairness ...”**

On the whole, the Danish government appears to be emerging as a sharing economy leader within Europe. Denmark's support for, investment in, and prioritization of the sharing economy in its national agenda presents a role model for nations everywhere. Its focus on sustainability, local business, and inclusive growth is level-headed and smart. We have not yet ironed out all the wrinkles, not least when it comes to policy reform. However, there is reason to be encouraged, particularly if policy makers can rise to the occasion and reimagine the tools necessary not only for business innovation, but for *civic innovation* and *policy innovation* that is at the heart of building better cities.

There has never been a more exciting time for cities, in Denmark and around the world. We must be careful as we move forward – to foster rules that ensure fundamental fairness, without eliminating the very incentives for innovation that we wish to promote – but this is a mandate that is eminently possible, perhaps nowhere more than in Denmark. We may usher in a golden era for cities in the process. ■



**Hegnsholt**  
HØNSERI

### Additional information

In-between the launch of the Danish version of this Sharing City Magazine (November 2016) and the launch of this English version (April 2017), the Danish Veterinary and Food Administration have stopped the exchange agreement between Hegnsholt Hønseri ("Hegnsholt Chicken Farm") and the restaurants Relæ, Manfreds, Bæst and Amass due to unforeseen circumstances. As the Minister of Environment & Food support new innovation as this sharing model, the Ministry and Administration are currently investigating solutions to this obstacle.

## Hegnsholt Hønseri

hegnsholt.net

### What is Hegnsholt?

Hegnsholt Hønseri ("Hegnsholt Chicken Farm") is a small-scale organic farm that operates on the principles of a co-op. The production takes place on a small scale but the products are all high quality. The way the co-op works is that you buy shares in a hen, chicken or lamb. When you buy a share in e.g. a lamb, you aren't just buying the meat, but also the reassurance that the product is of exceptional quality, raised in accordance with organic standards and with the spotlight firmly on the animal's welfare and the quality of the feed. Hegnsholt's main customers are restaurants, which are provided with products of the best quality and also receive a great marketing story to share with their customers.

Since Hegnsholt is locat-

ed in Lejre (45 km outside Copenhagen), the geographic area served by the farm is limited to Lejre, Roskilde and Copenhagen.

Hegnsholt intends to operate the business in a non-profit manner, with all income used on the operations and the farm's animals. An essential part of Hegnsholt's financial business model is that money isn't the only type of payment required from customers wanting to purchase a share. The restaurants also "pay" with a portion of their fresh-leftover vegetables (such as the top of the carrots) and bread in return for eggs.

Hegnsholt uses various digital platforms, such as Instagram, Facebook and their own website, to spread the word about their

products. Many of the conversations are analogue with customers happen during the delivery of goods or retrieval of leftovers. Hegnsholt also operates a farm store, where people can show up and buy products as well as visit the farm.

The biggest challenge Hegnsholt has faced has been that The Danish Veterinary and Food Administration ("Fødevarestyrelsen") is not fond of recycling food as feed since there's currently a lot of attention on prevention of salmonella and mad cow disease, which the council feels there's an imminent danger of if food is recycled. Hegnsholt would be able to accept more leftovers, but is limited by the legislation in this area. Hegnsholt Hønseri has a very



unique business model. It is innovative because it's based largely on exchange agreements, crowdfunding and share certificates.

→ The exchange agreements lower waste by utilising it as feed, thereby reducing the amount of chicken feed that needs to be manufactured and purchased, while at the same time increasing the market value of the chickens and the eggs. The hennery has contracts with restaurants in Copenhagen, where eggs and chickens are delivered, and a portion of the payment is in the form of leftover vegetables and bread from the establishments' kitchens. These are used as feed that is so nutritional and varied that the quality of the chicken and eggs is improved.

→ Another part of Hegnsholt's business model is allowing consumers to own shares in the farm's production. You can buy a share in the farm's chicken production, a share in a half or a whole lamb or a share of the egg-laying hens. The hennery receives payment in advance and Johanne keeps transparent accounting statements on behalf of all of her shareholders.

→ Finally, Hegnsholt has been able to open their farm store thanks to crowdfunding. When Hegnsholt was founded, consumers could make a donation in exchange for a gift card for the store, recipes or a visit to the farm. 75% of the expenses to establish the store were raised through crowdfunding.

### **What Are the Sharing Economical Aspects of Hegnsholt?**

Hegnsholt participates in the sharing economy on several levels. First and foremost, by using vegetable leftovers from restaurants in their production process. This allows Hegnsholt to help recirculate resources between its customers. By accepting and re-using leftovers, Hegnsholt utilises existing resources and reduces our need for new feedstock and foodstuff production, which helps ensure a better world for future generations. ■



## Naboskab

naboskab.dk

### What is Naboskab (Neighbourhood Cabinet)?

The Naboskab Association is working on innovative solutions that make it easier and more efficient to share, trade, re-use and recycle resources. Naboskab offers several platforms with this objective in mind and currently has three core products:

1. A Locked Neighbourhood Cabinet: In other words, a metal cabinet with an electronic lock that's set up, for example, in a housing association office. A Neighbourhood Cabinet lets residents share in a safe and secure manner since only they can open it with a key fob or an app.
2. A Swapping Cabinet: is an open cabinet that can be set

up in any housing association. With a Swapping Cabinet, residents can easily share things, such as toys, books, clothing and shoes, among neighbours in an organised and efficient manner.

3. A Public Swapping Station: is similar to the swapping cabinet but is larger and located in public spaces. It can be used by the neighbourhood's residents to exchange nice things with each other.

In addition, Naboskab sells lectures and educational seminars and has undertaken several extensive user surveys on behalf of municipalities to ascertain how their core products have been working. Naboskab's customers include housing associations

(co-op units, homes, rentals and public housing), municipalities and libraries. Additionally, primary schools, high schools and many other educational institutions purchase presentations and educational events. Currently, Naboskab is working with both Copenhagen and Lejre municipalities.

Naboskab has deliberately avoided the use of a digital platform as their primary product medium since they prefer having a platform that's physically located right where their users live. This idea is reinforced by their emphasis on close social relations between neighbours, which they hope to create and nurture through their work. Naboskab feel very strongly that trust is an essential element in getting people to change their consumption habits and share things.





Naboskab's products are therefore a melting pot of tangible offers, financial savings and expanded access to equipment, combined with softer values such as the environmental impact resulting from direct prevention of waste and stronger social cohesion.

### **What Are the Sharing Economical Aspects of Naboskab?**

Naboskab's concept subscribes to sharing economy because the neighbourhood cabinets allow more people can make use of less. When, for example, a co-op housing association with 150 residents buys a drill, the use of the machine is optimised and the need for residents to each buy their own drills is eliminated. Swapping cabinets and stations are also firmly rooted in the sharing economy since they promote sharing

of resources that would previously have been thrown out. Naboskab's main goal is thus direct prevention of waste and a circular philosophy that ends up preventing unnecessary consumption.

Ultimately, Naboskab's perspective regarding sharing economy can be divided into three components. Aside from working on the economic advantages of sharing, Naboskab also actively promotes social cohesiveness and climate optimisation. The neighbourhood cabinets serve as a catalyst for establishing and strengthening social bonds among neighbours and residents. In other words, the products represent informal social meeting places where residents can casually meet and strike up a spur-of-the-moment conversation. ■





Article

# A Sharing City Laboratory —Can We Share Our Way to Better Cities?

**Emmy Laura Perez Fjalland**, Ph.D. Fellow, Roskilde University and Danish Architecture Centre  
**Anne Grave**, Senior Project Manager, Danish Architecture Centre

### **A Co-Creating Programme**

When the idea for the project first arose in the beginning of 2015, sharing economy as a phenomenon had just arrived to the Danish media ‘vocabulary’, and it was necessary to study *why*, *how* and to *what extent* sharing economy could affect the development of cities and local communities. It was agreed that sharing economy – as such a new, diffuse and cross-disciplinary phenomenon – had to be investigated with an interdisciplinary lens, and among a manifold of practitioners and professionals. Thus, it was ideal to launch the Sharing City project as a co-creating laboratory where involved and affected partners could test and debate specific ideas, projects, and products in relation to the guiding question “*Can we share our way to better cities and local communities?*”.

For this, the role of the Danish Architecture Centre (DAC) has been to orchestrate and lead the *Sharing City* project. Our main task was to present an environment where businesses, authorities, organisations and the public sector could meet to discuss the future of urban and rural communities and together evaluate potential solutions to pressing local and national issues.

We believe that creative solutions are bred from co-creation and partnerships. By pooling resources (human and economic), uniting different professional perspectives and collaborating, we can make more progress in reaching our individual and common goals. Thus, it is needed to facilitate valuable meetings and partnerships between people from different industries and sectors in order to mutually innovate and expand our understanding of quality and innovation in our cities.

### **The Sharing City Laboratory**

The Sharing City Laboratory involved a number of entrepreneurs, organisations, businesses, municipalities and academic institutions, at different localities and situations, and with a myriad of projects and products. Together, they explored and tested various sharing economy ideas, solutions and hypotheses that could contribute positively in making better cities and local communities. A laboratory, aiming at examining and documenting the potentials of sharing economy, and fostering cost-effective, growth-generating solutions to take root - solutions that could have a substantial impact on the quality-of-life and sustainable cities.

The Sharing City was launched in August 2015 with seven Danish municipalities and in June 2016 each municipality hosted a Local Sharing Day where local and national stakeholders (professionals and civil society) working with sharing economy was invited. In August 2016, 24 sharing economy businesses and organisations from concept-phase to established businesses (called “innovators”) joined the collaborative project, and involved themselves in an incubator programme. These innovators were chosen based on how their idea/project/business/organisation was addressing either one or more of six formulated themes. These themes were based on local challenges formulated by the participating municipalities, and a part of the incubator programme was a match-making between municipalities and innovators.

### **Cities and Local Communities as a Foundation**

Significant for this co-creating laboratory exploring effects of sharing economy is the urban and local connection. The reason for this is that sharing economy plays out in cities and local communities *for* and *among* people, and it is thus in the interaction between people that the shared value of time, resources and knowledge is created. Moreover, looking at the current sharing economy services and solution these are, overwhelming, related to municipal areas of responsibility a Danish context. In Denmark, municipalities play a vital role in the welfare society as they are responsible for schools, day-care, elder care, health, social services, labour market, technical and environmental services (climate adaption, infrastructure, waste management), cultural and leisure activities as libraries and museums, and supply of electricity, water and heat.

The participating municipalities in the Sharing City project varied geographically, culturally, and demographically; from municipalities with many small rural villages to suburbs, suburban towns and large metropolises. During the autumn of 2015, the municipalities formulated a number of challenges that they each faced locally. Their most pressing challenges covered a broad range: congestions, immobility, loneliness among the elderly and young people, lack of overnight accommodations, lack of soil fertilisers, lack of leisure activities, lack of meeting places, lack of recrea-



tional spaces, treatment of household food waste, waste distribution, sharing of tools and machinery, sharing of the workforce, relationship between the city and the countryside, lack of security and sense of community, optimise the utilisation of public facilities, support sustainable commuting, better resident participation and better support of local entrepreneurship.

These local challenges were summarised into six themes or areas of initiative: *Share Tools*, *Share Waste*, *Share Facilities & Spaces*, *Share Data*, *Share Transport*, and *Share Activities*. As mentioned, the innovators were asked to address one or more of these themes. In spite of the differences in the scale and size of the municipalities, we use the

phrase “*cities and local communities*” as a common reference to them. The difference and variety of the challenges and six themes express the local qualities and urgencies, and holds a thematically-broadness of national interest.

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→ The specific actions and conceptualisation of sharing economy is described for each municipality under “Municipal Profiles” from page 54. The Expert Perspective written by Ida Bigum Nielsen also discusses the municipal role on page 69 just as the article on page 81 discusses the communal and municipal aspects of sharing economy.

## Frameworks for the Development of Sharing Economic Solutions

An all-encompassing important objective of the Sharing City project was to develop new knowledge about the potential of the sharing economy for Danish cities, and the focal point of the involvement of the municipalities was the development of innovative pilot projects within the field of sharing economy. These were partly intended for sharing economic business models, i.e. projects with explicitly commercial objectives that could be scaled nationally, and partly for sharing concepts that did not necessarily have a commercial aspect but which solved important and urgent needs and challenges both of local and national interest. Additionally, it was critical that the participating municipalities were able to launch and carry out locally-initiated sharing economy projects. The latter was launched during the individual Local Sharing Days in June 2016.

Both socioeconomic organisations and commercial businesses responded to the Sharing City project's *Open Call* for solutions corresponding to the six defined themes. This resulted in 56 applications for participation in the Sharing City's incubator programme, and in July 2016, 30 projects with the most potential were selected within the predefined themes. You can read more about the remaining 24 sharing economy participants in this magazine, indexed as "*Innovator Profiles*".

Rainmaking Innovation - a consultancy company with expertise in corporate innovation and entrepreneurship - assisted the participating municipalities with the design of their Local Sharing Days and to identify and headhunt sharing economy organisations and businesses for both the Local Sharing Days and the National Open Call. Last but not least, they designed the incubator programme and executed the incubator process over the course of the late summer and autumn of 2016 for the sharing economy innovators.

## Incubation of Sharing Economy Businesses and Organisations

The purpose of the incubator programme was twofold: On the one hand, it served as an important channel for empirical data on the Danish sharing economy scene, while on the other, it was a catalyst for consolidation, development and growth of the same businesses and organisations.

This was achieved by presenting the participants with tools for refining and developing their sharing economy business models and creating a framework for their investigation of potential strategic cooperative ventures or partnerships, both with the municipalities and the other sharing economy participants. Finally, the innovators were introduced to a network of mentors that could help with individually-tailored qualitative advice, both within and outside of the incubator process.

The incubator programme ran over six days, segmented into three modules, from August to October 2016. In this way, the participating teams were able to work with the tools and develop their skills during this period. The process was customised with the needs of sharing economy start-ups (in the broader sense of the word) in mind as well as the Sharing City project's overall objectives. Thus, special emphasis was placed on investigating strategic partnerships, community management, content marketing and the legal and insurance aspects of the sharing economy.

In addition, we incorporated best practice tools from the start-up environment, including tools like *Lean Start-Up*, development of business models during the launch and start-up phase, peer-to-peer knowledge sharing and sessions with mentors with experience in growing sharing economy businesses as investors, serial entrepreneurs or similar.

## Sharing City's Solutions and Effects

It is important to note that the participants in the incubator programme ran the gamut from being in the concept phase to the end of the implementation phase. That affects the extent to which it is possible to evaluate the sustainability of their business models, and in many ways, it can be said that this is just the beginning. It is always risky to work on the cutting edge, and the number of start-ups that survive is limited. But what the participating sharing economy businesses and organisations all have in common is that they received a boost in their development.

In different ways, they have laid the foundation for the approach taken with their business models and established a plan that emphasises building a customer base and creating value for their customers before building slick technical systems. In addition, the networks, collaborations and/or partnerships they have built among themselves

and with the municipalities have been of immense value to them.

Specifically, Donkey Republic and Middelfart Municipality, My Village and Nyborg Municipality, Naboskab (“Neighbourhood Cabinett”) and Lejre Municipality and Tadaa and Sønderborg Municipality have all entered into dialogues and initiated cooperation. Establishing real partnerships takes time, which has not been possible within the time frame of this project, but conversations between many of the innovators and the municipalities, including Kompostbudene (“the Compost Messengers”), Naboskab (“Neighbourhood Cabinett”), FarmBackup and My Village are a direct outcome of the process.

The innovators Underbroen (“Under the Bridge”), Kompostbudene (“The Compost Messengers”), Copenhagen Volunteers, OPI Thing Bank for Everyone, Local Sharing Middelfart, Green House Frederikssund, Hegnsholt Hønseri

(“Hegnsholt Chicken Farm”), FRiRUM Lab (“Free Space Lab”) and Share Your Land all have a specific local initiative or collaboration with their local municipality and the potential to contribute to the local community and its development.

The project aim was also to stress the potentials of sharing economy and sharing concepts in the broader sense. In June, the partnership behind the Sharing City project published a pre-study on the sharing economy, and through this magazine, along with the Local Sharing Days, debates during the People’s Political Festival (“*Folkemødet*”) and information in the local and national media, we have tried to communicate the challenges and potentials of sharing economy in relations to development of our future cities and local communities.

As a whole, the participating municipalities have indicated that the Sharing City project has allowed one of the largest sharing economy organisations, the municipality, to put small and large communities on the agenda. All of the political representatives on city councils have been able to find support for sharing economy, showing that it has been a topic with the necessary political focus. The discussion and work around sharing economy in a municipal context has been characterised by familiar initiatives and policies in the areas of well-being, growth and green redevelopment, rural district policy, environmental policy and business policy.



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**Anne Grave** is Senior Project Manager at Danish Architecture Centre, and holds a Master of Arts in Anthropology from University of Copenhagen, Denmark. Anne is responsible for the project management of the Sharing City partnership project, and her professional background is particularly centred around citizen involvement, democracy and urban planning. Anne has previously worked with the media and architectural event “Build It Up” (“Byg det op”), a collaboration with the Danish Broadcasting Association (“DR”), and was the project manager of “DK2050”, a simulation project where she was responsible for a number of workshops and moderated political debates between city councils and residents.

→ Since the project ended in December 2016, several of the innovators and the projects initiated by the municipalities have continued, and keep trying to find their way. ■



multikant

## Multikant

multikant.dk

### What Is Multikant's Platform?

Multikant works where the crossroads between citizens, associations and municipalities intersect to develop, expand and implement a sharing economy platform focused on a greater sense of community. This can occur, for example, when an association needs help to develop a framework for borrowing and lending their skills and other resources, such as trailers, lawnmowers, etc.

The platform was first started in the area surrounding Lillebælt (a southern sea part of Denmark) and other small towns nearby. The platform is designed to create a greater sense of community and visibility for the individual areas, thus serving as a means for attracting new residents. Multikant therefore works on a smaller geographic scale and values local

perspectives, which are vital in order to engage citizens, municipalities and other stakeholders in the sharing economy.

### What Are the Sharing Economical Aspects of Multikant's Sharing Platform?

Multikant's platform promotes the expansion of a shared use of the resources in local associations since it's not necessary for everyone to own the same products in a local community. Redistribution of the resources between smaller and larger associations creates a stronger community with better awareness of citizens in the local areas.

By focusing on the communities, new residents and associations are attracted and smaller towns are made more lively and interesting. The digital platform enables the mutual sharing and visibility.

By creating a platform for the sharing economy and implementing it locally, Multikant is helping to create a common platform for the local associations. ■





## FriRUM Lab

frirumlab.dk

### What is FriRUM Lab?

FriRUM Lab (free space lab) is a socioeconomic venture that develops activities for kids, young people and families and which provides social interaction and the opportunity for participants to unleash their creativity and pursue their ideas by discovering new uses for surplus materials. FriRUM Lab's activities therefore promote resourceful thinking and an emphasis on recycling in the community over wasteful consumption of resources. FriRUM Lab accomplishes this by holding various workshops, events and classes on these core topics. FriRUM's customers include day-care centres, schools and families in Slagelse, along with a few from outside the municipality.

FriRUM does most of their work in an empty retail space in Vestsjællands Centret ("West Zealand Centre") in the city

Slagelse, where they host workshops, classes and events. The location in a busy shopping centre provides plenty of visibility. FriRUM Lab also maintains a digital presence via their website and an active Facebook page. Likewise, they're also active on Instagram and Twitter in order to provide greater visibility and raise awareness on what the lab has to offer.

FriRUM Lab's business model depends on the materials local businesses donate, along with the lab's physical locations and, most important of all, the inspiration and hard work of all the bright minds behind the operation. FriRUM Lab has partnership agreements with West Zealand Centre and Slagelse Municipality and is supported by local businesses that donate materials and support the activities. In addition, FriRUM Lab has a couple of devoted volunteers who provide valuable assistance.

### What Are the Sharing Economical Aspects of FriRUM Lab?

Building a sense of community and promoting sharing is a priority for FriRUM Lab, as well as teaching kids and young people to share. FriRUM Lab participates in the sharing economy by utilising an empty shopping centre space that's not suited for rental and finding a new use for surplus materials from the centre and nearby businesses to create fun activities for kids, young people and their parents. At the same time, they're working on creating internships and jobs for disadvantaged young people.

FriRUM Lab is helping to create a world where schools, institutions and others readily loan resources that provide kids with fun learning activities, instead of everyone needing to go out and buy their own materials. ■





Expert Perspective

# The Sharing Economy — Keep it Local

### **We Used to Share To Keep Our Communities Together...**

From the early days of civilisation we have shared resources, accomplishments, information and knowledge. This has held societies together. Hunters and gatherers shared their daily catch with their clan and tribe, and when everyone did not have the same luck every day, sharing was a necessity way of surviving. Carpenters, saddle makers and brewers shared their work and their methods with their guilds. Without such sharing, these crafts would not have been feasible. Philosophers and physicians shared their knowledge with other academics at the universities and this sharing formed the basis of science. Farmers shared their tools and seeds, and later their dairies and machinery, with neighbouring farmers. It was this sharing that made the rural communities efficient compared to prehistoric hunter-gatherer civilisations.

All this sharing did not happen spontaneously. You do not share if you are afraid of opportunists or swindlers or worried about the so-called *free rider problem* – that someone takes without giving in return. Thus, sharing originally relied on strong, trust-based communities where most people knew one another and could keep an eye on anyone they did not know. It was no coincidence that sharing was kept local – in the tightly-knit environment consisting of families, clans, guilds, universities and rural communities. In such communities sharing did not just have a practical value, but also held a symbolic meaning that served to unite the community.

### **...Until the Market Economy Took Over**

As civilisations and cities grew, marketplaces popped up where resources and accomplishments were exchanged instead of shared, and eventually trading emerged, where people used money instead of bartering. Money enabled more anonymous trading. Resources and accomplishments became goods and services and senders and recipients did not need to meet personally. The market economy was a fundamentally new way of organising society. Instead of sharing taking place in local communities, the market economy functioned through individual buying and selling carried out via money and contracts (and later, as the market-based model developed further, also

via banks and security exchanges). The market economy spread across borders resulting in international trade. Tightly-knit rural and urban environments were no longer practical necessities and local communities were no longer held together through sharing. As sharing in local communities disappeared, other values, such as nationalism and religion, emerged to fill the void in holding society together.

Money-based international trade enabled a degree of specialisation and expertise that far exceeded what local sharing could deliver. As a result of the growth of the market economy, we have experienced enormous economic efficiency and technological development. The stock of knowledge has also grown in the market economy: Information and knowledge can also be traded, and that provides incentives for universities as well as businesses to participate in research and development.

### **New Technologies Give Sharing a Comeback...**

Paradoxically, it is the same new technologies developed as a result of the success of the market economy that have made it possible for sharing to make a comeback. It is this combination of the market economy and the ancient principle of sharing we call *the sharing economy*. The most important enabling technology is of course the Internet, which allows us to exchange and search for information across interpersonal and national borders. Of course, the rapidly growing opportunities for finding products and services benefits market-based trade. But the Internet also plays a role in propagating alternative values of environmental awareness, authenticity and the global village, while simultaneously making it possible to find resources and accomplishments that can be exchanged or shared as an alternative to market-based trade.

As a result, we also see that small non-profit communities are sprouting up on the Internet where resources and accomplishments are shared, such as art, cooking recipes, work tasks or open-source software. Alongside these non-profit sharing models, we also find market-based sharing models where businesses like Uber or AirBnB profit from enabling individuals to share private resources, such as their car, time or house.

**“Even if it is exciting that we are able to share vacation homes with Italians and share software with Indians, most of our everyday problems and solutions remain local.”**



**Mark Lorenzen** is Professor of Innovation, Entrepreneurship and Industrial Dynamics at the Copenhagen Business School and director of the international research network DRUID. His research is in the field of industrial dynamics, with a special focus on the relationships between innovation and the economic organization of the market in networks, projects, and clusters – currently within the creative industries. Mark has published in journals such as *Journal of Economic Geography*, *Organization Studies*, and *Economic Geography*, and he is editor-in-chief emeritus of *Industry and Innovation*, series editor of the *Routledge Studies in Industrial Dynamics* and editor of *The Oxford Handbook of Creative Industries*.

#### **... And Much of the New Sharing Economy Can Also Be Kept Local**

The sharing economy is still emerging but already enjoys huge popularity. For example, the sharing of costly resources makes it possible for more residents to access them, and the sharing of polluting resources reduces their negative environmental impact. The sharing economy also creates opportunities for many new small businesses with potential for creating employment and economic growth.

While many young consumers with a global mindset and digital skills embrace the sharing economy, it has also started to attract negative attention. The commercial sharing models employed by Uber and AirBnB challenge existing infrastructures and labour market agreements. Furthermore, the multinational corporations behind the largest digital sharing platforms are increasingly criticised for growing at the expense of existing industries and national identities and undermining national regulation and taxation. At the same time, it is becoming evident that the Internet has its limits with respect to community and trust, and there are more and more examples of opportunism, fraud and free riding: Scams, fake payment cards and identities, false ratings and rankings, imperfect information, misunderstandings and disappointment regarding those resources shared online.

# “It is this combination of the market economy and the ancient principle of sharing we call *the sharing economy*.”

At the same time as the commercial sharing economy driven by multinational providers is undergoing discussion and criticism, another, and more local, sharing economy is emerging. New technologies also make it possible to benefit from and further develop local offline communities. Both in local urban areas and in small towns and villages, residents and authorities use the Internet and cell phones to identify and involve neighbours in sharing local resources and accomplishments. The coming together of new technologies and the local urban environment, in the guise of sharing rides, child care or lawn mowers, is perhaps a less attention-grabbing part of the sharing economy than Uber and AirBnB, but it's a particularly effective one. Like the ancient form of sharing, it is based on the direct supervision and trust propagated by geographical proximity.

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→ Even if it is exciting that we are able to share vacation homes with Italians and share software with Indians, most of our everyday problems and solutions remain local. The local sharing economy thus has at least as much potential as the international one. The sharing economy still works best when it is kept local. ■

## Further Reading

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## Byhøst

byhoest.dk

### What is Byhøst (*Urban Harvest*)?

Byhøst is an association and online service that provides information, inspiration and advice to people on how to harvest and use natural ingredients, even in the middle of crowded urban areas. With its helpful online maps of edible foodstuffs in the local environment, wide variety of guided events and easy-to-digest information and tips, Byhøst makes it possible for even the most hopeless of “city slickers” to locate and use natural ingredients at home in the kitchen.

Byhøst has a digital sharing app that’s a mobile tool with an online “sharing” map, which makes it easy to locate and gather natural foods on the spot. Via the app, Byhøst users can locate and share their favourite spots for gathering edible natural ingre-

dients. As users contribute their favourite gathering places for natural herbs and plants, Byhøst will continuously expand its map of places in Denmark where you can find a bountiful supply of wild, natural ingredients. The app has over 20,000 gastronomes of all ages among its users, but caters especially to women between the ages of 24–35. Currently, there are around 1,500 gathering spots registered on its digital map.

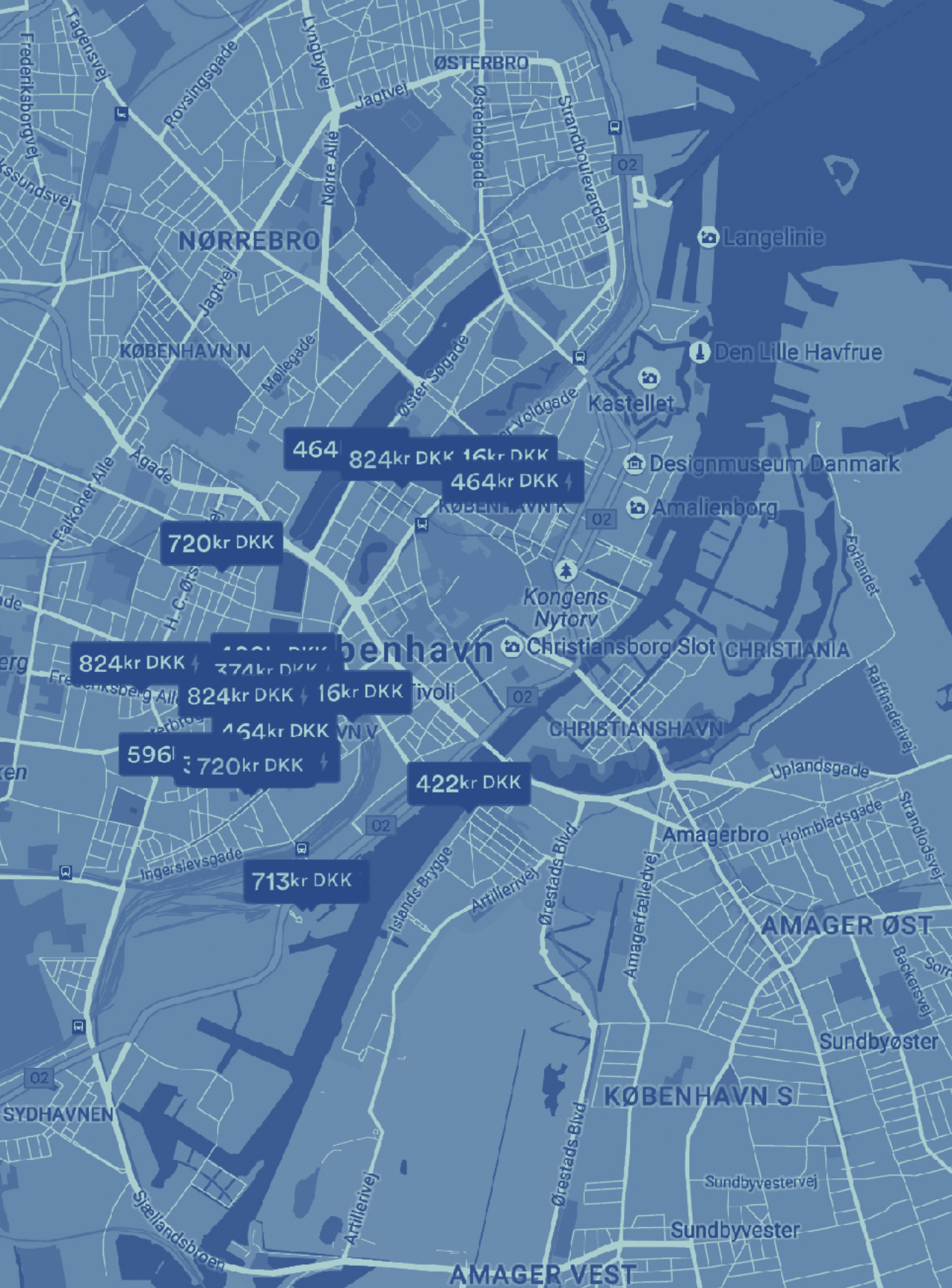
Byhøst has a host of various strategic partners in the community, including municipalities, local committees, museums, businesses and special interest groups.

### What Are the Sharing Economical Aspects of Byhøst?

Byhøst’s mission is based on sharing knowledge about natural ingredients and bringing people

together through the exchange of information, experiences and values. People in fact grow deeper roots in the community when they pluck an apple from the town’s biggest apple tree or dig up a wild carrot in a busy urban park year after year. When people realise that the town is “edible”, they care for it better, and this relationship to the bountiful nature around them provides personal and nutritional enrichment, improving their quality of life. Why eat apples that are sprayed with insecticide, packed in plastic and shipped from massive plantations in Spain when you can eat scrumptious shiny red apples right out of a city park? Wild, natural food from the field to the table – what better way to bring people together? Byhøst is actively working to promote cleaner, greener, more socially-cohesive and “edible” cities. ■





NØRREBRO

ØSTERBRO

KØBENHAVN N

KØBENHAVN K

CHRISTIANIA

CHRISTIANSHAVN

AMAGER ØST

KØBENHAVN S

AMAGER VEST

SYDHAVNEN

464 824kr DKK 16kr DKK

464kr DKK

720kr DKK

824kr DKK 16kr DKK

824kr DKK 16kr DKK

596 720kr DKK

422kr DKK

713kr DKK

Expert Perspective

# What Do We Know About Airbnb in Copenhagen?



**R**ecently, a new type of business has emerged. Businesses that focus on connecting those who provide and those who demand a product via an internet-based platform. Some notable examples are Airbnb and Uber. In this article, we focus on one of these new businesses: Airbnb. The article offers answers to the following questions:

1. How widespread is Airbnb in Copenhagen in relation to other comparable cities?
2. How are the dwellings distributed in Copenhagen?
3. Are the Copenhagen Airbnb hosts renting out regularly, or only once in a while?

We do this by extracting data from the internet on available dwellings on Airbnb. We use data from Copenhagen and comparable cities. Data are extracted from the website “Inside Airbnb” (2016). We focus on dwellings listed in 2015 or 2016. In the figure, where we use information on housing stock in Copenhagen, we extract the data from Statistics Denmark. For information on the housing stock in other large cities we use various data sources, which are freely available.

### **Copenhagen in relation to other cities**

At first glance it appears that the Danish capital has a relatively high number of Airbnb dwellings available, cf. Figure 1. Not surprisingly, Copenhagen is at a noticeably more modest level compared with larger cities with far more tourists like New York, Paris and London (cf. Euromonitor International (2016)).

When we compare the number of available Airbnb dwellings with the total housing stock in the cities, the numbers change dramatically. Figure 2 shows that Copenhagen actually has an Airbnb rental market share that is only exceeded by Paris. It seems that people in Copenhagen have embraced Airbnb’s rental model.



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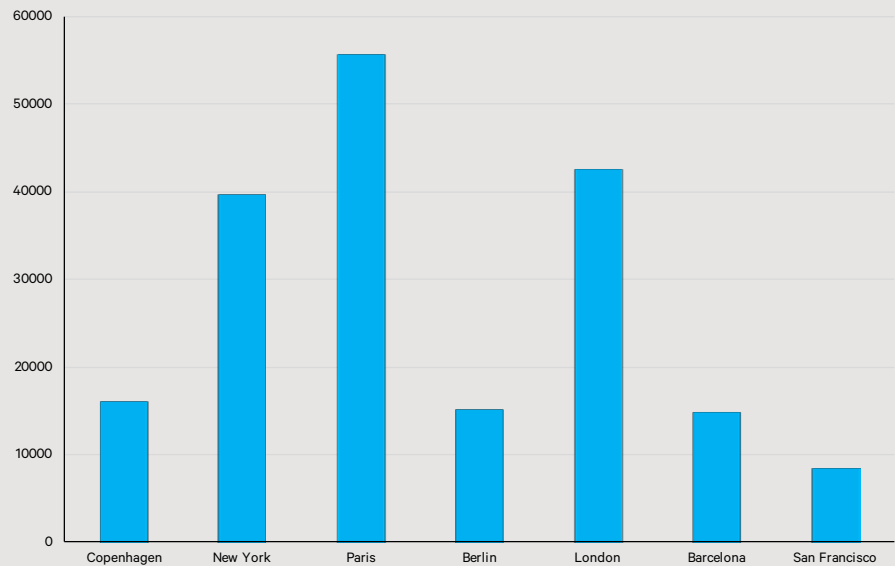
**Ditte Håkonsson** is a researcher at Kraks Fond – Institute for Urban Economic Research and a PhD student the University of Copenhagen. Ditte holds a Master degree in Geography and Geoinformatics from the University of Copenhagen, and her research focuses in particular on the location of companies and the geographic distribution of the workforce.



**Ismir Mulalic** is senior fellow at the Kraks Fond – Institute for Urban Economic Research, associate professor at the Technical University of Denmark, and part-time associate professor at the University of Copenhagen. Ismir holds a PhD in economics from the University of Copenhagen. His research areas are applied microeconomics and applied microeconometrics, in particular urban economics.

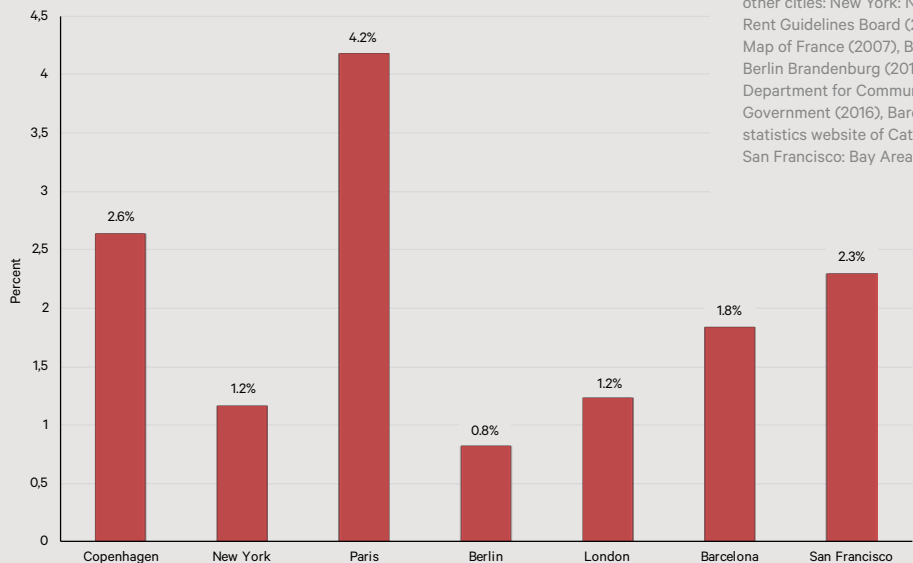
**Fig. 1.** The number of dwellings on Airbnb for different cities.

Reference: Inside Airbnb (2016).

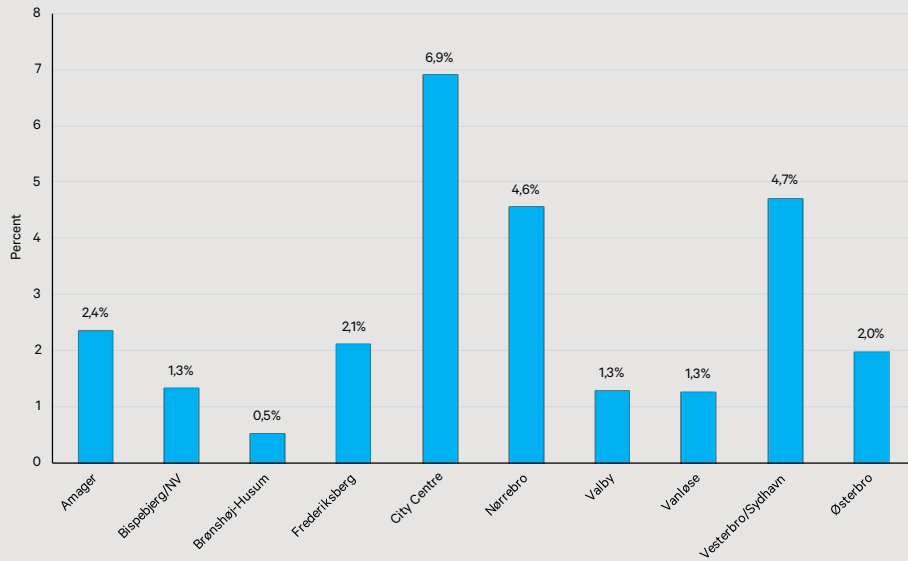


**Fig. 2.** Share of the housing stock that is rented out through Airbnb for different cities.

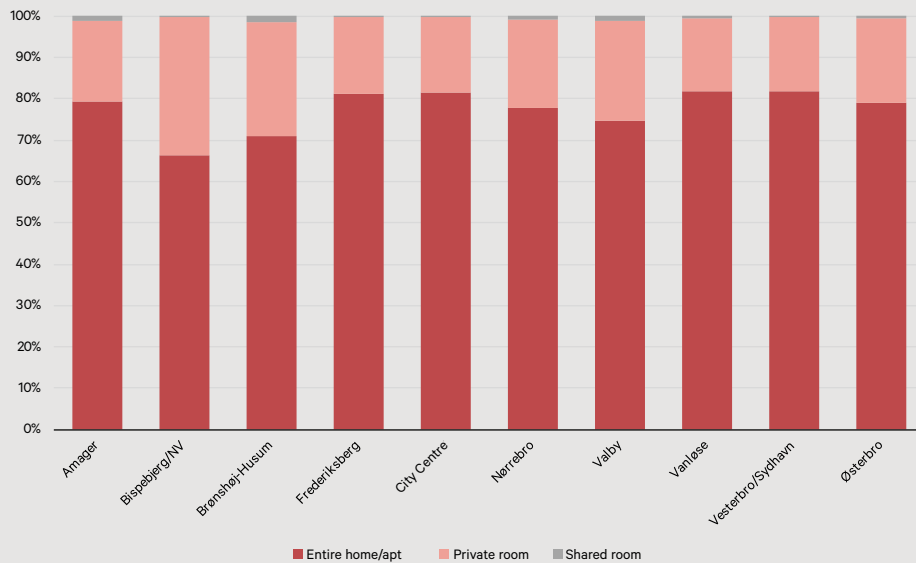
Reference: Own calculations based on data from Inside Airbnb (2016), Statistics Denmark and for each of the other cities: New York: New York City Rent Guidelines Board (2016), Paris: Map of France (2007), Berlin: Statistics Berlin Brandenburg (2015), London: Department for Communities and Local Government (2016), Barcelona: Official statistics website of Catalonia (2016) and San Francisco: Bay Area Census (2010).



**Fig. 3.** Share of the housing stock that are rented out through Airbnb in different areas of Copenhagen.



**Fig. 4.** The distribution of types of dwellings that are rented out through Airbnb in different areas of Copenhagen



Reference: Own calculations based on data from Inside Airbnb (2016) and Statistics Denmark. The calculations are based on dwellings that are rented out at least once in 2015 or 2016.

### The supply of Airbnb dwellings in Copenhagen

How is the supply of Airbnb dwellings distributed over different areas in Copenhagen? In Figure 3 we show the percentage of listed dwellings for different areas in the city of Copenhagen. The city centre dominates with the shares approaching 7% of the total housing supply, while Brønshøj-Husum is at the bottom with approximately 0.5%.

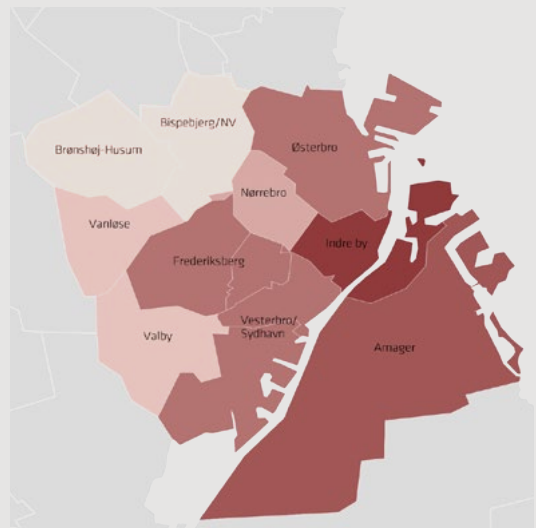
The dwellings rented through Airbnb in Copenhagen are predominantly entire apartments or homes. Figure 4 shows that between 70–80% of Airbnb dwellings in Copenhagen are entire apartments or homes.

The price per night for dwellings varies significantly in Copenhagen. Figure 5 shows the average prices for the listed dwellings in different areas (DKK 1 ≈ € 0.13). The price per night is highest in the city centre where the average price per night is DKK 1,137. The lowest prices are found in the outskirts of Copenhagen. The area with the lowest price is Bispebjerg/NV with an average price of DKK 574 per night.

**Fig. 5.** Average price per night for dwellings in different areas of Copenhagen

Kroner

550 - 600
600 - 650
650 - 700
700 - 750
750 - 800
800 - 850
1100 - 1150



Reference: Own calculations based on data from Inside Airbnb (2016) and Statistics Denmark. The calculations are based on dwellings that are rented out at least once in 2015 or 2016.

Reference: Own calculations based on data from Inside Airbnb (2016) and Statistics Denmark. The calculations are based on dwellings that are rented out at least once in 2015 or 2016.

# “Copenhagen actually has an Airbnb rental market share that is only exceeded by Paris”

## What rental pattern do we find in Copenhagen?

One of the arguments in favour of the sharing economy is that it involves ordinary families who are just making their property (e.g. home or car) available to others when they are not using it themselves. However, to what extent is this the case for Airbnb renters in Copenhagen?

If Airbnb hosts rent out their residence frequently or rent out several dwellings, their actions may actually be similar to that of an owner of a B&B or a hotel. Figure 6 shows the distribution of the number of dwellings offered per host. The figure shows that renting in Copenhagen is largely done by individuals who are renting out only one or two dwellings. Based on this, it seems plausible that it is the individuals' own residence or parts of their residence that they are renting out.

Finally, we look at the number of reviews a host has received from renters on Airbnb.<sup>1</sup>

In Figure 7 we show the number of reviews each year distributed over listed dwellings. Just over 3% have more than 50 reviews per year. In other words, not many people rent out through Airbnb on a scale that is comparable to an actual hotel operation. However, at the same time, the numbers reveal that a significant share of these individuals are renting out on a scale that presumably provides them with a notable income. More than 45% of the hosts are renting out at least ten times a year. ■

### Data

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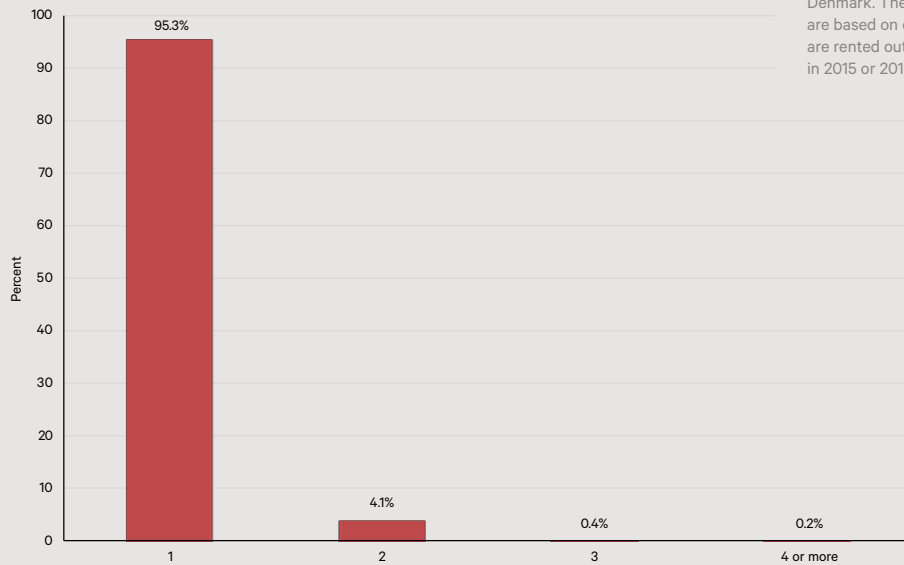
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<sup>1</sup> We do not have information on the actual number of dwellings per host. That means that the actual number could be higher since some people might not review the Airbnb dwelling they used.

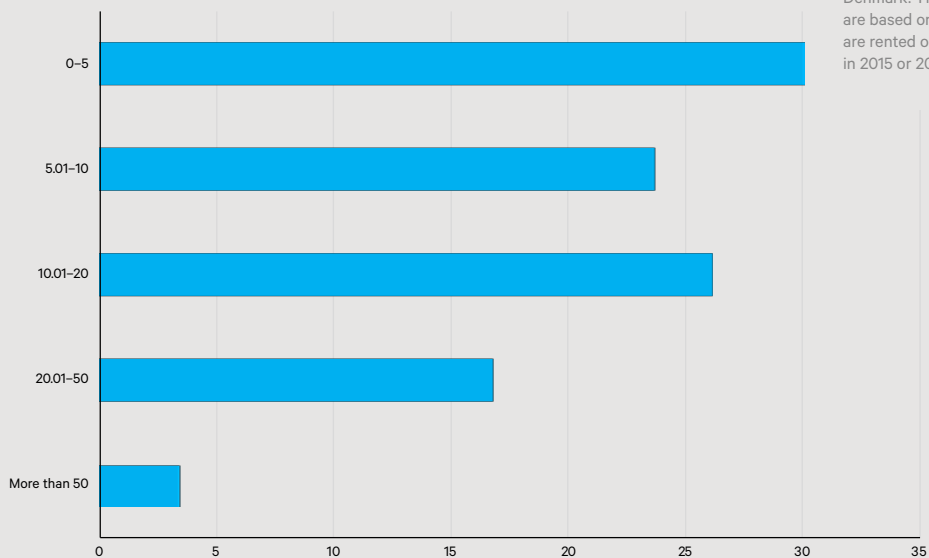
**Fig. 6.** Number of dwellings per host in Copenhagen.

Reference: Own calculations based on data from Inside Airbnb (2016) and Statistics Denmark. The calculations are based on dwellings that are rented out at least once in 2015 or 2016.



**Fig. 7.** The distribution of the number of reviews per dwelling each year.

Reference: Own calculations based on data from Inside Airbnb (2016) and Statistics Denmark. The calculations are based on dwellings that are rented out at least once in 2015 or 2016.





**Article**

# Urban Development and Planning in a Sharing Economy Context

**Brian Landbo**, Managing Consultant, Rambøll Management Consulting

**The population of Denmark is growing, but this overall trend covers great variations around the country. While some municipalities and cities have experienced an increase in the number of citizens, others have thus experienced depopulation as well as changes in their demographics, with an increase in the number of elderly and a decline in children and young people. In addition, citizens move from villages, small towns and suburbs to the main cities. The urbanisation is here to stay, and continue to impose challenges for the municipalities.**



### **A Broader Perspective on Urban Development and Planning**

While urban development and planning in Danish municipalities typically has focussed on physical aspects, such as infrastructure, homes and industrial areas, attention has in the recent years also been paid to social aspects of urban development and planning.

This has occurred in parallel with an increased understanding of the importance of physical structures for the well-being of people and for city life. Furthermore, when planning the city of the future, involvement and participation of citizens are also seen as increasingly important elements.

Active citizenship is an essential element of this evolving perspective. Active citizenship involves, among other things, taking collective responsibility for our own living conditions and those of others, and contributing to the development of healthy societies and local communities. Consequently, strengthening and developing communities is a fundamental platform. This applies to large cities with exposed urban areas, but also in smaller cities in rural areas, where the distance to commercial centres and principal cities seems to be growing.

### **The Sharing Economy in Urban and Community Planning**

Several of the municipalities in the Sharing City project consider sharing economy as new variant of the traditional Danish cooperative movement. Some of the initiatives in the project are based on digital platforms, while others are not, but they generally appear to be focused on social aspects and on the potentials for contributing to the development of the social community.

For example, this is the case in Sønderborg, where city managers played an active role in establishing an electric car sharing initiative that allows people in rural areas to book an electric car whenever they need one. The initiative supplements the existing public transport system and helps to bridge the gap between the rural areas of the municipality with the principal city.

This is also the case in Copenhagen, where the Culture- and Leisure Committee has tested various concepts of the sharing economy targeted at creating a thriving metropolis, in collaboration with the city's residents, associations and creative and cultural stakeholders. Examples of these include Naboskab in the city's libraries and OurHub, which involve cabinets with socially-oriented items (e.g. games, etc.) that will be installed in the city's parks and public spaces.

Some of the municipalities in the Sharing City project have however also had a strong focus on the opportunities related to innovation and entrepreneurship, including financing conditions and other framework conditions for entrepreneurs. For example, this is the case in Lejre, where the division of roles between the municipal administration, citizens and businesses have been clear. The municipality takes the role of a facilitator with a targeted focus on finding solutions to challenges imposed on entrepreneurs. In addition, the municipality had a strong focus on communication solutions provid-





As Managing Consultant, Brian Landbo has the professional and strategic responsibility for Ramboll-activities within business and growth policy, primarily in Denmark but also a Nordic and international context. Based on his experience from numerous analyses and evaluations, Brian among others advises on regional and local strongholds, on conditions for creating growth and jobs, and on current paradigms such as the Sharing Economy, Internet of Things, and Scaleups.

ed for individual entrepreneurs to the broader community.

This is also the case with Middelfart, where the sharing economy is seen as a driver of green transition. The initiatives in Middelfart are thus closely integrated with the municipality's strategy and efforts in relation to environmentally-friendly transition and growth, where an emphasis is also placed on supporting businesses that embrace the new green technologies leading to jobs and growth.

### Same As It Ever Was?

As mentioned, several of the municipalities in the Sharing City project consider sharing economy as new variant of the traditional Danish cooperative movement. However, when the sharing economy as a concept becomes very broad and possibly synonymous with concepts such as co-creation, citizenship, etc., the boundaries between projects and initiatives based on the principles of the sharing economy and other initiatives may become too blurred.

It has also become apparent that the initiatives that municipal governments categorise as being sharing economic are often not that closely linked to digital platforms. And in contrast, it is furthermore been demonstrated that the efforts of municipalities in developing urban spaces, for example in city parks and rural playgrounds, often end up serving as great examples of projects and initiatives based on the sharing economy.

In other words, we simply have too limited knowledge about how the sharing economy is linked to urban and community planning. The concepts related to the sharing economy remain too weakly defined and delineated within the context of urban planning and development.

Consequently, the roles municipalities can assume with respect to the sharing economy are still unclear. Some of the municipalities in the Sharing City project have taken a very active, developmental role and see the principles embedded in the sharing economy as a new approach for tackling social welfare issues. The basic premises behind the sharing economy and its integrated technological aspects may, in this respect, be able to provide meaningful new social welfare services on a limited budget. Other municipalities have been more passive and consider their role to be primarily supportive – especially where these efforts are linked successfully with rationalisation of services and cost savings.

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→ In the following pages, you can read about the initiatives launched by the seven participating municipalities and how they position themselves with regard to the principles embedded in the sharing economy. ■

# Frederikssund Municipality

**How can sharing economy promote better utilisation of existing resources?**

**How can sharing economy support new businesses and jobs?**

**What impact on society and the community does sharing economy have?**

**F**rederikssund Municipality's professional council decided that the municipality should participate in the Deleby project in order to learn more about how projects and initiatives inspired by the sharing economy could help promote better utilisation of existing resources and support new businesses and jobs.

For Frederikssund Municipality, this revolves around better utilisation of the municipality's premises to encourage cooperation and sharing of facilities and equipment among residents, businesses and associations. It could, for example, involve better use of waste heat or

waste products from businesses.

For the Deleby project, Frederikssund has focused on three initiatives:

1. "Stop Food Waste" is a project which started in Slangerup and deals with collecting food leftovers from cafeterias, restaurants, etc. and using them for such things as offering weekly meals to the elderly or to other who need them.
2. The idea behind "Share Your Green Space" is to create a readily understandable concept for establishing a local growers council, e.g. beekeeper, chicken and sheep farmer councils.
3. Finally, the concept behind "The Green House" initiative is to open an eco-friendly house where environmental organisations can hold meetings, community meals and social events. A physical location where residents can come in

off the street and meet these environmental organisations.

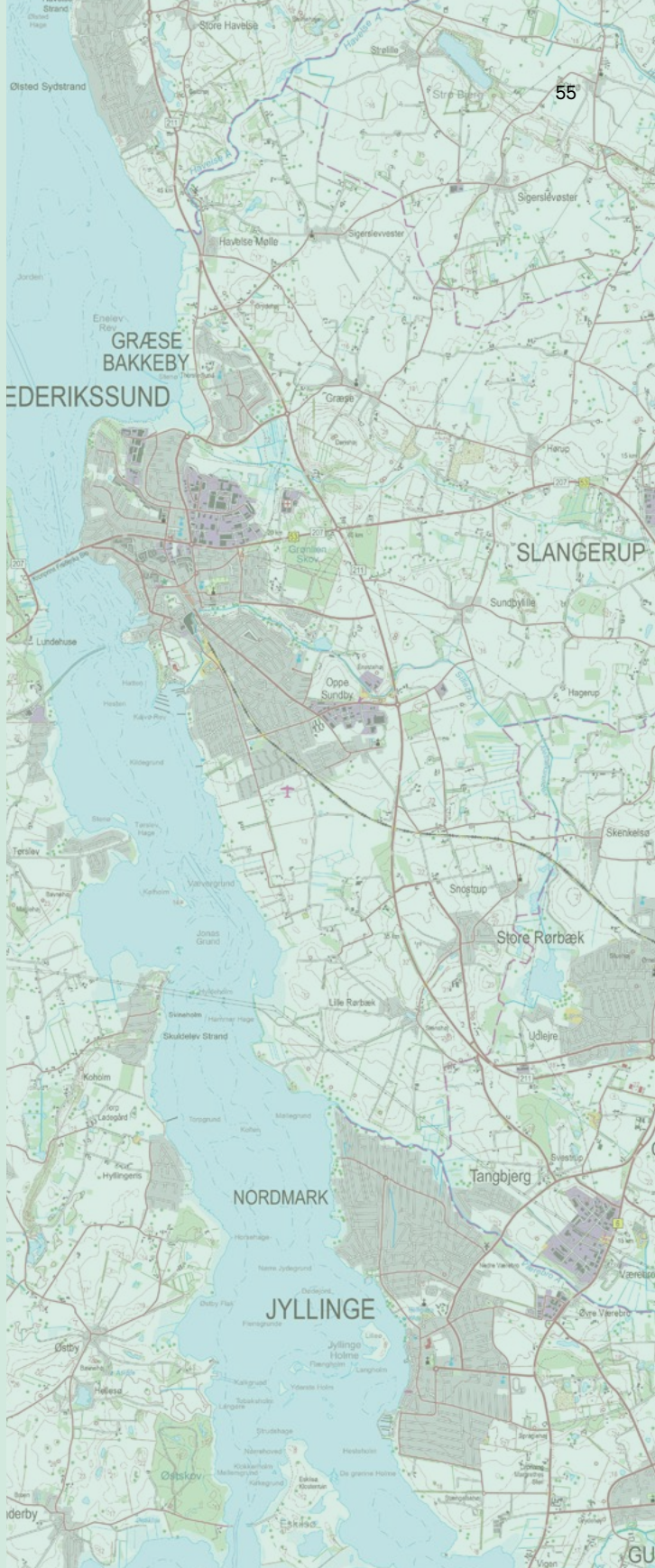
Aside from the focus on better utilisation of existing resources, Frederikssund Municipality is also devoting its attention to the more social and community-wide aspects of the sharing economy. Many of the current and prior initiatives the municipality has carried out were centred around urban development, including the so-called "book tree" in Sillebro Ådal Park, where residents set books beside the tree for the enjoyment of fellow residents.

In the new town of Vinge, which is under construction a little bit outside of Frederikssund, the culture of sharing is even integrated in the design of the first residential area. The lots are just 300 m<sup>2</sup>, which limits the space residents have to work with and encourages mutual sharing. In partnership with the municipality, the pilot group Vinge Gror ("Vinge Grows"), which includes entrepreneurs who live in the area around Vinge, are work-

ing diligently on various sharing concepts, such as a new “sharing house” whose the goal is to save resources, strengthen the neighbourhood and promote integration of the “pioneers” in Vinge with existing residents in the area.

In Frederikssund, the sharing economy agenda puts the spotlight firmly on new opportunities. Some of these are based on digital platforms, while others are not digital at all. The municipality is adopting a long-term perspective when it comes to opportunities for creating a better environment, promoting growth and improving quality of life. ■

This description of Frederikssund Municipality is written by **Emmy Laura Perez Fjalland** (Roskilde University and the Danish Architecture Centre) and **Brian Landbo** (Rambøll Management Consulting) based on interviews with representatives of the municipality.



# Copenhagen Municipality

**How can sharing economy be a driving force for green transition?**

**How can sharing economy strengthen communities in the municipality?**

**How can sharing economy provide ideas for new ways to work with public welfare solutions?**

**T**he goal of the Culture and Leisure Administration in Copenhagen Municipality in joining the Sharing City project was to investigate and learn more about sharing economy and culture of sharing. The project has thus helped provide the administration with a nice overview of the various perspectives out there regarding sharing economy and culture of sharing.

The culture of sharing is a good match with the municipality's 2016–2019 agenda for culture and leisure policies, where the goals and contents of many of the culture of sharing projects agree closely with the vision for this agenda, including the desire to create a lively urban centre

together with the city's residents, associations and creative and cultural forces.

For the Culture and Leisure Administration, the classification of culture of sharing and sharing economic measures in relation to the social, sustainability and growth-related aspects has been meaningful and helped provide the administration with a better overview of the possibilities and challenges. More specifically, the classification and the Sharing City project have contributed toward sharpening the focus of the administration, which is primarily preoccupied with aspects of the social/cooperative culture of sharing centred around local communities and the sharing of space and resources.

The culture of sharing and the ideas behind this concept have close ties to the Culture and Leisure Administration in Copenhagen and its currently practice. This includes making the city's cultural and leisure institutions available to residents, providing residents with self-service access to libraries outside of opening times, increasing the efforts of volunteers in the city

and creating new projects in collaboration with the city's residents and creative implementers.

With regard to tangible, independent sharing economy projects from outside parties, the administration has tested various concepts, including the innovator Naboskab (meaning "Neighbourliness" as well as "Neighbour Cabinet", read more at page 26) in Copenhagen's libraries, along with a new initiative called Ourhub that's centred around sharing public items in the city's parks and spaces.

In addition, the administration supports a cultural and creative growth agenda through its framework, including e.g. incubation environments and the option of using the city for new projects or project funding. The sharing culture practitioners are on equal footing with other cultural and creative project owners and implementers.

The Culture and Leisure Administration bases its work on the principles for the culture of sharing adopted by the Culture and Leisure Council. The standards are that the sharing culture and initiatives that The Culture



and Leisure Council promote in Copenhagen Municipality must support the local community, create more trust and closer relationships between people, improve the use of the city's space and provide equal opportunity for an active cultural life for both rich and poor.

Among other things, this leads to a focus on initiatives that improve the culture of sharing and use it to offer more residents the opportunity to use parks for recreational activities, so that more people can enjoy new games and playground equipment in public places and meet other people who want to use the facilities. It also provides those offering the sharing culture platforms with the option to experiment with their solutions in a real-life, progressive Copenhagen environment.

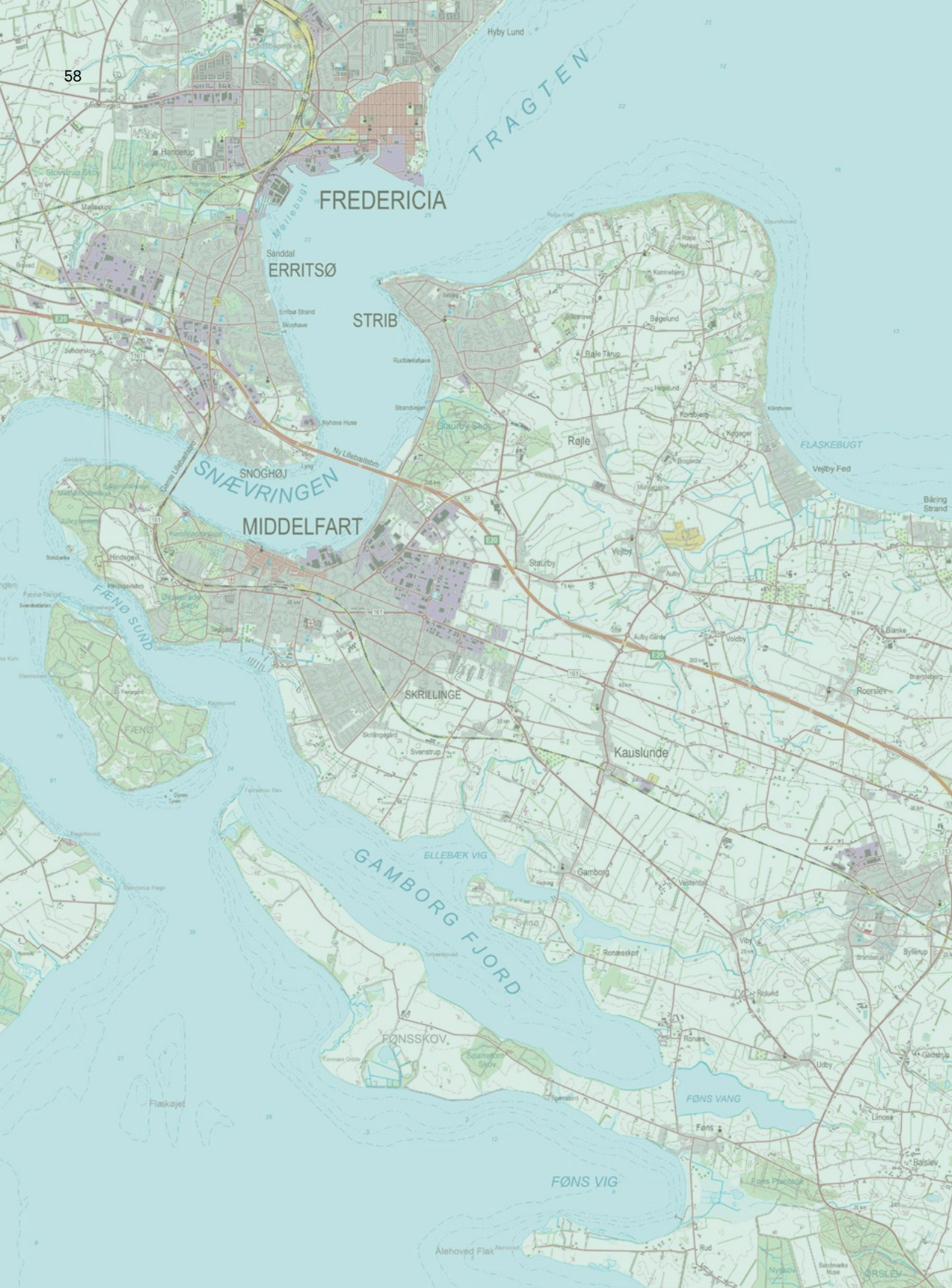
As an extension of the Sharing City project, the Culture and Leisure Administration continues to work on culture of sharing projects. The focus is on projects that provide added cultural value and social cohesiveness to the city. More attention is devoted to the projects' goals and implementation than how they are

organised. Additionally, through its support of cultural institutions and incubation environments, the administration intends to support sharing culture practitioners and actors as a part of its cultural and creative growth agenda along with other cultural, creative and social project owners and implementers.

The Culture and Leisure Administration will continue to work on creating an attractive city together with the city's residents and enterprising contributors. The culture of sharing is an attractive concept that contributes to this and is already present in many forms. The administration therefore anticipates that the culture of sharing will be a viable option going forward as a part of the overall cultural and leisure life. ■

This description of Copenhagen Municipality is written by **Emmy Laura Perez Fjalland** (Roskilde University and the Danish Architecture Centre) and **Brian Landbo** (Rambøll Management Consulting) based on interviews with representatives of the Culture and Leisure Administration in Copenhagen Municipality.







# Middelfart Municipality

**How can sharing economy be a driving force for green transition?**

**How can sharing economy strengthen communities in the municipality?**

**How can sharing economy provide ideas for new ways to work with welfare solutions?**

**M**iddelfart Municipality decided to participate in the Sharing City partnership project in order to gain more insight into the opportunities and unique perspectives that projects and initiatives inspired by sharing economy can help create, while at the same time actively investigating options that link solutions to resource issues with green growth and community building for our future welfare.

The sharing economy initiatives in Middelfart Municipality are closely integrated with the municipality's strategy and efforts related to sustainable transition and green growth. These initiatives are partly focused on growth, in the sense that they support businesses that

dare to utilise new "green" technology and harness it to create growth and jobs, but partly on a broader sustainability perspective through their efforts in attracting new residents and businesses looking for an eco-friendly, healthy life. Middelfart Municipality would also like to speed up green transition and regards sharing economy as a prime mover of this transition.

Middelfart Municipality casts a wide net with its projects and initiatives inspired by sharing economy. For example, the municipality has taken a close look at the bicycles that currently are disposed as scrap metal in the salvage yard. The municipality has taken the initiative to launch a volunteer project where the bikes are collected, rebuilt and donated to refugees. The municipality has expanded this theme and also looked at how e.g. roads can be used in other, more creative ways – for example, as an energy source when the sun heats up the asphalt.

For the municipality, sharing economy also offers new ways to work with social welfare solutions. This applies in particular to the technological aspects of the sharing economy since the

municipality feels that the basic premises behind the sharing economy, along with the technological aspects, can provide meaningful new social welfare services on a limited budget.

The municipality is also focused on the social and community aspects of the sharing economy. One of the goals in participating in the Sharing City project has therefore been to learn more about how local communities in the municipality can come together and find new ways to share use one another's resources.

For Middelfart Municipality, the sharing economy offers a lot of promise, so the municipality therefore feels that the concept is complex and multifaceted. All the better if the solutions are based on digital platforms, which would provide meaningful social welfare services on a limited budget. ■

This description of Middelfart Municipality is written by **Emmy Laura Perez Fjalland** (Roskilde University and the Danish Architecture Centre) and **Brian Landbo** (Rambøll Management Consulting) based on interviews with representatives of the municipality.



# Slagelse Municipality

**How can sharing economy be a driving force for green transition?**

**How can sharing economy strengthen community ties in your municipality?**

**How can sharing economy provide ideas for new ways to work with public welfare solutions?**

**S**lagelse Municipality joined the Sharing City project to study the possibilities for improving the utilisation of resources in the municipality. It's not just the municipal resources, but also the resources of private individuals and businesses that may be able to be utilised better.

Projects and initiatives inspired by the sharing economy can help Slagelse Municipality better utilise resources and help contribute to solutions that are more cost effective and environmentally sustainable.

At the same time, the municipality is focusing on sharing economy projects and initiatives that seek to promote the development

of rural districts in the municipality and meet the needs of their residents and businesses.

An example of a sharing economy initiative in Slagelse Municipality is the creation of the rural community organ "Bis'koppen" ("The Bis'hop") in Bisserup, which is open three times a week and allows residents in the village Bisserup and the surrounding area to share with one another. Bis'koppen offers assistance, car pooling, lending of tools, trailers, log splitters, high-pressure washers, help with homework, photocopying, house plant trading day, and much more.

Another example is the grocer Fødevarer Lokalt (Local Food), where a number of foodstuff producers have joined together to distribute their goods. An association has also been established to distribute the local producers' products to restaurants, cafés and other customers in the local area.

A third example is an experiment where elderly residents or people with chronic illnesses can borrow municipal electric bikes outside of business hours and thereby have the opportunity to get some exercise.

Slagelse Municipality has furthermore applied several sharing economy projects and initiatives to its internal management functions. The focus for these projects has been on utilising municipal resources in a more optimal and effective manner.

One example is the creation of a carpool for administrative workers around City Hall in Slagelse, where twelve cars are being pooled and made available to anyone who contributed to the pool. It's made it far easier to book an available car, while at the same time improving the utilisation of the individual cars.

Another example is the municipality's strategy for the use of municipal property, where the goal is to optimise usage and thus, in the long term, to reduce the number of required municipal buildings while utilising the ones remaining far more efficiently.

For Slagelse Municipality, sharing economy basically deals with using resources in a smarter and more effective manner. This can result in financial profits for businesses that can earn money from creating ways to improve the way we share

resources. This can also help the pocketbook of the consumers of those resources, who save money by not having to invest in the resource itself, while at the same time providing the owners of the resources with potential income.

Thus, the sharing economy can provide a number of sustainable benefits to Slagelse Municipality. By sharing resources even more and utilising them better and more effectively, we can both save energy and reduce our environmental impact.

Last but not least, Slagelse Municipality believes that the sharing economy can strengthen the sense of community in the municipality. For example, this happens when residents of the municipality gain access to resources they otherwise wouldn't have been able to use. ■

This description of Slagelse Municipality is written by **Emmy Laura Perez Fjalland** (Roskilde University and the Danish Architecture Centre) and **Brian Landbo** (Rambøll Management Consulting) based on interviews with representatives of the municipality.



# Sønderborg Municipality

**How could sharing economy exist without the use of digital solutions?**

**How can sharing economy create new communities?**

**How can sharing economy promote better utilisation of limited resources?**

**S**ønderborg Municipality joined the Sharing City project to help develop new solutions to challenges such as resource management, mobility and social welfare based on sharing economy.

Health, citizenship and sustainability are the titles of Sønderborg Municipality's three interdisciplinary policies. The fact they are interdisciplinary means that all efforts, strategies, action plans, etc. in the municipality's management offices and departments follow these three policies and are tied into the overall objectives set for them. Sharing economy is a natural part of the numerous strategies the municipality works with. Several of these strategies, such as pertaining to sustainability, foods, the energy plan for

environmentally-friendly transportation, etc. already include sharing economy principles.

The focal point for projects and initiatives in Sønderborg Municipality inspired by sharing economy is the activities that take place among the residents of the municipality, which are, among other things, visible in the many rural community councils, where there is a historic tradition of sharing when it makes economic sense. This tradition has been carried on further in a modern form.

For Sønderborg Municipality, sharing economy deals largely with a sharing society and the collaborative creation and citizenship processes that exist in the municipality in order to promote the good life, create positive growth and development, achieve CO<sub>2</sub> neutrality by 2029 (ProjectZero) and so on. Thus Sønderborg Municipality takes a socioeconomic approach to sharing economy with a focus on the social, community-related and economic possibilities. The technological aspects of sharing economy are not the focal point, but digital platforms (web or app) are nonetheless relevant if they can help support the different ways to satisfy citizens.

Meetings between people are still an important basis for sharing.

Several of the municipality's sharing economy projects and initiatives therefore exist without being based on digital solutions. An example of this is the project "Grejbank for alle" ("Thing Bank for Everyone"), where the goal is "the good life", with access to outdoor activities for everyone in Sønderborg by offering better opportunities to experience nature, and to create a better economy from common events like town festivals, community meals, food markets, classes or similar. The "Grejbank for alle" project also lays the foundation for added value and quality, which has a positive effect on the number of tourists visiting the area. At the same time, the project is expected to have the potential to attract new residents since the measure supports lively rural communities with a high activity level and quality-of-life.

In addition to the aforementioned examples, Sønderborg Municipality has other initiatives in sharing economy domain. In particular, this includes the creation of an electric car ride sharing arrangement. The arrangement is a cooperative venture





between the Energy Council (“EnergiStyrelsen”), ProjectZero, Sønderborg Municipality, the rural districts in Sønderborg, E.ON, Insero, TADAA! and the Joint Council of the Rural Districts (“Landdistrikternes Fællesråd”). The electric car ride sharing pool provides the residents of smaller towns with the ability to book an electric car whenever they need one. The initiative is based on the experiences of an ongoing demo project with rural buses and cars in three local communities. Through sharing, both initiatives promote behaviour modification towards more ride sharing and fewer cars on the road in the future, along with a reduction in CO<sub>2</sub>, if families can get rid of their second car.

The municipality also supports sharing economy initiatives in many other areas, such as a number of initiatives directed at the youth culture and sharing urban spaces and locales.

Sharing economy opens up a lot of possibilities for Sønderborg Municipality. Sharing between the public and private sectors can contribute to new types of resource utilisation, and projects and initiatives inspired by sharing economy can help create new com-

munities in the local areas. Thus the municipality has a long-term perspective on the potential since sharing economy can help improve the climate, environment, public health and well-being over time.

Going forward, the municipality plays three roles in the realm of sharing economy. The municipality naturally plays a role as an authority, but additionally it also plays the part of facilitator and early adopter, where it blazes a path and provides a good example for others. All three roles play a part at different times and on different levels.

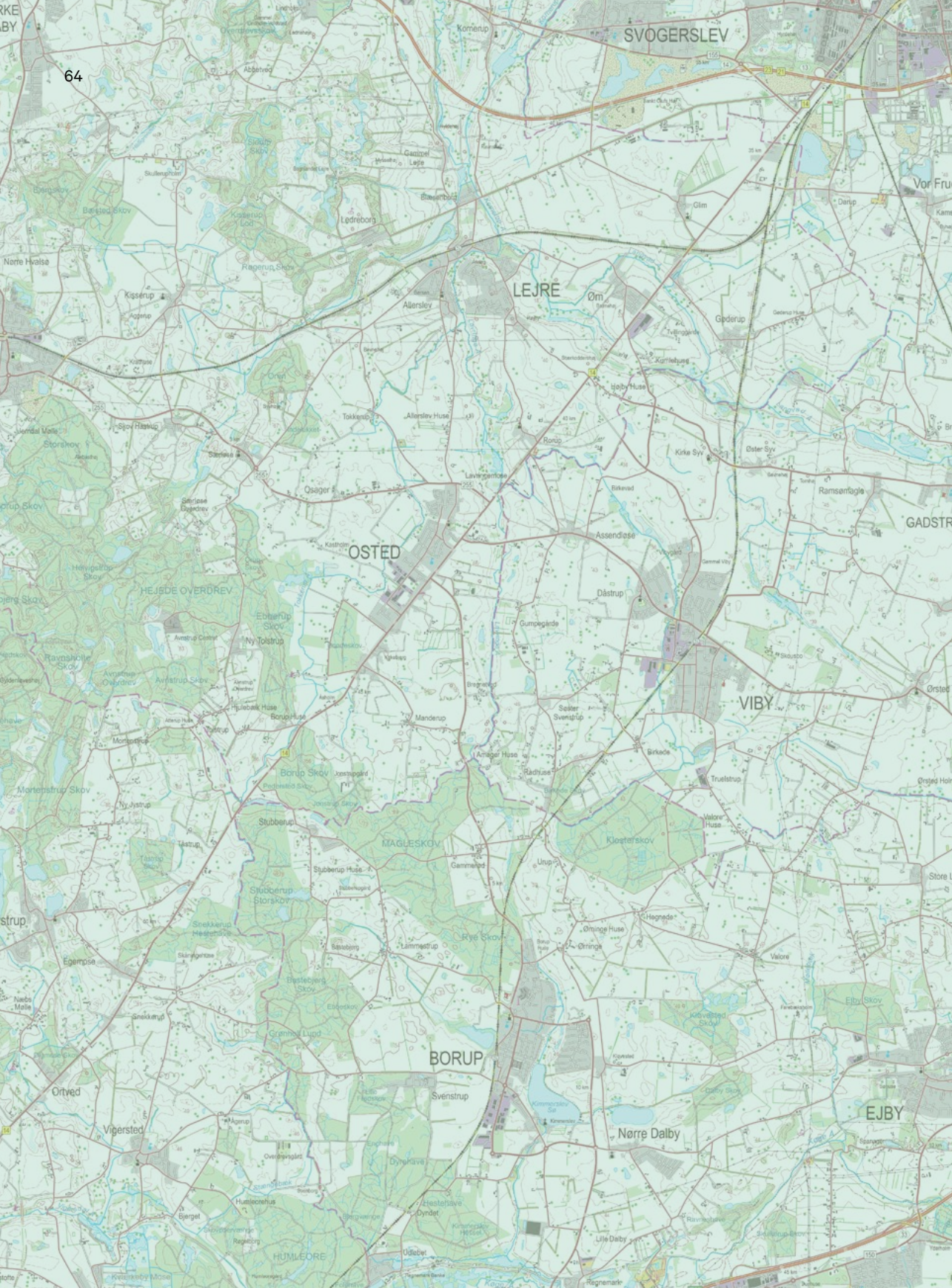
Sharing economy is here and it's growing, however it's still too early to comment on its full potential for resource sharing. In the beginning, it's all about the municipality helping create a framework for joint utilisation of limited resources, public as well as private, and perhaps new communities. ■

This description of Sønderborg Municipality is written by **Emmy Laura Perez Fjalland** (Roskilde University and the Danish Architecture Centre) and **Brian Landbo** (Rambøll Management Consulting) based on interviews with representatives of the municipality.

As a new resident in one of the many villages in Sønderborg Municipality you receive a 'welcome package' by a local resident.







# Lejre Municipality

**How can sharing economy support and help encourage sustainable development?**

**How can sharing economy strengthen community ties in smaller towns?**

**How can sharing economy strengthen partnerships in the private sector?**

**F**or the residents of Lejre Municipality, community ties and volunteerism are ingrained in their DNA. We have a resident-run cinema, volunteers lead elderly residents on hikes in the forest and the municipality's organic milk producers share farm machinery so everyone can have access to the newest and best machines. It's nothing new for people in Lejre Municipality to share with one another.

Therefore sharing is a central theme in the municipality's new development strategy. Lejre Municipality participated in the Deleby project to examine the possibilities of the sharing economy and enhance the growth that's already taken place.

Lejre Municipality views the

sharing economy as an active tool to support and help shape sustainable development – but also to ensure that it's attractive to live in one of the 49 small towns in Lejre Municipality.

For this reason, Lejre Municipality focuses intently on how communities and partnerships can be strengthened in our small towns and in the private sector, along with how our resources can be better utilised in a variety of areas.

For example, fruit trees, vegetable gardens and flowering meadows that are a delight for our residents have been planted in several of our municipal green zones. Community kitchens and local farmers work side-by-side and these devoted volunteers are finding new ways to recycle our leftovers to benefit our local economy and our palates.

Lejre Municipality is also focused on the possibilities the sharing economy holds for innovation and entrepreneurship.

The business Grønvirke is located in a converted barn in Kyndeløse and works with communication and project development for companies and organisations.

Grønvirke has established a new company together with the microbrewery Herslev Bryghus – Herslev Grønvirke Aps. The business manufactures malt vinegar from the microbrewery's leftover beer. The new business has really taken off because the two companies – Herslev Bryghus and Grønvirke – share their financial assets, food industry knowledge, logistics solutions, customers and time in the common new venture. All in all, a perfect example of how the sharing economy can create sustainable development.

Lejre Municipality's role isn't to come up with new projects, but to play the role of a facilitator and help identify good solutions that will benefit residents and businesses. Likewise, it's up to the municipality to spread the word on these success stories and share them. This helps to bring our community together. ■

This description of Lejre Municipality is written by **Emmy Laura Perez Fjalland** (Roskilde University and the Danish Architecture Centre) and **Brian Landbo** (Rambøll Management Consulting) based on interviews with representatives of the municipality.



# Nyborg Municipality

## How can sharing economy foster community and development in towns of the municipality?

### How can the sharing economy generate solutions to promote cost efficiency and growth?

**I**n Nyborg Municipality, the Council for Green Redevelopment has worked determinedly for some time with sharing economy projects and initiatives. The municipality joined the Sharing City project in order to be a part of the development and exploration of sharing economy initiatives.

Projects and initiatives inspired by sharing economy can help promote social cohesiveness and growth in Nyborg Municipality's cities, and they can also help create new cost-effective solutions to promote growth.

Thus the efforts have actively involved residents of the municipality's small towns and urban centres, and by implementing initiatives that encompass both urban and rural areas, we've

attempted to integrate the rural-urban more closely. One example of this is in transportation, where the municipality has taken the initiative to expand car pooling and ride sharing. Specifically, this is done through the project Landsbytransport ("Village Transportation"), where the digital platform Min Landsby ("My Village" an innovator in the Sharing City-project, read more at page 78) is connected to GoMore's car pooling platform and provides the residents of smaller towns with the opportunity to get a lift if the bus isn't due to arrive shortly or they don't have access to a car.

Furthermore, the municipality's involvement in the Sharing City project has focused on gaining more insight into the sharing economy as a concept, especially as it relates to how cities in the municipality can function even better when residents, businesses and the public sector find new ways to share and use one another's resources.

The municipality currently takes a broad view of the concept of sharing economy. Basically, we

consider sharing economy to be a kind of rethinking of the cooperative movement, where digital as well as non-digital meeting places embody different ways in which we can share and use one another's resources. For example, when the municipality makes its premises and land available to residents, it's just as much an expression of sharing economy as when it participates on a digitally-based platform within transportation.

Going forward, the municipality's sharing economy projects and initiatives will continue to emphasise the social agenda and the opportunity to contribute to the development of our cities and our communities. Furthermore, the municipality sees opportunities in sharing economy projects and initiatives promoting the growth of local businesses and thereby improving employment options for our residents. For instance, this can take place in the food industry, where surplus goods from e.g. grocers can be used as a production resource for a business. The municipality can also work on sharing economy

projects and initiatives that are increasingly aimed at entrepreneurs, for example by facilitating that entrepreneurs and established businesses are able to gain access to tools and sophisticated, expensive equipment such as 3-D printers.

The municipality's efforts in this area have thus far involved volunteers. Volunteers and entrepreneurs play a large role in these opportunities and the municipality has a strong volunteer force at its disposal that maintains a very high activity level. As far as the municipality is concerned, they plan to continue to work on inspiring new ideas and making their facilities and land available for use. This will continue to be done in close cooperation with residents and volunteers in the municipality. ■

This description of Nyborg Municipality is written by **Emmy Laura Perez Fjalland** (Roskilde University and the Danish Architecture Centre) and **Brian Landbo** (Rambøll Management Consulting) based on interviews with representatives of the municipality.







Expert Perspective

# Should Municipalities Take Responsibility for the Sharing Economy?

**Ida Bigum Nielsen**, Head of Section, Copenhagen Municipality, Department of Finance,  
Office for Business and Growth Policies

**Copenhagen Municipality would like to harness the potential of sharing economy for innovation and growth. New as well as established businesses are anticipated to develop new solutions, services and business models that increase competitiveness and create an innovative environment in the city. At the same time, we worry about how the basis for the welfare society can be assured. Therefore Copenhagen Municipality would like to come up with models that permit this development to go hand-in-hand with workers' rights and tax liability.**

### It Started in 2015...

That's obviously a fabrication as sharing economy started long before 2015. But it doesn't seem disingenuous to say that the broader interest in the sharing economy began in 2015. In January, parliament reviewed a proposal on the support and expansion of the sharing economy<sup>1</sup> – a debate that to a rare degree united the parties in favour of the potential of the sharing economy. In February, Amsterdam officially became Europe's first "sharing city",<sup>2</sup> and it was also in 2015 that economists and consulting firms seriously began to add a few 0s to the sharing economy's value assessment projections. Among other things, in June 2015 the Boston Consulting Group<sup>3</sup> forecast that the worldwide sharing economy would increase from around 27 billion \$ in 2014 to around DKK 384 billion \$ in 2025.

The time was, in other words, ripe to develop Copenhagen Municipality's position with regard to sharing economy. The question was: What will it mean for Danish businesses? What will it mean for Danish employees? Do Danes even want to share? And what about the pitfalls? The environment, worker rights, tendency for the creation of monopolies, social responsibility, fair terms of competition, tax evasion, etc.? The potential for growth, innovation, resource efficiency and stronger communities was clear, but it was also obvious that the sharing economy couldn't deliver all of this without a certain amount of regulation.

### A Few Basic Assumptions

As a result of the many considerations, two basic assumptions were formed:

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- The sharing economy shouldn't be defined too narrowly since the trend is more relevant than the definition. In practice there's a basic understanding pervasive throughout Copenhagen Municipality that the sharing economy contains an element of peer engagement and that it's a new way to create value. Thus the sharing economy requires new skills – for entrepreneurs, established businesses, residents and public authorities.
- 
- The innovation and growth potential of the sharing economy will presumably be achieved through increased professionalisation of the sharing

economy market. That's obviously relevant for entrepreneurs, but also for established businesses that will increasingly come to challenge traditional business models.

For this, there are two overall goals for the sharing economy in Copenhagen:

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- Copenhagen's businesses must become world leaders in the sharing economy.
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- The sharing economy must develop in a reasonable and fair manner.

The latter goal was the basis of the six principles formulated by Lord Mayor Frank Jensen. The principles resulted from discussions with a number of stakeholders, which were held to identify where each of them saw the best potential as well as the greatest challenges for the sharing economy in the future.

### Six Principles for the Sharing Economy in Copenhagen

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1. Take advantage of the sharing economy's potential for growth and innovation, which can benefit the city and its residents.
- 
2. Develop and implement the sharing economy in a way that supports more effective use of resources.
- 
3. Don't support unfair business models based on substandard compensation and poor work conditions.
- 
4. Don't allow the sharing economy to lead to tax evasion.
- 
5. Don't allow the sharing economy to lead to a deterioration in the terms for consumers, information or insurance.
- 
6. Recognise that the sharing economy isn't just pure idealism, but can be good business for both companies and consumers.
- 

These principles were first published in Politiken on 24 April 2016<sup>4</sup> in an article by Lord Mayor Frank Jensen.



Ida Bigum Nielsen is Head of Section at the Department of Finance, Copenhagen Municipality. Ida holds a Master of Political Science from University of Copenhagen. At Copenhagen Municipality Ida works with strategic and project development within sharing economy, food policies and social economics for Copenhagen Municipality. Ida has broad experience in project management of innovation projects and analyses and has mainly worked in the areas of social and service innovation, emerging growth areas and cluster policies. Among other things, Ida has previously worked as a consultant for the think tank DEA and the Innovation Network Service Platform, where she co-authored the report “Your Business in the WE Economy – Navigating the Waters of the New Collaborative Economy” (2015).

### A Foundation Needs To Be Laid

2016 offered several examples of uncertainty tied to the sharing economy. For example, 3F’s campaign against Uber or the case of the unemployed man who lost his welfare support after renting out his car on GoMore.<sup>5</sup> Then there’s Horesta’s criticism of the competitive conditions for accommodations in the city, along with Copenhagen Municipality’s Health and Care Management Minister, Ninna Thomsen’s questions about AirBnB’s effect on the housing market in Copenhagen.<sup>6</sup> All are examples of the fact that different parties look toward public authorities for answers to the sharing economy’s inherent problems. The problem is that many of these questions don’t have a clear answer, partly due to the diffuse legislation and partly because of a lack of knowledge about activities, behaviour and concerns.

Like other municipalities, Copenhagen Municipality has limited room to operate according to the legislation and regulation in the area of the sharing economy and does not (yet) purchase services, to any significant degree, that are available on the sharing economy market. This means that the traditional tools authorities typically use to influence the surrounding community don’t work here. If you’re willing to accept the premise that cities should, to a certain extent, take more responsibility for the further development of the sharing economy, then there’s a need for creativity.

Traditionally, public authorities aren’t known for being on the leading edge of development, but Copenhagen Municipality would like to ensure that it’s policy development in the area follows the market. So after a lot of discussion about the potential and the challenges, the time is ripe to establish partnerships and find solutions to lay the foundation for fair-minded and positive development of the sharing economy.

The expectation is that this foundation could consist of three things:

1. *Close dialogue with the city’s residents – to understand sharing economy consumers’ experiences when it comes to doubts, dilemmas and challenges.*
2. *Development of helpful tools targeted at the sharing economy consumer – e.g. calculating hourly pay, explaining insurance, taxation or similar.*
3. *Partnerships with sharing economy businesses in Copenhagen – to promote and distribute helpful tools and gain knowledge about activities and behaviour.*









Expert Perspective

# Sharing Economy and the Welfare State





**Bent Greve** Bent Greve is a Professor at Roskilde University at the Department of Social Sciences and Business. He graduated with a Master of the Arts in Economics and earned his Ph.D. Degree and a Doctoral Degree in Social Sciences and Public Administration from Roskilde University, Denmark. Bent has been a part of a large number of international research projects and has published over 300 articles, books and more.

**I**n principle, sharing economy can help us use resources, including scarce resources, better than we're currently doing. This applies in particular when we're talking about large acquisitions/investments, where sharing can presumably contribute toward better utilisation of resources. In recent years, there's been significant growth in the area, and the expectations are that this will continue. Most people who employ various types of sharing, such as for rides or the rental of one or more overnight stays, do it largely because it's cheaper than using other providers of the same products or services. So even though there may be a sustainability argument in favour of the sharing economy, it's hardly the primary factor that motivates people to embrace the concept.

Being able to share capital goods means that even in a decentralised welfare state like Denmark's, investments in buildings, machinery, etc. can be advantageously shared. It's not necessarily anything new since municipalities have been interested for quite some time in using their real estate optimally. But the new element could be that the municipalities supported the use of buildings, machinery, knowledge, etc. by local communities in a better and more comprehensive fashion than they do today. It's also possible that more people can get out and enjoy and be active in the nature. The difference is of course not necessarily great in all areas in relation to what we now know and what the co-op and residential movements accomplished previously in Denmark. But what is new is that technology has made it easier and simpler – perhaps without large investments in fixed assets – to ensure that everything from large machines to small household gadgets and books, etc. can be shared. The municipalities can facilitate this development via developing local apps, for example.

In general for something to be labelled as “sharing economy” there must be sharing in which no money is earned on the sharing itself – either directly or indirectly. To the extent that money (or other services) can be earned, then it moves more in the direction of being equivalent to the sale of goods and services on the private market or even a modern type of barter economy. This is what characterises a number of platforms that are used today. They are in reality not part of the sharing

# **“Above all else, it’s important to have guidelines and rules that ensure fair competition.”**

economy, but rather platforms in which a new and often more direct way of selling goods and services has been created. This type of use of platforms is a problem for the welfare state, partly because those who offer services on these media aren’t necessarily assured reasonable compensation and employment terms for the activities they’re providing and partly because the state must ensure that income from these activities is taxed.

The indirect income can be derived from the goods and services that are exchanged. It’s equivalent to the old-fashioned barter economy and can also be viewed as a type of underground economy since the activity doesn’t end up in the public domain and is therefore not, like other economic activities, subject to taxation.

Thus one of the welfare state’s biggest problems with the current way many of these platforms are used is that there is no automatic reporting, such as for pay cheques, to the public sector on the total income of these activities and therefore there’s a risk that it will be more difficult to finance the welfare state in future years as taxes are not being paid. This also applies if the providers of platforms that allow assets to be exchanged don’t pay taxes on the grounds that they don’t formally own anything or haven’t earned anything from the activities in the country where the service was carried out. Thus there’s a need for platforms having the same obligation to report income as

other employers, banks, credit institutions, trade unions, etc. have. In addition, there’s a need to calculate VAT as for other economic activities in our society. In a nutshell, it’s important that there are equal conditions for the various participants. The judgement of the City Court in relation to the Uber drivers showed that there may be other types of legislation than taxation and levies that are important to pay attention to.

This also applies if the municipalities support various platforms that users can use. This can be a valuable way to support local initiatives and enable people to more easily help one another in the local environment. Naturally, the municipalities need to be aware of whether they’re creating unfair competition for private entities. But as a start, municipalities could use new technology (and are expected to do so) to ensure better decentralised environments. If the use of different ways to share activities simultaneously strengthens a local region, it can presumably also contribute toward better communities.

The sharing economy is here to stay – and probably within a large number of different industries and activities. Above all else, it’s important to have guidelines and rules that ensure fair competition, but it’s also important that those who carry out these activities have reasonable working conditions and that there is still enough financing to maintain a welfare state such as the Danish one. ■



## Cph Volunteers

[cphvolunteers.kk.dk](http://cphvolunteers.kk.dk)

### What is Cph Volunteers?

Cph Volunteers is Copenhagen's volunteer corps agency, which connects volunteers with volunteer work. Cph Volunteers makes it easy for community residents to participate as volunteers in events that require the effort of volunteers in order to be carried out. In addition, Cph Volunteers manages the volunteers and their working conditions.

Volunteers are matched with appropriate events through a digital platform, app and website. The platform allows volunteers to set up a profile and sign up for any relevant events. The corps' volunteers are of all ages and hail not only from Denmark, but from around the world. What they have in common is a burning desire and keen interest in serving as volunteers.

Cph Volunteers is working to spread this model for volunteerism and make it as easy as possible to work together with other volunteers helping cultural

centres, cities and many others. This happens on a digital platform called iVolunteer, which is not only a valuable scheduling tool for this defined group of volunteers, but also enables cooperation between volunteer groups. In other words, a cultural centre can use the platform to plan the daily work activities of its own volunteer staff, but when they host a large festival and need more volunteers, they can make the event available to others.

### What Are the Sharing Economical Aspects of Cph Volunteers?

Cph Volunteers' platform lowers the barriers for community residents to participate as volunteers and makes it easier for more cultural and community actors to work with volunteers. Residents will find it easier to participate in exciting events and experiences and share their time, passion and unique skills as volunteers. Less time is spent on recruitment, scheduling and administration, leaving more time for events and other activities. ■

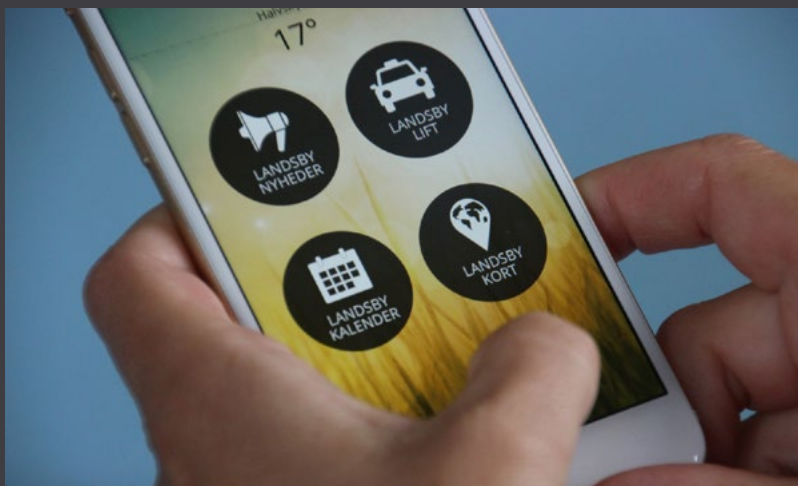


## Min Landsby

[minlandsby.dk](http://minlandsby.dk)

### What is Min Landsby?

Min Landsby ("My Village") is a business that was started as a reaction to the urbanisation agenda and negative development spiral of rural regions in Denmark. Min Landsby aims to retell our perception of communities in the rural regions, tell their stories and market their values. Min Landsby has created a digital platform called "Min Landsby App", which expands the services they offer. The main users of the platform are the residents, tourists and visitors of the rural communities and districts, as well as potential new residents. Rural communities can acquire this platform by negotiating with Min Landsby, which then sets them up and gets them started. The app contains a number of services, such as a communal local 'Village Calendar', a 'Village News' service for the community, a service 'Village Ride' that allows the residents to coordinate ride sharing (currently linking the national ride-sharing company GoMore), and 'Village Map' service that shows a map of activities,



shops, culture, etc. in the chosen area. The app is available to everyone free of charge.

The platform is intended to strengthen the digital community in the rural community and across rural communities all over Denmark. Rural communities “social DNA” is incredibly powerful, and Min Landsby would like to package this code in a digital format. This packaging is done in several steps, the first of which is a platform that creates a local identity. The concept is aimed at rural communities and districts, tightly-clustered villages and smaller towns that are similar to rural communities. Min Landsby was started as a research project in several of Lemvig Municipality’s rural communities, but has now spread to include rural communities and groups of villages in several municipalities across Denmark.

What’s most critical to the product is that the residents of the community are active users and providers of the platform. In addition, it’s very important that businesses in rural areas support the

project so rural communities are able to get access to this platform. This is done by having the companies purchase a sponsorship pin in the rural communities map. This lets local businesses spread the word about life in the rural communities and share specific information with locals and tourists. The money gets channelled back to the rural community since Min Landsby donates 10% of the sponsorship pin proceeds back to the community.

Min Landsby’s goal is to create a visible community and, above all else, a serious communication platform for rural communities and districts, while helping to create a new historical record of this unique part of Denmark.

#### **What Are the Sharing Economical Aspects of Min Landsby?**

What we find most essential to sharing economy is the “social DNA” of rural communities and their residents’ desire to make their voice heard where they live. It’s the way rural communities breed social unity and mutual

trust that makes their residents prime movers in the sharing economy. Min Landsby feels it’s this rich “social capital” that leads to a strong “sharing capital”, in other words the actual value of sharing. If we can help develop “social capital” in cities, rural communities and between communities, we can contribute to improving the potential of the “sharing capital”.

Min Landsby is working to create communities in rural Danish towns that will foster more social unity in those towns and with other neighbouring towns. Thus, it’s not just about sharing things, but is also about sharing experiences and physical surroundings by, for example, mapping special local places and events that aren’t publicised elsewhere, such as vegetable stands alongside the roadway or social events on the community calendar. Additionally, Min Landsby uses the mass transportation portal GoMore to examine rural communities’ basic ride sharing habits, which will be the basis for a tangible ride sharing programme for rural communities. ■





**Article**

# **Communality in Sharing Economy**

**Emmy Laura Perez Fjalland**, Ph.D. Fellow, Roskilde University and Danish Architecture Centre

**It has been said that sharing economy promotes and strengthen communities and creates new social relationships via digital platforms and co-creation. It is too early to make any finite conclusions on these matters as most sharing economy services and products are on an infant stage. What we find intriguing is how sharing economy inspires people to engage in communities in new ways, and once again give reason to talk about what nourish communities and communality.**

**“The nicest and largest example of the sharing economy we have is the municipalities. The municipality has it all – we work for the residents and the communities define the municipality”**

Tina Tving Stauning, Chairman of the Technical Council of Frederikssund Municipality

#### **A question of scale**

Sharing economy is foremost perceived as a global technological trend due to the global mobility of knowledge, ideas, and data. Nonetheless, sharing economy is also a locally rooted phenomenon as our everyday lives are lived locally (as Mark Lorenzen notes in his article, page 113), and it is within the locality that the value sprouts and grows. It is the site-specific and local intimate social relations that create the values as authenticity, uniqueness, intimacy, human. These local values are central to and being marketed as the key signifiers of the sharing economy products and services. This global trend with local links, highlights the ‘glocality’ of sharing economy and the mutual influence between scales. Following, sharing economy can affect communality at multiple scales; from trust between individuals, to families, to neighbourhoods, organisations, and businesses, to the municipal, regional, and national scale.

As the quote by the Chairman of the Technical Council points out, municipalities and local communities manage public spaces, places and resources, and therefore they can be perceived as being a sharing economy organisation. The acknowledgment about the link between the municipality and sharing economy was emphasised as a reaction to the idea that sharing economy was just about new business models. What is most relevant is that the phenomenon of the sharing economy has given rise to a renewed focus on efforts and actions already undertaken by the municipality – specifically, preservation



of the common good, public spaces and resources. Additionally, the technological aspects and the ideas of resource efficiency of sharing economy has inspired the municipalities to rethink issues as welfare solutions, climate adaption, and citizen involvement. Several of the participating municipalities, seek to modernise citizen participation by focusing on co-creation and collaboration, and providing citizens more ownership - not to privatise functions, but rather to make them even better. What residents contribute is “the icing on the cake, not the cake itself” as Nyborg Municipality expressed it.

Through the Sharing City project, Sønderborg and Lejre Municipalities have both indicated that they view sharing economy as sustainable business model that help strengthen neighbourhoods and build communities. It is a part of their DNA. Throughout the project the story about sharing economy changed from being largely regarded as an urban, commercial phenomenon to indicate that it is perhaps in particular the rural and remote municipalities, the local communities, that are frontrunners in knowing how to use sharing economy to build social and environmental value.

### Sharing Economy as Empowerment

The growth of sharing economy has provided us with the impetus to revitalise the enormous underutilised human, natural and physical resources that apparently permeate societies, communities, and organisations. The digital and technological aspect of sharing economy has shown how resources can be extracted and distributed effectively in well-designed platform networks between peers. However *“resources turn into resources when people and their surroundings are able to reach out to one another.”* (Own translation of Vacher 2008: 36). Both local communities and digital platforms can be starting point for “the reach out”, but to alive idle capacity it is crucial to question what makes people able to activate these idle resources? It requires courage, energy and resources – personal and physical – to get involved in a community, to collaborate, and *to share*.

Viewed from a planning (urban and rural) perspective it seems like, that building up the abilities to share, starts with *being able to use and affect* places and spaces. The design of for instance public spaces is made available and cater to development that can revitalise *communal* resources by designing living/non-finished environments that appeal to human endeavours, where people can actively participate in the design, construction, and maintenance. In this sense sharing economy solutions, services, and designs, can be used as an empowerment tool.

### Designing the Opportunity to Share and Co-Create

Being part of a community and creating something with others also seem essential to becoming able to share. Regarding the need and opportunity to be able to contribute and be a part of creating the places where we live, Susanne Abilgaard Rud (one of the pioneers living in Vinge, Frederikssund) says that *“those people who have bought*



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# “Building up the abilities to share, starts with *being able to use and affect places and spaces.*”

*lots in Vinge pretty much just buy the land their house will be standing on. But on the other hand, there are a lot of common areas that they can take care of and use. We won't be getting any young Copenhagen families to move into single-family houses with high hedges. They prefer something else.”*

Also, several of the Sharing City innovators are working on strengthening communities by providing the opportunity to share and co-create. E.g. *Kompostbudene* (“*The Compost Messengers*”), where co-ops and local communities compost their green kitchen waste; it is both a practical community where people learn about waste, compost, and soil, and it builds new social relationships in housing associations and urban areas. The innovator *Del Dit Landskab* (“*Share Your Land*”) can also be highlighted as participants can offer green space that others are allowed to sow, and *Naboskab* (“*Neighbourhood Cabinet*”), which explicitly works on strengthening social relationships primarily in housing associations and apartment complexes via cabinets that allow people to share items such as tools. Finally, the innovator that has designed the digital application *Min Landsby* (“*My Village*”), helps promote the identity of rural communities and villages, create visibility and access to local leisure activities and places, and thereby about co-creating local identity through shared information and knowledge.

## **Building Trust - and Alienation**

Many people are preoccupied with the sharing economy's potential for the community – especially for promoting security and strong local communities. The digital platforms set up new meetings between people but the argument that digital sharing economic platforms strengthen social relations has in particular been criticised based on the depth of the relationship and the level of trust. Another criticism is that sharing economy just monetises services among friends and social relationships and thereby alienates people instead of bringing people together.



Trust of *outsiders* is a familiar urban sociological trait and trust is needed to create communities. Trust requires experience. Regarding this, Rachel Botsman argues sharing economic platforms can be enriching – people start by placing their trust in the idea, then in the platform or network and, finally, in the other person. Sharing economic platforms offer this, but of course trust can be broken. The success of for instance Uber and AirBnB (in terms of their number of users) or, for example, the French BlaBlaCar (ride sharing over long distances – the average trip is 320 km – and handles 40 million trips a month) show that trust is primarily on the rise as opposed to being broken. When someone experience that their home has been left by the renter in good shape, that their car was returned safely or that their drill didn't fall apart – that they weren't in fact cheated – then in that case *trust* increases in the other party and it helps create a sense of security.

#### Further Reading

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**McLaren, D. & Agyenan, J. (2015):** *Sharing Cities – A Case for Truly Smart and Sustainable Cities*. The MIT Press.

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Our survey of the municipalities and the Sharing City innovators shows that places and relationships are also of importance – digital platforms can allow for new relationships with people we don't already know, but when we already know one another, it can seem alienating. This is perhaps due to the difference between a socially-fragmented living environment and a smaller rural and homogeneous community, and underlines how local site-specific qualities and face-to-face relations continue to be important in our increasingly digitalised everyday life. But the digital platforms, with their written rules and assurances for sharing, can build trust in areas and environments where sharing elicits uncertainty and unease. In such places, the digital functions like a key to sharing.

In spite an era characterised by individualism a need and interest for communities – communities based on *joie de vivre*, on a desire and need to create and contribute, on interests, needs and necessities – seem to nourish sharing economic initiatives, services, and solutions. On the other hand, sharing economy businesses and organisations (some already mentioned in this article) also offer a community or sense of community – digitally and/or physically facilitated. Essentially, sharing and co-creation – regardless if it is in and between companies, organisations, private persons, or authorities – is about making it accessible, relevant, and meaningful in an everyday life.

The link between communities, communality and sharing economy is also handled in the articles “Editorial”, “*Sustainability and Green Redevelopment*” and “*The New Business Models*”. Also, the authors Malene Freudendal-Pedersen, Annika Agger and Jesper Kofoed-Melson offer their expert perspectives on communities and co-creation, and how these elements are essential to the development of cities, regions, and organisations, and which mechanisms are needed for this to be a success. ■

# Del Dit Landskab

## What is Del Dit Landskab (*Share Your Green Space*)?

Del Dit Landskab is working on creating a platform where people can share green spaces with one another. Del Dit Landskab aims primarily to work with rural districts to bring new life and social meeting places to urban communities, which have often lost their own. Del Dit Landskab therefore intends to work diligently to create more green spaces full of soul, ambience and a sense of community in locations where natural social meeting places are few and far between and the existing green spaces are empty, sad affairs.

Del Dit Landskab is targeting three kinds of users: Users and growers of green ecospace, who would primarily be residents or various institutions; owners of the green spaces, who could be farmers, municipalities, institutions, homeowner associations, etc.; and last but not least, municipalities who could use help in starting a local sharing green space. Del Dit Landskab is currently in discussions with Lejre and Frederikssund municipalities, along with other potential partners.

In order to connect its users, Del Dit Landskab is creating a digital platform. The structure and design of the site are still in the works. The platform will however

include Del Dit Landskab's four core services:

1. Del Dit Landskab seeks to nourish relationships between users and owners of green spaces.
2. Del Dit Landskab would like to ensure knowledge sharing regarding the potential of unused green spaces and how they can be cultivated by the community.
3. Del Dit Landskab would like to: offer tools and frameworks that facilitate the sharing of green spaces by providing a basic template for a formal partnership contract between the owners and operating groups; establish a local growers' council; help apply for the required permits from public officials, and so on.
4. Furthermore, Del Dit Landskab intends to create a framework for sustainable local food production by inspiring users and connecting them with unused green spaces.

## What Are the Sharing Economical Aspects of Del Dit Landskab?

Del Dit Landskab is all about sharing and cultivating green

spaces and encouraging people to view them as a resource. Based on the various core services Del Dit Landskab is developing, there's no denying that several aspects of the sharing economy play a vital role. By sharing green spaces through e.g. a growers council, the owner will achieve cost savings from a circular economy and better utilisation of local resources since open green space is often expensive to maintain. Through the proximity of users – and neighbours who pass through – to local food production, the cultivation of local shared green spaces and Del Dit Landskab contribute towards better, experience-based local knowledge about sustainable food production, including the resources and time that must be invested in the production of such things as mutton, wool, honey or apples.

Through the creation of shared green spaces and growers' councils, Del Dit Landskab is working to strengthen local communities and create attractive urban environments in rural districts. Del Dit Landskab wants to create more green spaces, strengthen the sense of community in urban society for people of all ages and lifestyles and thus make urban society a more attractive place for current and incoming residents. ■

# BRAIN SHARE

## BrainShare

brainshare.sharetribe.com

### What is BrainShare?

BrainShare is a knowledge collective where you can exchange your knowledge for other people's knowledge and "borrow" their brains for a limited amount of time. The business model is not quite fleshed out yet, but BrainShare is actively working on a transaction-based revenue system: Each time a customer purchases a lecture or a service through BrainShare, a fee of 10–15% of the amount is charged. This is pretty much the same business model used by the Danish ride-sharing platform GoMore. BrainShare's customers can be divided into two segments: People with special knowledge or knowledge-based services, e.g. a lecture that they'd like to offer, and people who are interested in purchasing those services.

BrainShare works on several different platforms. The main connection with users is through their existing digital platform Sharetribe, where customers can set up a profile on BrainShare's so-called mind catalogue featuring the services and/or lectures they're offering. BrainShare is also active on Facebook with almost 1,900 followers. On top of this, BrainShare holds non-virtual arrangements, so-called BrainShare Live Events, where the attendees

can enjoy live human contact and communal interaction through "brain speed dating", mini-lectures and knowledge-sharing.

BrainShare is currently working with SDU Erhverv, the career centre at The University of Southern Denmark. They have also been hired to manage a large conference for entrepreneurs next year. In the future, BrainShare would like to expand its partnerships to other career centres, with providers of courses, job centres, HR departments and employers as future participants. BrainShare mainly operates in Copenhagen and Odense, where they would like to expand their live events – eventually to once a month.

The biggest challenge BrainShare has faced is that it's been difficult to find enough people willing to sell and purchase knowledge. The mind catalogue is not as large as they would like. In order to take the next step in their development, BrainShare needs more time and resources to build up its network and platform. Going forward, they would therefore like to be able to afford full-time employees to handle these issues.

### What Are the Sharing Economical Aspects of BrainShare?

BrainShare believes firmly in the idea that you have to give

something to get something in return. BrainShare thus participates in the sharing economy by allowing people to expand their knowledge by offering their own unique know-how in exchange for that of others. For example, a lecturer and a graphics designer might trade a speech for a logo, or an accountant and a stress coach might trade the review of accounts for a presentation on stress. BrainShare makes it affordable or even free to obtain knowledge that is normally an expensive resource, for example the knowledge offered by consulting companies at a premium. The people behind BrainShare believe their business is in fact democratising knowledge.

This is because when people get together to share and cultivate knowledge, productive new communities and relationships often bloom. ■





Expert Perspective

# **On Sharing — Yours, Mine and Ours: Citizen Involvement as a Catalyst for Sharing Economic Activities**



### New Perspectives on the role of Citizens

*How can we promote more effective utilisation of the individual and common resources in our municipality? And can and will citizens actually loan out, rent and share their own and others' resources?* These types of questions were discussed in a meeting with citizens, politicians and public officials that I was present at in Gentofte Municipality in the summer of 2016.

The various parties who attended devoted a Tuesday afternoon to collectively finding new ways for the municipality, residents, businesses and associations to cooperate in order to promote better and more resource-friendly ways to operate and conduct themselves.

*"Is this anything new,"* you might ask? As it's also been mentioned many other places in this magazine, we have a long tradition in Denmark of cooperation and partnerships that span across the private and public sectors. As such, this is nothing new. But what is new is that in recent years we've seen a rising trend in the public sector to regard citizens as important resources. Instead of providing public services *for* citizens, there's been more of a focus doing things *with* citizens (Mandag Morgen ["Monday Morning"] 2015; Boyle et al. 2010). This calls for a new role for the performance of the public sector.

It's in this context that the sharing economy makes its ingress as an inspirational perspective that can be used to think along new lines about how to create synergy between the different factions in local communities.

The municipality can of course play an important role (as exemplified with the seven municipalities that have participated in the *Sharing City* project and as described with Ida Bigums article on page 69) by taking initiative and facilitating a framework that makes it easy to participate in local communities and activities. But at other times the municipality needs to step aside and not stand in the way of citizens and local interest groups' sharing economic initiatives.

### Collaboration with Communities

The potential of the sharing economy for urban centres is a proliferating research field and there are many cross-disciplinary approaches used to

interpret it (Rambøll Management Consulting & Danish Architecture Centre, 2016). We can therefore draw on various areas of research to understand what it is that motivates people to share and cooperate and to evaluate what this kind of sharing can offer.

In this context, I'd like to put the spotlight on Elinor Ostrom, who in 2009 became the first American female political scientist to win the Nobel prize in Economics. Ostrom was interested in shedding light on how societies around the world managed their common resources, which we refer to as '*commons*'. Ostrom (1990; . A "*common*" originally referred to a pasture that farmers in a community shared and let their animals graze in. Everybody benefits from this mutual arrangement, and the system works as long as the herds aren't too large and the land doesn't get overgrazed. But as soon as one individual gets selfish and allows more cattle to graze, based on the philosophy that "an extra cow won't make a difference", then it ends in what's called "the tragedy of the commons". That means in practice that the shared resource goes to waste by being overgrazed so the vegetation can't recover.

What was interesting about Ostrom's research was that she identified a number of cases where shared pastures were managed responsibly and didn't get exhausted. Her research showed that regardless if they were sustainably managed in different ways, the common pastures only worked when the farmers held a certain amount of authority over it (Hermansen and Nørretranders, 2011, p. 88). This means in practice that the affected parties are all involved in how the common pasture should be managed.

And here we come back to how citizen participation can be a catalyst for sharing economic activities. For there are many things we can share – my things, my sofa, my tools, my car, my time, etc. But there are also many things we own jointly – "pastures" that we need to share in ways that we can all accept and live with.

An example of a new way in which a municipality laid the groundwork for communal property (a kind of common) is the project "Sammen om Sofie vej" ("United for Sofie Road") in Gentofte Municipality. Inspired by New York, the municipi-

# “The potential of the sharing economy is that it promotes a lot of community gatherings and meetings ...”

pality wanted to make a so called “pocket park”, referring to a tiny park on a vacant lot, so they set up a Facebook group to debate what the area should be used for. In addition, the municipality advertised the project in the local paper and via direct mail flyers. Facebook served as the main channel for contact with residents, but was supplemented workshops where ideas were developed and subsequently posted for commentary on Facebook. It was a new role for the municipality to give up control since “anything can happen”, as one of the public officials expressed. However, there was a great deal of transparency since anyone could join the group, and 100 residents chose to do so.

The story about Sofievej Road contains two important lessons that are helpful if we want to promote communities where we can discover ways to manage and share our common resources. First off, a framework for participation needs to be available. In this case, it was via Facebook and the workshops. In other cases, it could be through making facilities/areas available, but the point is that it needs to be made easy to participate, which can be facilitated either through formal or informal *ad hoc*-type meetings. Secondly, entrepreneurs and other volunteers need to be supported, praised and recognised so they don’t burn out.

The potential of the sharing economy is that it promotes a lot of community gatherings and meetings – some short-term and some long-term, but these everyday meetings and participation in community events offers the potential for creating neighbourhood ties, local identity and social cohesiveness. If we are to manage and share our resources in sustainable and meaningful ways, it must begin on a small scale – by being willing to see the value of sharing “yours”, “mine” and “ours” in new ways. We’re already well on our way, and you’ll find more inspired reading in this magazine. ■



**Annika Agger** is Associate Professor in public administration at the Department of Social Sciences and Business, Roskilde University (Denmark). She is trained as an environmental planner and wrote her Ph.D. dissertation on the management of citizen involvement in urban planning. She’s involved in teaching, research and communication in the following areas: citizen involvement, conflict management, co-creation, public value creation and democracy (and how it’s measured). She’s been published in Danish as well as international scientific journals, such as: *Byplan* (“Urban Planning”), *Politica*, *Planning Theory*, *European Planning Studies*, *Local Environment* and *Public Administration Review*. In addition, she has been a member of the Urban & Regional Planning and Sustainable Development working group of the Swedish research council FORMAS.

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Artikel

# **What Nobody Sees! — The Value of Co-Creation in Urban Development**

Jesper Kofoed-Melson, Co-founder and Partner, GivRum

**I**n cities we share space, air and energy. In other words, even if we don't always interact with one another, we're still sharing all the time. The city is a joint asset with a wealth of unexploited human, geographical and physical resources. Way too much of it is constantly being privatised, and to a large extent the development of cities and landscapes are reserved for those who possess the most resources. It would make sense to imagine a city oriented more toward a sharing economy – in the way our processes develop and in the way the city is built and lived in. Based on my experience with co-creation, I'll describe how we can increase the value and quality of our urban areas by exploiting the unused resources.

### **But Aren't You Just Selling the Lovely View?**

Recently I participated in a seminar at Freja Ejendomme A/S ("Freja Properties") for 100 developers who attended, which highlighted the value created by urban development from different perspectives. The attorney and urban developer, Rune Kilden, from Aarhus was one of the speakers, and he spoke about his approach to urban development, particularly in connection with the comprehensive revitalisation of Aarhus harbour, where he's responsible for a large part of the construction.

Perhaps due to local patriotism or lessons learned from a unilateral focus on profit in urban development, Rune Kilden spoke enthusiastically of the many initiatives he has implemented to transform the new area in Aarhus into a lively, cultural neighbourhood. He invited and involved a wealth of different cultural institutions to contribute in creating an attractive district to spend time and live in. Afterwards there was time for questions, where the lack of queries illustrated that developers in the room found it difficult to ask relevant questions about Rune Kilden's cultural and social approach to urban development. After a period of silence one person raised his hand and asked the question: "Aren't you really just selling the lovely view?"

The question clearly shows the logic that permeates large urban development projects. Many of the complex factors that in fact form the basis of the good life are left out of the equation, so things end up just revolving around *the lovely view* – or in

other words, the profit motive in maximising the market price per square metre. The question from the audience shows the deficiencies in the prevailing thought process, which often leads to areas facing a large clean-up task once these buildings are completed and the desire of the citizens for a vibrant and cultural city must be accommodated. A lot of people just don't see the forest for the trees.

### **Exploiting Resources During the Redevelopment Process**

If in the long-term we're to create healthy cities that are attractive, sustainable and liveable, then other qualitative factors, such as city life, recreation and the opportunity to "contribute and create" become ever more important. The key is to nurture and stimulate these values early in the redevelopment and/or development process. Unfortunately, urban development and renewal generally happen in such a brisk tempo that they do not allow ambitious involvement of the residents and stakeholders who will be living in these places and dealing with the solutions created. But precisely here there are a number of unused resources that can elevate the local qualities, along with developments that can help create attractive areas right now and in the future.

Rune Kilden has shown how the ambitions of developers can be elevated so the "view" in urban renewal projects can be expanded to incorporate *the good life*. The development of our cities should be a joint asset since we all live with the solutions that are created there. In her article in this maga-

# “It’s only when more people can take ownership in our city spaces that we’ll see the potential of our cities expand...”

zine, Annika Aggers highlights in Ellinor Ostrom’s words how experience has shown that areas are more often sustainable if the affected parties are all involved in how joint property should be managed. It’s not just about creating facing citizen involvement projects, but about empowering residents to get involved and take ownership. It’s only when more people can take ownership in our city spaces that we’ll see the potential of our cities expand and find that more people are motivated to contribute to develop the city’s variety of spaces and environments.

## Co-Creation

With involvement and co-creation processes, we potentially sail into perilous, uncharted waters. These processes involve inviting more people to participate in creating solutions cooperatively, and to ensure this outcome, it’s important to know the expectations for this involvement. There’s obviously a price to be paid when people are involved in urban development. It requires a carefully designed process in order to create the confidence, commitment and pace called for in the city’s fast-paced development. And if it’s to succeed, you’ve got to deliver what you promise.

My experience from the processes GivRum orchestrated and participated in is that there’s often a conception that it’s the municipalities that need to lead these processes. But if we’re to have any hope

of developing a more inclusive urban development process, and thus societal development process, then there needs to be a change in the culture of the civic, private and public sectors.

A culture needs to be created where we support one another on a united front and recognise that different stakeholders contribute different valuable skills and insight.

## Copenhagen’s Sydhavn: a Divided Neighbourhood

In the Copenhagen neighbourhood *Sydhavn* - an old working class area and abolished harbour-industry are in the southern end of the Copenhagen harbour - GivRum has worked on co-creation and cultural development this past year (2016), a significant amount of urban development has occurred in recent years, with the new builds *Teglholmen* and acknowledged *Sluseholmen* areas expanding into the older Sydhavn neighbourhood. The original residents in Sydhavn have observed a horde of newcomers on the other side of the road *Sydhavnsgade*. A road that separates the new and old parts of Sydhavnen as it is one of the most heavily-trafficked roads in Copenhagen.

However, it's not just Sydhavnsgade road that separates the two areas of Sydhavnen, but also two different histories and identities. Sluseholmen and Teglholmen are populated with an affluent new group, while the "old" Sydhavnen is populated by a group of people firmly rooted in the working class. It's created a number of conflicts in the area and has been characterised as a problem by both the residents and politicians. In order to create a unified Sydhavnen, broad involvement in the development of the neighbourhood is an absolute necessity.

GivRum is working with the objective of creating a socially and culturally sustainable development of Sydhavn, based on initiatives that unite the residents of the new and old parts of Sydhavn instead of just providing a lovely view that only a few are privileged enough to enjoy. What unites Sydhavn is an expressed desire to connect the different parts of the neighbourhood and create a common identity. Building a bridge has been a focal point in the development of the neighbourhood, and Copenhagen Municipality has had an actual bridge over Sydhavnsgade road up for debate several times. However, a bridge in and of itself can't unite the neighbourhood, which may be the reason it has yet to be built.

The solution is instead to associate the building of the bridge with a tangible, grass roots process. In this context, we've negotiated an agreement for the temporary use of several older industrial buildings that have stood empty since 2008 and are centrally located in the area. We've subsequently transferred the buildings over to the association *SydhavnsGade* ("Sydhavn's Road"), which is a locally-rooted cultural organisation comprised of young people from Sydhavnen. Together with them and other cultural organisations in Sydhavn, we plan to influence the development of Sydhavn based on locally-rooted desires and needs.

## **Buildings As Incubators for the City's Real Value Creation**

Until the end of 2017, the buildings will serve as a platform for engaging Sydhavn stakeholders on both sides of Sydhavnsgade road. The goal is for the buildings to serve as a framework and anchor-age for the municipality's ambitious strategies for Sydhavn, while at the same time serving as a hot-spot for innovation, firmly rooted in the interests of the local area, so that a diverse mobilisation of the numerous stakeholders with aspirations for the neighbourhood's development can occur.

When many people get involved in the development of a city, there must be some recognition of the fact that not everybody has the interest, knowledge or resources to be a part of the exhausting bureaucratic and administrative work incumbent on those participating in strategic urban development projects. If we're to exploit the grass roots and cultural factions that provide vibrancy, community and a sense of security in our residential areas, we need to keep in mind that the value created through a co-creation process adds as much value to the neighbourhood's development as the developers' deep pockets.

## **Utilise Resources and Create Lasting Value**

In the case of the Sydhavn development, a process has been created to accommodate the various professional skills being used in collaboration to provide holistic, sustainable development. This development is divided into three components:

1. Cultural activities in the buildings.
2. Cultural and urban development festival that will provide the area with visibility and a forum for debating the district's development.
3. A strategy whose objective is to make temporary, co-created activities permanent.

This approach has enabled the mobilisation of the resources and abilities of neighbourhood residents and local characteristics in the solution, and the current objective is to provide the development efforts with more political legitimacy by prioritising funding to build the bridge. Sometimes life must be created before bridges can be built and crossed!



# “Sometimes life must be created before bridges can be built and crossed! “

It won't result increase the square metre pricing right away, but there's unharnessed potential in getting the developers to consider the value that can be unlocked by such cultural, temporary grass root processes. Consequently, it's important that these things remain a part of the plan and a part of the solution – both with regard to the buildings and the humanistic aspects – and not just used in the construction planning and then banished once the earth-moving equipment arrives.

It's a utopian pipe dream to believe we can earn a tonne of money in the short-term. There's a need for a radically different approach to the way we develop our cities, and it requires significant investments in time, human resources and financing if we are to create change *together*. If a cultural change in the various sectors is set in motion and more people are involved in urban development, it would mean that long-term there could be a shift of responsibility and ownership. This would enable the creation of attractive, liveable and sustainable residential areas. It's all about creating solutions with the people who'll be living in them afterwards, and that enriches all the parties in the long-term. ■



Jesper Koefoed-Melson is the co-owner and co-founder of the company GivRum ("Give Space"). He holds a Master in Teaching and Performance Design from Roskilde University (DK) and has worked in and with the city of Copenhagen since the beginning of the 20-aughts, when the city's cultural life and institutions received special attention. This was where Jesper met up with Christian Fumz and founded GivRum ("Give Space") in 2010, which has worked ever since on co-creation solutions in empty buildings focused on everything from art and culture to entrepreneurship and creative business to public housing for refugees. What's unique about GivRum's work is that it never fails to create sustainable organisations that continue the work GivRum initiated through partnerships with the public and private sectors.

# GoParkMe

## GoParkMe

goparkme.com

### What is GoParkMe?

GoParkMe is an internet-based parking service that's intended to serve as an online marketplace for renters and lessors of private parking spaces for vehicles. GoParkMe connects car drivers needing parking with people who have extra space available, whether this is in the form of a private car park, driveway, garage or similar. GoParkMe's customers can be segmented into two main groups, renters and lessors of parking spaces. The renters must possess a vehicle, while the lessors must possess a parking space. Customers in these segments must additionally be at least 18 years of age and capable of using technology, the internet and cell phones. GoParkMe operates only in Copenhagen.

The two user segments are connected through GoParkMe's digital service, which consists of a free mobile and web app. The platform itself is not yet fully developed, but the goal is for it to be user-friendly and simple, with a feature where lessors can set up an advertisement for a parking space and potential renters can easily conduct a search and book a space. GoParkMe takes care of both the initial contact and the payment transaction between the two parties. For this service,

GoParkMe will charge a small service fee to the renter and the lessor whenever a successful booking has occurred.

By using GoParkMe, the renter and the lessor earn or save money, while renters save time since they no longer need to drive around for ages searching for a vacant parking space.

Currently, nobody is partnered with GoParkMe, but in the future there will be a need for the following: Distribution partners, technology partners, partners with legal skills and network partners. GoParkMe works nonetheless with many organisations, including housing associations, day-care centres, hospitals, hotels, petrol stations, etc. There are unfortunately several legal aspects hindering the rental and administration of car parks belonging to housing associations, which GoParkMe is struggling with. Furthermore, GoParkMe has experienced conflicts-of-interest with some of the municipalities' transportation goals, which have increasingly become more focused on reducing private automobile traffic in favour increased use of public transportation.

Going forward, GoParkMe hopes to increase its financial funding in

order to expand its resource base, including its human resources.

### What Are the Sharing Economical Aspects of GoParkMe?

GoParkMe can be regarded as a sharing economy concept since the basic premise behind the business is to utilise spare parking spaces and car parks that currently aren't being used effectively. GoParkMe believes that the core essence of the sharing economy is the potential to utilise currently available resources in a more creative and effective manner, and the company focuses on the sharing economy because it's a current trend that benefits society and holds a lot of potential for improving our social well-being. In this respect, the sharing economy is a phenomenon that can be implemented in almost any industry, and car parks are just one of many industries that have not yet been able to fully exploit the sharing economy.

There's also an environmental aspect to GoParkMe's business model since the platform makes it possible for car owners to pre-book parking spaces and more effectively take advantage of parking areas, which helps reduce traffic and CO<sub>2</sub> emissions in densely-populated areas and large cities. ■



## Cook with a Local

[cookwithalocal.net](http://cookwithalocal.net)

### What is Cook with a Local?

Cook with a Local is a digital platform that connects users and lets them meet and cook together or teach one another to cook. This allows people living in different parts of the world, who come from different cultures and backgrounds, to meet and share their passion for cooking.

Cook with a Local's mission is to connect people through food since by breaking bread together we can share our stories and experiences and develop lasting new relationships. Visitors to the site can be divided into two groups: Hosts and guests. Visitors run the gamut from pure amateurs to professional chefs. Cook with a Local was started in the Greater Copenhagen area, but has increasingly been visited by food-lovers from all over Denmark and the entire world.

The platform that connects these gastronomes is currently limited to Cook with a Local's website, but a mobile app's on the way. It allows food-lovers to set up an event, which could e.g. be a dinner, a course or similar. They need to set a price for the event, indicate the capacity, etc. Potential guests can then go on the platform and find the event that appeals to them and book a place at the

table. Cook with a Local handles the initial contact and payment on behalf of the host and the guest, allowing the guest to pay at the time of booking and the host to receive payment just two days after holding the event. Cook with a Local boast a long line of partners: Municipalities, businesses in the food industry, official tourism organisations, farmers, food culture houses, food and travel bloggers, along with various organisations and educational institutions.

### What Are the Sharing Economical Aspects of Cook with a Local?

Cook with a Local focuses on promoting the sharing economy not just by encouraging people to share food, but also by encouraging social interaction. Cook with a Local is not just about sharing food to avoid wasting resources, it's also about sharing knowledge, experiences and friendship! Another aspect is that you generally cannot cook an entire chicken just for yourself, so you need to be able to share with others in order to make best use of our precious food resources. ■





Artikel

# Breaking Up with Habits — Consumer's Eye on Sharing Economy

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### Does a Sharing Economy Consumer Even Exist?

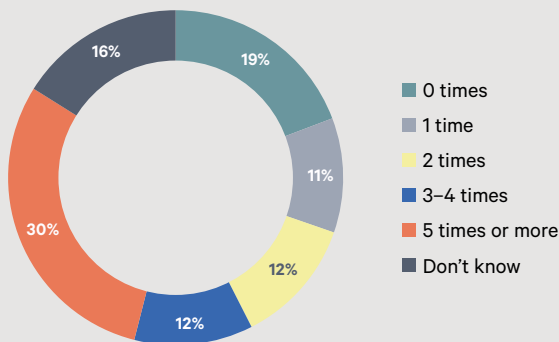
Since sharing economy hit the Danish agenda, a clamour has run through media and political arenas, but does a sharing economy consumer even exist, and to which extend are the new types of services actually being used. A survey - carried out by TNS Gallup for Nordea Denmark based on the responses of 1100 respondents in Denmark - showed that only around ½ a percent of the population engages in sharing economy transactions by providing their own assets and services and using other people's assets and services. Comparable surveys were conducted in Sweden, Norway and Finland, and in total the surveys include 4,148 respondents. In Sweden and Norway, the engage-

ment with sharing economy solutions is 1% and in Finland it is 5%. This indicates that very few people have routine sharing economic consumption habits. Moreover, the frequency of consumption among this limited number of consumers is very low.

The challenge with sharing economy is that almost half of consumers have engaged in a sharing economy transaction just one time in the last six months, while only a fourth have engaged twice during this period. In other words, very few experienced consumers have participated three or more times over the last six months. In actuality there are only around 2-3% of Danes who can rightfully say they're experienced sharing consumers.

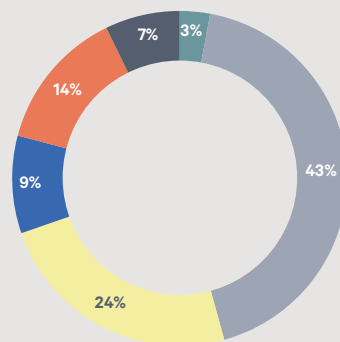
### How many times within the last 6 months have you...

...rented, shared or swapped your things with other people, as part of the sharing economy?



NOTE: SMALL BASE (29)  
Reference: TNS for Nordea 2016

... rented or used other people's things, as part of the sharing economy?



NOTE: SMALL BASE (103)  
Reference: TNS for Nordea 2016



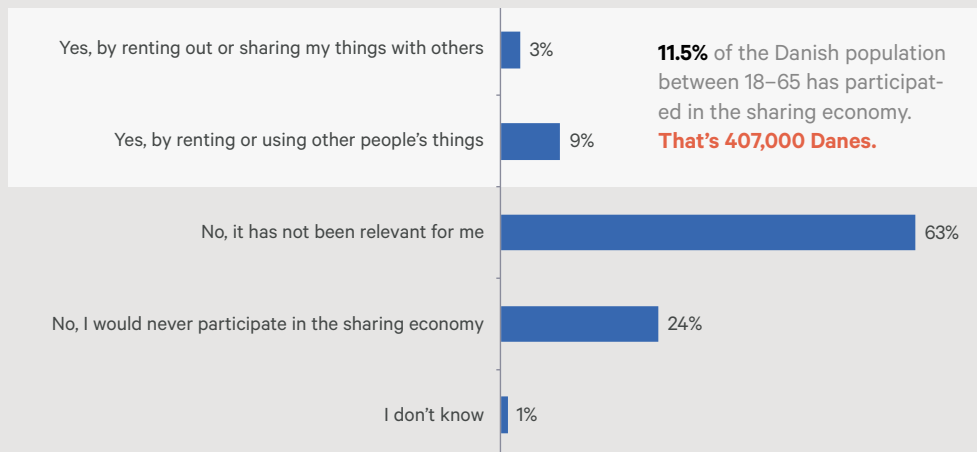
### Limited Growth Potential in the Current Sharing Economy

When we measure what could be called the commercial sharing economy in Denmark, in 2016 it was to a large extent a phenomenon restricted to the main cities, among low income groups, and young people, not only in Denmark, but also in Norway and Sweden. Finland stood out from the rest of Scandinavia in their approach to the sharing economy. This is apparent from the September 2016 survey TNS Gallup carried out for Nordea Denmark, based on the responses of 4,148 participants in Scandinavia. Nordea Denmark has undertaken surveys of Danes' participation in the sharing economy since 2014. Danes were asked

about their engagement with sharing economy, more or less in the following wording: "as a result of the expansion of the internet, have you begun to rent and/or rent out/share/exchange your possessions or services with other consumers, for example via apps or sharing economic platforms on the internet and social media?" According to the study, In general, 11.5% of Danes engaged in sharing economy exchanges between March and August 2016; in Sweden the figure was 13%, in Norway 16% (over the last 12 mos.) and in Finland the figure was considerably higher at 24%.

## Have you actively participated in the sharing economy within the last 6 months?

As a result of the expansion of the Internet, consumers are beginning to rent and/or rent out/share/exchange their possessions or services with other consumers, for example via apps or sharing economic platforms on the internet and social media. This is called sharing economy. It could mean to rent/rent out private homes, cars, clothes, and so on. Examples of these platforms are Airbnb, GoMore, DriveNow, Uber and Resecond.



Base: 1100

Reference: TNS for Nordea 2016, Ann Lehmann-Erichsen

### **It is A Young People's Market**

According to this survey, sharing economy is most widespread among people under 40. This is true for all four countries. There's a marked, noticeable drop in the share of users over 40.

A closer look into the results, reveals that the most frequent users in all four countries are those young people under 26. In Denmark, this age group represents 29% of all survey participants, while in Sweden it's 24%, in Norway it's 27% and in Finland it's 58%.

If we take a look at those over 40, the share of users in Denmark is 6%, while in Sweden it's 8%. In Norway, the share of users is 13% for the 40-54-year-old age group and 9% for the 55+ age group. In Finland these figures are 20% and 16%, respectively.

For all the countries, participation in sharing economy transactions falls as the age of the respondents rises. This may be due to the fact that younger people are often *early adopters* or *first movers* who test new opportunities with more curiosity and flexibility. Maybe young people will maintain these new habits as they get older, but there is no guarantee of this. The figures from the survey highlight that the main motive behind engaging in sharing economic exchanges today is money – to save or earn a little more – and the older people are, the more income they tend to have, so therefore it's uncertain whether these types of sharing economic solutions will persist as these younger consumers age. Finland has more users in all age groups. This is primarily due to two conditions. On the one hand, Finns are 'spend-thrifts' and view sharing economic solutions as an opportunity to get the most out of their resources. On the other hand, they are obsessed with using new technology apps and platforms that help them save money and manage their resources.

### **Experiences of Today Affect Future Visions for Sharing Economy**

The survey shows that 14% of the population in Denmark and Sweden believe that they will use sharing economic services over the course of the

next six months. In Norway this figure is 18% and in Finland it's 19%. Among this small group, half of them (in Denmark and Sweden) indicated they would keep their sharing economic activity at the same considerably low level in the future, while four of ten would increase their use of sharing services.

On top of this, the share of Danes who would not even consider participating in the sharing economy has been stable for three years in a row. One in four Danes had no interest at all in sharing economic solutions. Given that so many have no interest in participating and the few who do participate do so at such a low level, indicates that we will have to wait for a long time for Denmark to become a Mecca for the sharing economy.

Moreover, if we compare Danes to their neighbouring countries, they are number one when it comes to scepticism of sharing economy. 24% of Danes are unwilling to embrace the concept, while the number of sceptics is 15% in Finland, 12% in Sweden and 9% in Norway.

### **Outside of the Big Cities**

The survey indicates that scepticism and resistance to sharing economy is more common in rural and suburban districts than in the larger cities. This is true for all of the Scandinavian countries aside from Finland. More people in the countryside expressed that they couldn't imagine participating in sharing economic activities. This resistance may go hand-in-hand with the fact that there are more people over 40 in the countryside than in the larger cities, where you will usually find more young people. In addition, another limiting factor may be that the selection of sharing economic solutions is smaller outside of the largest cities. Sharing economic activities are consequently most widespread in the metropolitan areas and larger cities in Scandinavia and least prevalent in peripheral regions and rural districts. Finland is an exception to this where the users are evenly distributed nationwide.

Looking at payment data, it appears like users in urban make the most money by making their

**“There is nothing to substantiate the wildly optimistic growth forecasts for the sharing economy that many observers have put forward – at least not with the types of sharing economy solutions in our current Scandinavian welfare society.”**

possessions “shareable”. But the picture is not that simple. Data also show that “free” sharing economy exchanges are more common outside urban centres and regions. This is a clear indication, but since there are so few people currently participating in the sharing economy, the data is too limited to draw any final conclusions from this pattern.

#### **Are Danes Missing Out?**

Right now we see several problematic business models in the form of platform-based sharing solutions operated by professionals who earn money by facilitating contact between non-professional “buyers” and “sellers”. These models provide challenges for the collection of taxes, risk of an underground economy, etc.

Integration of the sharing economy, in its current form, into the everyday life of Danish consumers seems a long way off. But are most Danes in fact missing out of nice, cheap sharing economic solutions by staying away from this market? Off cause, there is no clear answer to that question. What can be stated, is that when you measure the subjective satisfaction with sharing solutions, as

done in Denmark and Finland, 80-90% of users indicate that they didn't experience any problems. A few experienced minor problems, while only 1-2% experienced major problems. These satisfaction figures are extraordinary high compared to similar figures for a related area of consumption – namely e-commerce in Denmark. The Danish E-commerce Association's ("FDIH") e-commerce data for the first half of 2016 shows, for example, that 48% of consumers who shopped online would recommend their most recent purchase to others and 5-8 of 10 consumers return to the same online stores they've dealt with previously. Both of these figures mean that they were especially satisfied with the process.

Something suggests that sharing economy regulates itself to a certain degree. That's a good thing, mainly because it is difficult to complain about sharing economic goods and services if something goes wrong since they fall outside the scope of ordinary consumer complaint boards, which only handle complaints about agreements between consumers and businesses, and not between 'peers' – between two consumers who are renting or sharing amongst themselves.

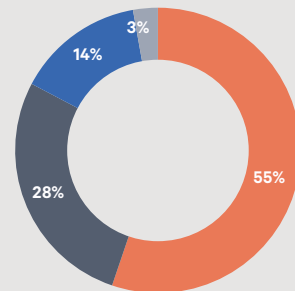
For those comfortable navigating around the pylons of the sharing economy, the seas are full of promising alternative consumption options, but as known from behavioural economics, the power of habit is strong and to stick to familiar charted waters is often preferred.

Improved and more relevant sharing solutions in the future combined with clear, precise legislation would probably get more consumers to leave their comfort zone and embrace sharing economic solutions. But it will probably be another five to ten years in the future before there is a reliable number of consumers who instinctively base their consumption habit on sharing economic solutions.

### **Our Pocketbooks Seem to Lead Our Motivations**

Already from the figures in 2014 it was clear that money is a motivating factor for participating in the sharing economy. Money clearly plays a major role for both users and non-users of sharing economy transactions. When asked to explain what motivates them, the majority of users in all four countries reply that making or saving money is the most important factor. This applies to all

2015



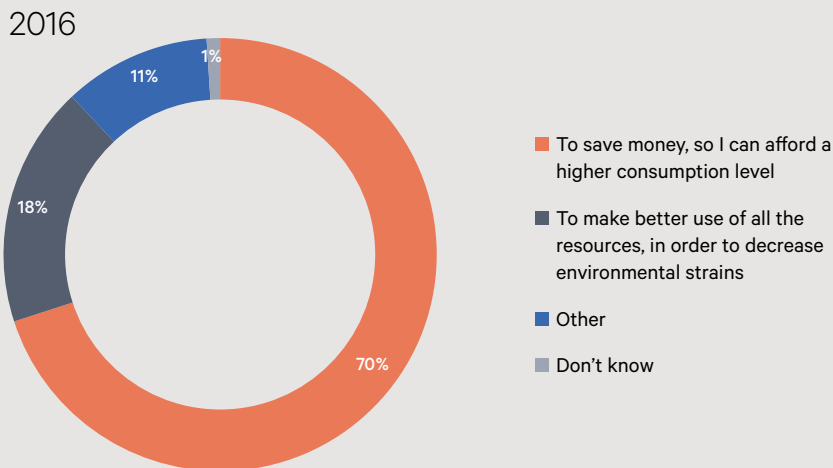
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Reference: TNS for Nordea 2015, Ann Lehmann-Erichsen

surveys since 2014. Only a small percentage of respondents were motivated by climate or environmental considerations; and this share has even contracted compared to the figures for Denmark in 2015 and 2014. One explanation for this contraction may be that sharing economy is widely associated with underground economy and underpaid labour, leading to ideological discussions about these issues. Another indication of the money-motivation, is that the use of sharing economic solutions declines as income rises, except in Finland where this is not the case. The money-motivation is evident in these studies, but it shall be methodologically emphasised that the questions asked, asks significantly on the digital sharing economy platforms.

Given that the mature segment of the population generally has a more stable financial situation than young people, the need to try out new consumption solutions and to experiment is much more limited to this age segment. The financially secure and 40+ segments feel no real pressure or incentive to change their consumer behaviour. In other words, a large part of the population in the Nordic welfare states are “too rich” to bother with the hassle of these new sharing economic solutions, which seem too time-consuming and deliberation than if you do as you’ve always done. Most people can afford that drill, so why burden themselves with sharing it with others? Consequently, there are other needs and motivations that have to be met than just saving money.

## What is your main motivation for using a sharing economy solution?



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Reference: TNS for Nordea 2016

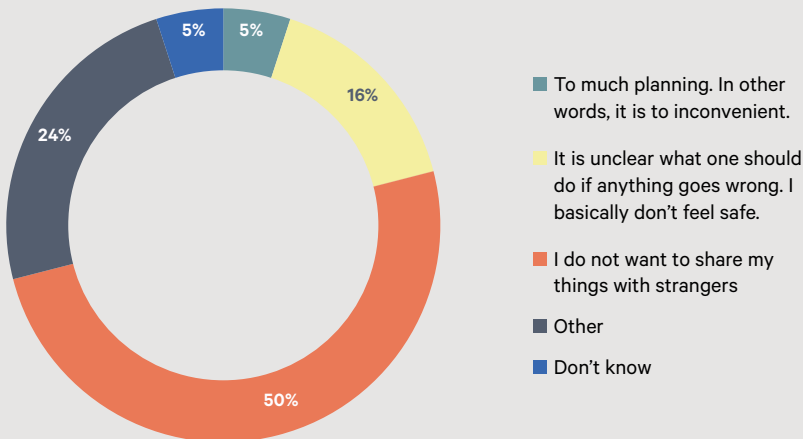
### Sharing Pushes Us to Break Up With Habits

The comfort of the comfort zone, force of habits and a need for feeling safe were all very important to everybody who has not been engaged with sharing economy. 88.5% of Danes do not engage with sharing economy services; in Sweden the number is 87%, in Norway 84% and in Finland it's 76%. Most non-users indicate that these sharing economic services seem are either too difficult, too insecure or too unclear. This applies to 21% of non-users in Denmark, 23% in Sweden, 18% in Norway and 36% in Finland. Surprisingly enough, for all countries it was in the under-40 age group that most expressed this concern. Furthermore, the before mentioned FDIH's survey from February 2016 showed that 75% of respondents who shop online were aware of sharing services, but only 20% indicated they had used them. It shall be noted, that the concern is based on the non-users or no-yet-users, and that these replies

are most probably not based on experience but on pre-understandings.

Choosing solutions aside from your usual ones requires effort and, moreover, the alternatives must be reliable and more attractive. If the survey results are accurate, we could in theory transform Scandinavia into a Mecca for sharing economy solutions. We could more than double the number of users of sharing economy solutions if the hassle and insecurity was removed – this is mainly the kind of insecurity caused by not knowing what is legal and what is not. The insecurity caused by concerns about fraud and vandalism, seem mainly to be addressed by experience with the opposite. Admittedly, 24% of respondents in the Danish survey answered that they would never participate – and the reason *why* must be studied - but 63% answered that it has just not yet been relevant for them to get involved with sharing economy. In other words, 63% do not dismiss the idea.

### What is your main reason to *not* participate in the sharing economy?



Base: Has not participated in the sharing economy, 961  
Reference: TNS for Nordea 2016



These 63% could indicate that if systems and organisations are created so they are meaningful in the complex everyday life with all its challenges in terms of logistics and lack of time could enhance the potential of sharing economy solutions. It seems reasonable to conclude that more user-friendly solutions than the current ones and full clarity of legal aspects and safety might wake the interest of the concerned and “not-yet-relevant” group.

However, it is also noticeable that the survey indicates (although based on a small sample) that there are few complaints have been made by persons who either provide their own assets and services or use other people’s assets and services. It is a challenge for the sharing economy to ensure a sufficient large supply of sharing economy initiatives – with reliable deliveries – and to ensure that goods and services can be found within a user-defined reasonable distance.

### **What Are We Waiting For?**

Throughout the Nordic countries there is a usage pattern of very few people putting up their belongings and renting or loaning out their available resource capacity. The number is only 3-4 %, except in Finland where it is 16%. Consumers would much rather use and share property and services others make available – not sharing their own possessions. The FDIH’s e-commerce survey also demonstrates this. Our survey also shows that the majority of non-users stay away because they don’t want to share their own things with strangers. This applies to 50% of Danes, 40% of Swedes, 37% of Norwegians and 30% of Finns. When so many are unwilling to offer their own possessions, it is a significant factor that inhibits the development of sharing economy solutions. The potential of “personal possessions” is too small, but other types of sharing economy solutions clearly show potential; according to the figures it has just not yet been relevant for the majority.

Given the widespread reluctance to share own possessions and the lack of pressure to do so (in the Nordic countries), other solutions are needed if sharing economy is to become a realistic alternative to personal ownership.

The strategy for making sharing economy grow might be the focus on solutions that allow personal ownership to be retained while perhaps “new purchases” are shared in modern forms of “join own-

ership” or cooperative models. Moreover, there is a need for new thinking and a higher degree of professionalism. This does not mean that people do not want to share, but that the framework and conditions for sharing should be reviewed.

Thus sharing economic solutions must be operated effectively and professionally, giving consumers access to goods and services that are suitable for multiple users. The goods and services need to be solutions people feel like choosing instead of acquiring their own things. The incentive has to be that the new sharing solutions are better, cheaper and, above all else, easier to use than conventional solutions. And it must not take too much time to carry out the transaction since as we all know time is money. For example, a transportation solution cannot require a person to start out in a place that’s inconvenient or end up in another place they have no desire to go to. That would be too time-consuming.

Areas that are suitable for replacing personal ownership with a “user license” or “access” may include transportation on two or four wheels, holiday homes in the city and countryside, consumer products that aren’t used that often or are just used extensively for a limited period of time, such as tools, toddler furniture and products, etc.

An example of a new access model in the future is under development at the German car manufacturer Volkswagen. They’re currently developing a new mobility brand with an electric self-driving car with a built-in IT distribution platform and an accompanying car fleet. Starting in 2025, the combination of the fleet, ride-sharing and autonomous cars will provide consumers with four wheels on demand. Operation of this programme is thoroughly professional, and presumably it will become both an attractive and competitive alternative to owning a personal vehicle. This kind of more professional, large-scale “on-demand” solution with a subscription membership could be the future for the sharing economy in the Danish market. ■



**Ann Lehman-Erichsen** graduated with a Cand. jur. (Master of the Arts in Law) and is a consumer economist and branch executive officer at Nordea. Over the last ten years, she has researched and analysed the Danish consumer economy and consumer behaviour through independent surveys and so on. She has been carefully following developments in the sharing economy since 2014. Ann was previously employed by the Danish Competition and Consumer Authority as an attorney for the Danish Consumer Ombudsman and the Consumer Complaints Board (“Forbrugerklagenævnet”). Ann is the author of the Danish book “Plus på kontoen, syv smutveje til en bedre økonomi” (“Funds in your account, seven shortcuts to a better economy”) published by Gyldendal Business in 2015.

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Read more on the Volkswagen project here: “TOGETHER – Strategie 2025”, [goo.gl/qCvqiZ](http://goo.gl/qCvqiZ).

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# The Green House in Frederikssund

## What is The Green House in Frederikssund?

The Green House in Frederikssund is a project that was recently started to establish a meeting place for “green” organisations in Frederikssund. The Green House is a non-profit project, meaning that it does not involve any business model. As the name suggests, The Green House in Frederikssund is an initiative of Frederikssund municipality. The members of local associations and citizens of the municipality would be the main beneficiaries. The services the Green House would offer are designed to promote the activities of members of “green” organisations, enhance ordinary citizens’ knowledge and awareness of environmental and climate

issues and encourage participation in joint events and community gatherings regarding future green ideas and solutions.

Currently most of the partners of The Green House are volunteers from the “green” organisations, such as the *Frederikssund Økologiske Fødevarefælleskab* (“Frederikssund Organic Food Cooperation”), but the longer-term goal is to also include a collaboration between the municipality and business owners. Additionally, there’s a tentative plan to expand the platform to include an empty retail location centrally-located in Frederikssund, which would provide a physical presence in Frederikssund. The project’s most important resource

are the activists who devote their time and energy to facilitate the project.

## What Are the Sharing Economical Aspects of The Green House in Frederikssund?

The Green House in Frederikssund is not a commercial venture, but is instead based on the efforts of volunteers and local community members in Frederikssund municipality. In a nutshell, it’s all about sharing knowledge and fellowship and spreading awareness of “green” initiatives that can improve the environment. This can be achieved through a number of joint activities: Culinary get-togethers in the community, joint events, group excursions, etc. ■



Article

# New Business Models —Chickens, Chocolate and Vinegar

**Emmy Laura Perez Fjalland**, Ph.D. Fellow, Roskilde University and Danish Architecture Centre  
**Mark Lorenzen**, Professor, Copenhagen Business School

**D**oes sharing economy create growth, wealth and jobs? Where does the potential for growth come from? A number of consulting firms worldwide have forecast that sharing economy will be worth hundreds of millions of pounds, and a good deal of the attention sharing economy has attracted is due to the high-profile companies, like BlaBlaCar, WeWork and AirBnB, with millions in sales whose businesses are based on a sharing economic business model. It is clear that start-ups try to copy and refine these successful (in terms of economic growth) business models, while at the same time industries and authorities examine how elements of the models can be applied to established manufacturing and service industries.

It is too early to tell which sharing economic business models will be successful in the future just by studying the existing sharing economy businesses. Today's sharing economy businesses are too few and too new, and the technological and political development changes too fast for us to conclude anything on their future competitiveness. But we can say something about the overall growth potential of sharing economy by studying the key tenets of existing businesses' business models.

In Denmark we do not (yet) have any sharing economy businesses with a "billion-dollar-turnover". But through the Sharing City project we have met various small and mid-sized businesses who work with sharing economy both as a way to build their own business and as something they provide for others. Examples of the latter, could be well-known Airbnb and BlaBla Car. In the following section, we present a closer look at a couple of examples of those building their business on the principles of sharing economy, and following make a few general observations about the growth potential we see across the various businesses. Our analysis of these small and mid-sized Danish sharing economy businesses shows, in general, that business models that contain principles of sharing economy:

- 
- can contribute to a healthy, sustainable bottom line for small and mid-sized businesses (SMEs)
- 
- can help provide products and services of a higher quality
- 
- have a spill-over effect through its value of network
- 
- can make local resources more visible, exploitable and efficient.
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### **Chickens, Chocolate and Vinegar**

In the following section, we present three examples of Danish sharing economy businesses. In order to better compare their business models, we've chosen three businesses within the same industry: Food Production. We focus in particular on how the three food producers have innovated their business models with sharing economic elements.





**“It’s not technology alone that creates a customer base or adds value. It’s our experience that offline activities are essential to the new business models.”**

→ *Sharing Inputs and Outputs: Hegnsholt Hønseri (“Hegnsholt Chicken Farm”)*

Hegnsholt Hønseri, which participated in the Sharing City project’s incubator programme, has a very unique business model and business philosophy. Hegnsholt is a smaller organic farm of 11.5 hectares. Johanne Schimming, the owner and operator of the farm, produces eggs, chickens and lamb of high quality. What’s innovative about the farm’s business model is that it is largely based on exchange agreements, crowdfunding and share certificates.

The exchange agreements reduce waste by using it as feed, thereby reducing the amount of chicken feed that needs to be manufactured and purchased, while at the same time increasing the production value of the chicken and the eggs. The farm has contracts with restaurants like the Michelin-starred Relæ, and Manfreds, Bæst and Amass (all located in Copenhagen, Denmark). The farm delivers eggs and chicken to these restaurants and a portion of the payment is in the form of leftovers from fresh vegetables such as the green top of the carrot and bread from the establishments’ kitchens. These are used as feed that is so nutritional and varied that the quality of the chicken and eggs is improved. The farm also has contracts with the mill at the farm Østeragergård, where Johanne receives waste consisting of grain husks and grain that is likewise used as chicken feed. Johanne sells the mill’s bread and grains in her crowdfunded farm store. In addition, the Hegnsholt has exchange agreements with organic vegetable farmers on the farms Kiselgården and Jørgenssæde. Hegnsholt receives surplus vegetables and delivers chicken manure in return, which is used as fertiliser on their fields.

Another part of Hegnsholt’s business model is allowing consumers to own shares in the farm’s production. You can buy a share in the

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farm's chicken production, a share in a half or a whole lamb or a share of the farm's egg-laying hens. The farm receives payment in advance and Johanne keeps transparent accounting statements on behalf of her shareholders.

Finally, Hegnsholt has been able to open their farm store thanks to crowdfunding. When Hegnsholt was founded, customers who made a donation received either a store gift card, recipes or a visit to the farm. 75% of the expenses to establish the store were raised through crowdfunding.

→ *Sharing of Ownership and Profits: Friis-Holm Chokolade (“Friis-Holm Chocolates”)*

Friis-Holm Chocolates is a family-owned chocolate manufacturer with an explicit focus on the segment of the market that is willing to pay a premium price for the highest quality. The owner, Mikkel Friis-Holm, has won gold, silver and bronze medals several times in leading confectionery competitions.

Friis-Holm's business and manufacturing philosophy is based to a high degree on the involvement of shareholders as well as suppliers. When the business' chocolate production was first established in an earlier production kitchen in village Hvalsø in Lejre Municipality

(Denmark), Friis-Holm received a loan of DKK 2 million from The Danish Growth Fund, but also got a number of private investors involved in a deliberate departure away from traditional venture capital funds and investment companies. The goal at the time of the company's founding was to raise capital in a way that allowed owner Mikkel Friis-Holm to retain full management control of the company. The businesses attracted 29 investors from Mr. Friis-Holm's personal and professional network, who bought DKK 2.4 million in shares. The investors all signed a prospectus entitled "Bedst i verden, Bedst for verden" ("Best in the World, Best for the World").

The title refers to Friis-Holm's socially responsible goals for their manufacturing. The business works with what is defined as '*direct trade*', a variation of 'fair trade' where direct trading between chocolate farmers and chocolate makers ensures that farmers get better payment in comparison to a traditional commerce model based on distributors. Thus, Friis-Holm is involved in the entire chocolate value chain from *beans to bars* – they take care of the entire process from the cocoa beans to the final packaged bar of chocolate. This process starts with the choice of a supplier for the raw cacao fruit and includes selecting the varieties, harvesting, fermenting, drying, transport, roasting, peeling, rolling, conching, tempering, moulding and packaging.

Friis-Holm was able to get the business profitable to such an extent that it was able to provide its shareholders with satisfactory returns, invest in business and product development and reward the farmers with generous payment for their beans.

#### → *Sharing Knowledge and Surplus: Herslev-Grønvirke*

Herslev-Grønvirke is a sharing economic collaboration between two smaller businesses that emerged from an environment of "green" entrepreneurs in Lejre Municipality. In this environment, ideas and knowledge were exchanged among local entrepreneurs based on the concept that it's possible to cooperate in certain activities while competing in others. At after-work meetings, local small companies discussed the opportunities for networking and business cooperation across industrial and competitive lines.

At such a meeting, Tore Jørgensen the owner of the brewery *Herslev Bryghus* met Kristian Isbrand and Karen Hertz from the company *Grønvirke*, a small business that works with communication and project development on behalf of other businesses. Through local knowledge-sharing they discovered that their skills – *Herslev Bryghus* in beer manufacturing, logistics and distribution and *Grønvirke* in food, communication, design and branding – were complementary.

Together they developed a business model based on sharing a surplus from *Herslev Bryghus*' beer production: beer vinegar. Tore Jørgensen, Kristian Isbrand and Karen Hertz agreed that this vinegar would be refined for use in cooking. *Herslev Bryghus* thus delivers the vinegar and *Grønvirke* takes care of the processing and marketing. The refining is done in the building where *Grønvirke*'s former

office was located. The sharing economic utilisation of a former waste product in the production of a new food item is so promising that they founded a joint company, Herslev-Grønvirke, based on a 50/50 distribution of the profits.

### **Strength in Numbers for Smaller Companies**

These three examples show how incorporating sharing economy into a business model can optimise the use of resources and lead to an increase in productivity. The examples also show how the local environment can play an active role in both the development of a business model as well as the establishment of the company. In return, sharing economy businesses can strengthen business development in their local environment.

These three companies share a lot of characteristics with a number of concept-stage or very early business-stage projects we've gotten to know through the Sharing City project and are represented in this magazine. The three examples also show that not all projects need to be scaled up for the big leagues. The basic sharing economic principle is seldom about economies of scale, centralisation or a market monopoly. The economic potential in sharing economy business models often depends on decentralisation and distribution through new channels: that you use existing resources in new ways, pool them or optimise their use in another way.

Even though few of the new sharing economy businesses may end up becoming high flyers, sharing economy can offer growth, wealth and jobs. While large businesses are more productive and profitable, it's always been the sum of all the small and mid-sized companies that represented the majority of the Danish commercial life. Developments in recent years show that innovation forms the foundation for more and more small and mid-sized Danish businesses and it doesn't just create new businesses, it also improves the income and exports of existing small businesses. The innovation represented by sharing economy principles is a good example of this: Small and mid-sized businesses often lack resources – time, funding and skills – but by sharing to exploit existing resources or developing new ones collaboratively, the contribution of small and mid-sized businesses to the Danish economy can be improved.

### **Locating and Upgrading Idle Resources with the help of Network**

How do they do this? What is the basis of the sharing economic components in the business models of small and mid-sized Danish companies? Up to now, the discussion on sharing economy has mainly focused on the largest international businesses. Most of these have reached scale via the use of digital applications, which is why we often speak of the sharing economy as a “digital” or “platform” economy. Our three examples and the projects we've encountered from the Sharing City project indicate that digital applications are far from the whole story. It's not technology alone that creates a customer base or adds value. It's our experience that offline activities

**“Small and mid-sized businesses often lack resources – time, funding and skills – but by sharing to exploit existing resources or developing new ones collaboratively, the contribution of small and mid-sized businesses to the Danish economy can be improved.”**

are essential to the new business models. The main thing that's made sharing economic business models feasible for the small Danish businesses and projects is that material and human resources are identified, discussed and transacted.

It's additionally not technology alone that facilitates this identification, discussion and transaction. In our examples, these processes have occurred through a tight synergy between digital and physical relationships and networks. It's in networks that information flows and knowledge can be shared. It's also in networks where we can see one another and develop the trust that's so essential in order to share. The networks that provide a basis for knowledge-sharing, discussion and transactions and that can lead to new business models are created at meetings, conferences, workshops, in places like UNDERBROEN (see Sharing City Innovators) and over digital platforms (e.g. the Sharing City innovators Cph Volunteers, BrainShare, FarmBackup and Min Landsby ("My Village")). These

digital platforms can seldom stand alone. In some cases, they can be used as a key that can unlock and create new relationships – they can provide visibility, along with a bird’s eye view of resources that are outside our own local environment (geographically and socially). In contrast, the digital can be experienced as an obstacle – an alienation – other places (frequently in existing communities, neighbourhoods and networks). This isn’t anything new, but as our examples and projects illustrate, it’s a very important point to emphasise in the Danish context that digital platforms often depend on offline networks.

While networks are needed for sharing and developing new business models, sharing both creates new networks and strengthens existing networks. In other words, sharing lays the groundwork for more sharing. Sharing economy and sharing economic business models require networks and trust and therefore move slowly compared to more competitive market systems. But sharing economy also houses the potential for a self-reinforcing effect (spill-over), both economically and socially, due to its strong value of network.

### **Growth, Wealth and Jobs**

In this article we’ve examined sharing economic components of the business models in small and mid-sized Danish businesses. We’ve also discussed the potential socio-economic significance of such businesses.

Critics will argue that since the current Danish sharing economy businesses are small, their business models will be ineffective and their socio-economic impact on our economy will be modest. As our examples show, it’s correct that sharing economy business models shouldn’t be analysed in the same manner as typical scalable business models. It’s not just their income model but often also their objectives that are based on sharing and collectivism. And as our examples show, the more long-term orientation of these goals doesn’t necessarily make the road to a healthy bottom line any bumpier.

From an economic standpoint, the cumulative effect of these small and mid-sized sharing economy businesses is potentially large. The sharing economic elements in these business models are innovative and create a basis for new income opportunities and savings. For some of the small and mid-sized sharing economy businesses, the scalability is limited by their integration with their local environment: Their owners, target group and market will continue to be local. For others, the local orientation is just a launch pad for developing a model with national or international business potential.

### **Additional information**

In-between the launch of the Danish version of this Sharing City Magazine (November 2016) and the launch of this English version (April 2017), the Danish Veterinary and Food Administration have stopped the exchange agreement between Hegnsholt Hønseri (“Hegnsholt Chicken Farm”) and the restaurants Relæ, Manfreds, Bæst and Amass due to unforeseen circumstances. As the Minister of Environment & Food support new innovation as this sharing model, the Ministry and Administration are currently investigating solutions to this obstacle.

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→ On the whole, both the arrival of new sharing economy businesses and the integration of sharing economic elements in the business models of existing small and mid-sized businesses needs to be viewed as a significant opportunity for growth, wealth and jobs in Denmark. That many of the small and mid-sized sharing economy businesses are so tightly interwoven with the social cohesiveness of their local environment should be viewed as a beneficial side effect. ■





## Kompostbudene

kompostbudene.dk

### What is Kompostbudene?

Kompostbudene (“The Compost Messengers”) offer a number of services centred around the bio-conversion process – everything from biological waste to composting to the use of compost for cultivation and fertilisation. They do this by establishing local compost systems and supplying information and guidance to residents on everything from sorting kitchen waste to local maintenance and local use of composting sites. Kompostbudene also set up educational seminars and workshops for kindergartens and schools to promote understanding of the cycle that leads from waste to compost to the table and back again. Kompostbudene operates in Copenhagen. Since Kompostbudene delivers these services where residents live, there’s a strong physical dimension to their work.

Kompostbudene’s customers can be divided into several groups: Housing associations, businesses whose operations produce a lot of organic waste (cafés and restaurants) or are environmentally responsible, institutions (e.g. cultural institutions), schools and kindergartens and private individuals. What the customers all have in common is that they’d like to make a difference in their communities and contribute to “green” transi-

tion where they’re part of a local “green” network. Kompostbudene also emphasises the cost savings involved in reusing organic waste in a bio-conversion cycle.

Kompostbudene also works on a societal level by putting socially marginalised individuals to work as compost messengers. Thus, their most important partners are various institutional employers, such as Sundholm Activity Centre (“Aktivitetscenter Sundholm”), The Home for Men (“Mændenes hjem”) and The Settlement (“Settlementet”).

Kompostbudene has encountered several challenges in relation to legislation in this area. The legislation is national, but is interpreted differently from municipality to municipality. Copenhagen Municipality has, for example, adopted a stricter interpretation of these laws than say Odense Municipality. Since opening, Kompostbudene has however held conversations about these topics with Copenhagen Municipality regarding various solutions and test runs. A number of municipalities have expressed an interest in Kompostbudene’s services but since the organisation’s services cross over several different municipal functions, such as the socially disadvantaged and waste, it’s been difficult for Kompostbudene to position itself. Waste is also an ex-

ample of an area where there’s no precedent for smaller players with alternative solutions submitting a bid on a proposal.

### What Are the Sharing Economical Aspects of Kompostbudene?

Kompostbudene works with sharing green resources such as waste and compost in the city. This sharing can take place on a classic Copenhagen courtyard, where the residents share their organic waste in order to compost and use it as nurture soil and mould in e.g. gardens, raised beds, or green balconies. Kompostbudene also works on a larger scale, for example by helping tenants at Torvehaller (a food market in Inner Copenhagen) share their organic waste as compost with town residents as fertiliser for the plants and flowers on their balconies.

Kompostbudene believes sharing economy is all about creating better products, services and strategies that are beneficial for our planet and its residents. The world’s moving away from a culture of consumption and toward other things like sharing, which must work according to the market conditions of our society. Many people are also pre-occupied on a personal level with minimising our footprint on the planet and are therefore very interested in using these sharing services. The people behind Kompostbudene are providing a real-world example of how this actually can be done. Kompostbudene would also like to provide people with a better understanding of how the bio-conversion cycle and recycling process can affect other types of waste and help them change their perspective on life. ■



**e-loue**

dk.e-loue.com

#### **What is e-loue?**

e-loue is a digital marketplace that allows peers, individuals and companies to lend out equipment and machines. e-loue's mission is to change our consumption patterns by encouraging us to rent and share instead of purchase, while at the same time providing income opportunities for individuals and companies.

This all happens on a digital platform consisting of their website, where lenders can offer their equipment, set a price, etc., and potential renters can easily search for and rent what they need. Visitors to the site can be divided into two groups: Lenders and renters, which can either be individuals or companies. e-loue therefore depends on the willingness of their customers – both private individuals and companies – to share and lend their equipment, machinery, goods or other services. e-loue is working on a

pilot project to involve more companies so businesses don't miss out on the growth in the sharing economy. Currently, e-loue just operates in Denmark, but they'd like to expand to the rest of Northern Europe in the future.

e-loue works with various partners, including a PR agency, a digital marketing agency and a sales promotion company. It's been a challenge though for e-loue to locate partners, especially in the sales and insurance industries, who are willing to lend out equipment to individuals. e-loue is additionally working on providing its customers with an integrated smartphone-based app in order to speed up user transactions.

#### **What Are the Sharing Economical Aspects of e-loue?**

e-loue is part of the sharing economy by offering a service that promotes sharing between individuals, using a pay-per-use

model instead of purchasing.

Additionally, e-loue points out that they help lower the amount of idle goods in our society by providing better access to expensive equipment and machinery that many customers couldn't otherwise afford to buy. Furthermore, they provide additional income opportunities to private individuals and companies that have invested in expensive equipment.

e-loue also believes that the development in the sharing economy must embrace local businesses, which is something they are looking into further with their pilot project. They feel that businesses are the catalysts for growth in the sharing economy and emphasise the importance of including them in sharing economy projects. ■



**deemly**  
deemly.co

#### **What is deemly?**

deemly has designed their digital platform to build trust and confidence among users within the sharing economy. Users can set up a 'trust profile' on deemly's website, which serves as a central repository for all their existing ratings and reviews from sharing sites like GoMore, AirBnB, etc. and also provides an overall score. This total score is available to other visitors to the site and helps breed trust and confidence that encourages people to feel comfortable transacting in the sharing economy. Visitors feel more secure about entering into a transaction on a sharing economy site when they have more information about the person on the other end of the transaction. It's absolutely free for private individuals to set up and use their deemly profile.

deemly's business model helps the sharing economy by providing businesses and organisations that haven't yet developed their own

sharing software with a rating and review system. deemly also offers an API solution that enables platforms like e.g. AirBnB to allow their users to include the deemly score in their AirBnB profile. deemly's customers aren't just limited to Denmark either, as the company already has customers in the US, the Netherlands, and Switzerland.

You will find deemly on all customers' platforms, or you can just go to deemly.co. The people behind deemly are also active on various social media channels and have their own blog, which is frequently updated.

deemly received their first round of funding in the Spring of 2016 from SDI, which they used to launch the product. The team released a beta version in June and launched Version 1.0 in October 2016, which adds new features, updated functions, and has been optimised according to user and customer feedback.

#### **What Are the Sharing Economical Aspects of deemly?**

By offering a service that makes it easier for sharing economy sites to build trust among their users, deemly helps improve the level of confidence in their platforms and promote a sharing economy culture. deemly firmly believes that the sharing economy is beneficial for our environment, our culture and our overall economy. By helping people build trust in one another, deemly helps the sharing economy work more effectively. ■



Expert Perspective

# Law in the Sharing Economy —Challenges That Sharing Economy Projects Run Into

**Martin von Haller Grønbaek**, Partner, Bird & Bird Law Firm

**Morten Bernhardt**, Student of law, Bird & Bird Law Firm

**T**he legal challenges can be numerous and will always depend on the specific situation, but typically at the very beginning you have to address i) *how* the sharing economic activity is organised, ii) *who* is responsible for this activity and iii) *if* the activity has a profit motive or is non-commercial.

In the following, we'll highlight some judicial areas of relevance to several of the innovators in the Sharing City project based on several practical cases. The following text will be relevant for people with a general interest in the sharing economy and especially for entrepreneurs interested in this market who are evaluating their own start-up. Furthermore, we'll highlight judicial aspects that the latter group should be aware of in order to avoid short-term and long-term surprises.

### Personal Data

Many innovators use a digital platform that's designed to serve as a connection between the initiative (the sharing economy business) and customers. It typically encompasses an online platform where users set up their own profile in order to share the service that's the focal point of the respective idea. It's likely in this context that information will be processed about an identified or identifiable physical person<sup>1</sup>, where The Act on Processing of Personal Data ("*Persondataloven*")<sup>2</sup> is applicable. Particularly those innovators who are planning long-term to sell or share data as their primary business model should take a close look at the rules on the collection of personal data.

In relation to this, there are several aspects that should be included in the deliberations as this can determine whether you are in compliance with the applicable legislation – which will see an increase in the obligations of the data processor, i.e. the innovator, when the new personal data regulation enters into force in 2018. Aspects such as the processing of *sensitive personal data* should play a key role since the protection of this data is more far-reaching. In this context, it's important to look at anonymisation and, in general, plan ahead and integrate it with the platform you want to create. Reuse of personal data for another purpose than

what was originally planned also violates the rules and can be a frequent misstep since many innovators aren't aware of the existence of the rule. As it was so eloquently stated by the Romans, "*Ignorantia juris non excusat*," which means that ignorance of the law does not excuse you from liability. The consequences of this can be significant fines, which will also be increased, when the new personal data regulation enters into force.

### Employment Law and Incentive Packages

Some of the participating innovators have included as part of their future plans a desire to expand with full-time employment of co-workers. This naturally brings employment law regulations into play since these are designed to protect employees and therefore cannot be changed to be unfavourable to the wage earner. In other words, they are mandatory for employee protection. On top of this, there are the collective bargaining agreements that initially are only relevant to consider if you as an employer actively enter into an agreement or sign up to an employer organisation.

<sup>1</sup> As the phrase personal information is defined in The Act on Processing of Personal Data

<sup>2</sup> Act 2000–05–31 no. 429 on the processing of personal data, Section 3, no. 1



# “The legal challenges can be numerous.”

An especially relevant point for innovators are incentive packages. The prevalence of incentive packages, which typically are equity-based, has been rising since the middle of the 1990's and compensation in the form of partnership shares or stock has become a common method of payment. This was seen, for example, in the fitness app company Endomondo, where the board of directors prior to the company's sale to Under Armour in 2015 pushed through a share option programme that ensured some of the employees a large profit on the sale of the company. However, some of the entrepreneurs refrain from awarding pay in the form of shares, including especially the so-called share option programmes, where employees receive an option to acquire shares in the company at a pre-set price. The reason share options aren't used that much in Denmark as you might immediately assume – in direct contrast to the trend of our partners on the other side of the Atlantic – is due, paradoxically enough, to the far-reaching Danish legislation in the area of employment law, which to a certain extent also protects “good leavers” (the reason why an employee leaves the company). This refers to the case where an employee is terminated by the company and this isn't due to the employee's breach of the employment terms.

However, there are still ways in which innovators can benefit from the numerous advantages inherent in share option and incentive packages in general. It requires though a knowledge of how to structure the programmes, which must not only

be agreed to by both management and employees, but also must be entered into the company's articles of association and adopted at the general meeting.

Programmes that distribute partnership shares in a company are of course not just relevant within the area of employment law. If you're thinking of starting a sharing economy business where incentive packages are awarded, such that users of a particular service are, for example, offered shares of the company if they're power users, then this would also be considered a type of incentive programme. Although it won't be covered by the employment law rules, it will still be affected by company law and contractual law regulations, so the agreements must be designed with this in mind.

The area of *incentive compensation* is one parameter that all innovators should certainly evaluate – or more accurately, go over with a fine-toothed comb – so watertight contracts that benefit all parties can be ensured. Legal advice on this topic is therefore highly recommended.

## Taxation

Flere af innovatorerne har valgt en transaktionsbaseret indkomstmodel. Flere af innovatorerne har valgt en transaktionsbaseret indkomstmodel. Several of the innovators have opted for a transaction-based income model. The phenomenon is well-known and used on a grand scale by many companies, including e.g. GoMore, which charges 10% of a motorist's income from online bookings with a so-called service fee. However, as an innovator, you should be aware of eventual legal aspects with respect to VAT. There are also some innovators who have a subscription-based model that involves a free initial advertisement with subsequent payment if the customer wants more ads.

## Common Regulatory Legislation and Considerations

As mentioned initially, the regulatory speed bump is a frequent problem for innovators' entrepreneurial aspirations. Law is not an exact science, which is why legislation is typically interpreted before it's applied to a particular fact. Thus it's also possible to interpret the laws in a different manner than previously. In this way, an activity that wasn't possible before may be accepted if a different interpretation of the rules is adopted (and thereby understanding) than was the case previously.

A different interpretation can, among other things, come about due to a general development in society. In other words, challenges can be overcome if you as an innovator enter into a dialogue with the public authorities and can put into words the challenges that are associated with the applicable regulations, so the public authority can include this viewpoint in its interpretation of the specific provisions. In contrast to this, there are the actual, legislative barriers, where it simply isn't possible to pursue a sharing economic idea, regardless if the law is interpreted differently, without a change to the applicable legislation. For example, this could concern the legislation pertaining to the food production industry if you plan to pick up food from restaurants or other establishments that have spare leftovers.

If your work involves storing a physical object, for example by facilitating the communication between one person who *wants* storage and another person who *has* storage space, then insurance-related aspects will take centre stage since it's absolutely critical for all involved parties (i.e. innovators, lessor of the space and renter) that they're not left in a pickle, having to pay compensation for the other party's loss due to accidents and so on. In this context, it's also very important to establish comprehensive terms of business that account for the various risks, so any uncertain situations and unpleasant episodes can generally be minimised. ■



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**Morten Bernhardt** is a student of law working at Bird & Bird Law Firm and deals with commercial law, including corporate law, employment law and public procurement law. Morten is a Master's degree law school student at The University of Copenhagen and is currently working on his thesis within public procurement law.



## Spaceflex

spaceflex.dk

### What is Spaceflex?

Spaceflex connects people looking for storage space with other people in the neighbourhood who have spare unused extra space. With its safe, secure framework, Spaceflex has created an easier, cheaper and more convenient storage alternative for consumers lacking space to store their belongings, while simultaneously providing other consumers with the chance to earn passive income on space they aren't using. Users are primarily private individuals and small businesses and can be divided into two groups: Renters and "spacelords".

Spaceflex facilitates this contact between the renter and the space lessor or "spacelord" through a digital web platform, and is actively working on expanding the platform to include a mobile app. On this platform, customers must create a profile in the system. Users' profiles are verified in order to create a safe and secure environment. The platform works by allowing customers to locate a local spacelord in their neighbourhood on a map. Then they can simply contact the

space lessor to inquire about the space and book it directly on the platform. Spaceflex takes care of the payment arrangements, rental contract and insurance for the stored items.

Spaceflex started in Copenhagen and its operations are centred around the Greater Copenhagen area, but efforts are underway to spread the phenomenon throughout Denmark.

Spaceflex is partnered with the ePay payment system, the Alka insurance company and various investors. In addition, Spaceflex is setting up partnerships to create an even better user experience. These include e.g. moving companies, online housing marketplaces and other relevant partners.

Since Spaceflex has experienced that real estate companies and housing coops can be difficult partners to obtain, they've decided to take a bottom-up approach and targeted private individuals instead of established organisations.

### What Are the Sharing Economical Aspects of Spaceflex?

Spaceflex feels strongly that sharing economy is all about

making better use of idle resources. Spaceflex addresses this by making it possible to share unused resources in a smart, secure way. Instead of building new storage hotels, they'd like to see people utilise resources that are idly gathering dust, including unused storage space. Spaceflex points out that even if sharing economy doesn't end up saving the world, it's making the public aware that we need to find new ways to make better use of our planet's resources if we want a future that's sustainable for all of us. Spaceflex would also like to emphasise that any sharing economy platform is essentially selling confidence and security. Spaceflex is building new relationships between individuals by enabling them to create added value via its platform, while developing lasting new friendships. And as a result, better use is made of a lot of unused cellars, lofts, spare bedrooms and garages, instead of more sprawling storage centres rearing their ugly heads in our cities. ■



Article

# Elements of Green Transition in the Sharing Economy

**T**he dogma regarding resource optimisation in sharing economy services and solutions has been an essential topic for discussions concerning green transition and sustainability. These discussions have been about moving away from a “use and discard” mentality and embracing a mentality of preservation. The effects are still questionable since the prerequisite for resource optimisation providing a positive effect on the ‘climate equation’ is that whatever is saved or earned is not used for more consumption. For this, sharing economic initiatives can have a significant positive impact if the use is on a scale that can promote a transformative process toward more sustainable consumption patterns.

### Human Activity and Climate Concerns

As the positive ‘climate-effect’ is related to consumption patterns and lifestyle, green transition can be interpreted as an individual concern. According to scientists, we find ourselves in an era that’s defined by various converging critical conditions (crises) – climate change, ecological crises, increased social inequality, wars and financial disruptions – that simultaneously and in a mutually-dependent manner are expanding locally and globally and creating geopolitical, social, economic and cultural conflicts with regard to the distribution of the Earth’s dwindling resources.

These crises are directed mainly towards human activity, and to place a large part of the responsibility for these changes on humans with a high carbon-dependent lifestyle, and in the form of the societal structures, appears to both create possibilities and be paralysing; creating possibilities due to the idea that societal structures are human-made and therefore can be redirected, and paralysing, as the structures also seem to be interpreted as ‘natural’ and as the unintended consequences seem apocalyptic.

### Communities As a Part of the ‘Green’ Solution

Since psychologists in Norway and Sweden, in tandem with the fact that threats to the climate are drawing nearer, have embraced the concept of “climate angst” it is once again relevant to talk about communities (see page 81), now in relation to green transition. There is a considerable amount of climate angst because the threats to the climate are real. Philosopher and economist

Per Espen Stoknes describes the need to give this enormous climate angst a social form and find a community-wide expression for it: “*It can be in the form of art, a ritual, a book, a demonstration, a debate or letter to politicians – as long as there is an active and collective reaction to the feelings.*” A study of the users of *The Bicycle Library* (“Cykelbiblioteket”) in Copenhagen and the carsharing company *LetsGo* shows that some sharing economy businesses and organisations are regarded as communities by their users.

Successful sharing economy businesses and organisations seem to exist based on a common practical need that turns into a practical community centred around a specific function (use/consumption of cars, bikes, food) that makes everyday life run smoother. Additionally, these can also be communities-of-interest where members often share a vision of increasing sustainable mobility or reducing crowding in the city (Magelund and Bennetsen, 2015). “*These organisations are regarded by the interview respondents as movements that take responsibility for sustainability.*” (Own translation, Magelund and Bennetsen, 2015: 126).

The power of change seems to reside in communities and networks – the close ones and the more remote ones – where people share resources, e.g. objects and places. This sharing enables users to take better care of the shared resources since the users know they will be passed on to others, and their use of the resource, most often, will be evaluated publicly by others. This is supported by the point that vandalism or a violation of the shared resources on sharing economic platforms like the Danish ride sharing and private car-sharing application *GoMore* and international home-sharing platform *Airbnb* is very rare. If these acts occurred frequently, these companies never would have grown as large as they are today.

### The Potential of the Sharing Economy for Sustainable Transition

The entire awareness and acquired knowledge about what resources are, where they are and how they can be distributed differently can play a role in changing our consumption, production and disposal patterns. The various sharing economic initiatives offer opportunities to share things like cars, bicycles and tools and can help show individ-





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#### Further Reading

##### CONCITO (2015):

*Deleøkonomiens klimapotentiale*

**Davis, M. (2010):** *Who will build the ark? New Left Review*, (61), 29–46.

**Gjerris, M. (2014):** *Willed Blindness: A Discussion of Our Moral Shortcomings in Relation to Animals. Journal of Agricultural and Environmental Ethics*, 16.

**Kieffer, Geert (2016):** *Bange for moder jord ("Afraid for Mother Earth")*. P Psykologernes Fagamasin. Vol. 8 2016.

**Magelund, Julie Overgaard og Bennetsen, Nina Moesby (2015):** *Hverdagshandlinger – En undersøgelse af bæredygtighed og mobilitet i hverdagslivet ("Everyday actions – a survey of sustainability and mobility in everyday life")*. Master's thesis for Roskilde University.

**Swyngedouw, E. (2010):** *Apocalypse Forever?: Post-political Populism and the Spectre of Climate Change. Theory, Culture & Society*.

**Virilio, P. (2012):** *The Administration of Fear*. Los Angeles: Semiotext(e) Intervention Series (The MIT Press).

uals that there are other ways to consume than just owning (CONCITO 2015:6). The Sharing City innovators Kompostbudene, Naboskab, SnappCar and Hegnsholt Hønseri furthermore demonstrates how users, partners, and customers through their practical involvement and restructuring of everyday activities such as transportation, household waste and use of tools can acquire new knowledge about their consumption, allowing us to act in a different manner. In this way, a type of transformative community arises. In this way, sharing economy solutions and services can function as eye-openers for individuals and attract attention toward possible sustainable alternatives in our busy daily lives full of lots of errands. In other words, the potentiality lies in rethinking the value resources and the users' bodily experience with these services. Furthermore, it seems like users will inspire and recommend the services and solutions to others, only if they are meaningful and convenient in the ambitious everyday life.

Sharing economy services and solutions such as ride sharing (e.g. SnappCar, LetsGo and GoMore), food processing and waste handling (e.g. Hegnsholt Hønseri, Kompostbudene, Cook with a Local), sharing of clothing, equipment and space (e.g. Naboskab, Local Sharing Middelfart, Spaceflex and e-loue), collaborative activities such as public and semipublic spaces and places (e.g. Del Dit Landskab), workshops and offices (UNDERBROEN and FriRumLab) and sharing of skills (e.g. Multikant, GoJoin and BrainShare) all offer various forms of community and provide services and/or products that offer the opportunity to act in a more sustainable manner in communities and networks. The article "New Business Models: Chickens, Chocolate and Vinegar" also reviews new types of businesses that work with a philosophy, manufacturing system and value creation that are particularly sustainable and compatible with the sharing economy. ■



**Middelfart**  
KOMMUNE

## Local Sharing

### Middelfart

#### What is Local Sharing?

The Local Sharing Middelfart project is working to establish a network among businesses to facilitate the sharing of employees, while providing a platform for sharing physical resources in the region around Middelfart. Local Sharing's work is based on the understanding that there's a huge untapped market potential that can lead to more efficiency and growth in smaller businesses through sharing circles if they are able to exchange tools, machinery and specialist knowledge for their support functions. The users of Local Sharing's sharing platform should be small businesses, municipalities and business and knowledge centres. The team behind the platform comes from Middelfart Municipality and Middelfart Business Centre. In addition, Local Sharing could be partnered with The University of Southern Denmark and several select start-up businesses.

Local Sharing is focused on two building blocks that are closely tied together and interrelated: the creation of a common online platform, where businesses can share their tools, machinery and other things, such as surplus products and resources, and the establishment of a physical network, where a relationship is

struck between business leaders and employees in order to share knowledge workers. The willingness to share tools and employees requires mutual trust and familiarity between the parties, which is achieved via the physical network.

The final design of this digital platform has yet to be determined. Local Sharing anticipates it will be able to use and/or adapt existing platforms to serve its objectives. The physical network connecting the businesses will be managed by Middelfart Business Centre. These building blocks will provide small businesses with new ways to collaborate and enhance their competitiveness by providing them with access to technology that either makes their everyday tasks easier or helps them develop new products. Currently, Local Sharing is focusing its efforts on users in Middelfart Municipality, but the potential is there to expand the initiative to include small businesses and business centres throughout Denmark.

#### What Are the Sharing Economical Aspects of Local Sharing?

Local Sharing is all about helping businesses share machinery, tools, resources and knowledge workers. This helps provide sustainable growth and facilitates the development of new services at

small businesses since they gain improved access to knowledge workers for their HR, communication, marketing functions and so on. The network, which creates relationships between business leaders/employees and allows the sharing of knowledge workers, raises the bar for what companies can achieve with their marketing, online services, HR, administration and so on. The online platform provides the businesses with cost-effective access to tools, machinery (e.g. 3D printers) and resources, which cuts down on their capital expenditures. This provides the businesses with more focus and control and trickles down to the bottom line.

Through its sharing solutions, Local Sharing thus seeks to remove or minimise barriers to efficiency and growth in smaller businesses. Apart from its role in promoting growth, Local Sharing also works with resource optimisation, by improving efficiency through shared tools, machinery and other resources. This recycles resources and ensures less waste, community growth and job creation through the sharing of knowledge workers. ■



## Donkey Republic

donkey.bike

### What is Donkey Republic?

Donkey Republic is a self-service bicycle rental platform designed to ensure simple bike rental at a location convenient to customers. In a nutshell, what Donkey Republic offers is a digital platform and service that people can use for bike rentals. The business model itself is based on Donkey Republic selling this platform to bike rental outfits and taking a 20% cut of any revenue earned through the platform.

Donkey Republic works with two user segments: Bike Owners and Riders. Bike Owners are bicycle rental outfits, which are typically larger partners such as bike rental shops and hotels. Donkey Republic has also experienced that some private individuals are also Bike Owners. The Riders are cyclists, who tend to be tourists, but can also be families, friends and business travellers.

Donkey Republic's digital platform includes an app and a website. Bike Owners can list their bikes and make them available to Riders. Via the app, Riders gain access to all the bikes and can always find and book them in the towns they'll be in. The bikes are locked by a so-called "smart lock", where the Riders use the app as a key at the beginning and end of the rental.

Donkey Republic works in cooperation or partnership with various Bike Owners, such as: Bike shops, bicycle rental shops, hotels and hostels. Furthermore, they have many marketing partnerships with tourist centres, travel organisations, cafés, local kiosks, car parks, petrol stations, municipalities and tour guides. The parties they work with and the success of that collaboration has varied quite a lot from city to city.

Donkey Republic is based in Copenhagen, but operates in a large number of cities in both Europe and the US: Copenhagen, Elsinore, Aalborg, Malmö, Gothenburg, London, Oxford, Plymouth, Ohio, Barcelona, Málaga and Amsterdam.

Going forward, Donkey Republic will be in need of financial resources in order to expand and spread its model. Additionally, it's been a challenge to find skilful computer programmers since there's a lot of competition for their services in Denmark. The goal for the next 5 years is to increase revenue and have 1 million bikes available on the platform come 2020.

### What Are the Sharing Economical Aspects of Donkey Republic?

Donkey Republic feels that the central theme of the sharing

economy provides us with a way to make more effective use of our resources. This is the overriding premise behind Donkey Republic's platform since it ensures that people can share resources (bicycles) and in the process achieve more cost-effective and efficient utilisation. This also helps keep our cities free of "clutter" since it limits the number of bikes that occupy a city's limited space and thereby makes better use of crowded urban areas. Since people can just have subscriptions to use a shared bicycle, it makes their lives easier since they don't have to own and maintain quite so many things.

Through this sharing economy platform, Donkey Republic believes they can help spread the joy of cycling in cities throughout the world. The fact that more transportation in our cities occurs on bikes benefits not only bike riders but also people who don't ride bikes since it leads to improved public health, less air and noise pollution, less traffic jams and less congestion in urban spaces. Not to mention, it also makes our roads safer when more and more people ride bikes instead of drive cars. ■



Expert Perspective

# Exploring Green Potentials of Sharing Economy

**S**haring economy gives hope for the environment and the climate and serves as an inspiration to us all for a gentler and wiser use of the planet's scarce resources. But the sharing economy is also a "green" joker. Today, we know very little about its environmental impact. What we do know is that the sharing economy's "green" rewards are still quite small and no law of nature.

In order for the sharing economy to become a green trump card, it takes an effort: The politicians need to create the right frameworks and incentives; the businesses must insist on using the sharing economy to promote a better environment and climate, and the citizens must be prepared to change their actual behaviour and not spend the "green" savings on an extra trip to faraway places or other activities which are damaging to the environment.

In an analysis carried out in 2015, CONCITO concluded that the sharing economy has a great potential for the environment and climate providing us with the opportunity to consume less and use our things more effectively in the long-term. But it also underscored that the sharing economy will not in itself reduce our carbon emissions to a sustainable level of around 2–3 tonnes per citizen. The role of the sharing economy, when it comes to reducing our carbon footprint, is first of all an important supplement.

Right now, the sharing economy is most of all a promising, although distant vision when we talk about the climate and the environment. This is due to the fact that the sharing economy still lacks scale, if one leaves Uber and Airbnb out. According to The Technical University of Denmark (DTU), only 0.3 percent of our population between the 18 and 84 was a member of a carpool in 2015. A survey by Ritzau Fokus in January showed that 9 of 10 citizens have never used a carpooling scheme like Car2go, GoMore or DriveNow. The expectation though is that car sharing arrangements will become more widespread. But there are mixed opinions on how much more.

In an area such as clothing, the sharing economy is even less significant in spite of a rising trend to reuse. There is at the moment not a lot of sharing economic platforms in this area. CONCITO's analysis shows that over 70,000 tonnes of clothing that was discarded still contained around 70 per-

cent of its lifetime value. If Danes used their clothing until it wore out, they would save 1200 tonnes of CO<sub>2</sub> annually. In other words: The potential environmental savings are enormous, if we chose to share our clothing more often.

The sharing economy has been successful in particular where assets are expensive and underused. Cars and housing have therefore been the first to take off. You will find many different estimates of the green potential in these areas. Some of them are pure propaganda.

One example is Airbnb, which hired the Cleantech Group to evaluate their footprint (Airbnb and Cleantech Group 2016). Not surprisingly, their conclusion was positive with regard to the impact on the environment: Airbnb's guests in North America saved the equivalent of 270 Olympic-sized swimming pools full of water and emissions corresponding to 33,000 cars during one year. But Airbnb never agreed to disclose this data. Presumably, they have conveniently left out how many extra plane trips their guests account for.

The Danish company GoMore's ride sharing platform offers an environmentally-friendly approach. But how environmentally-friendly? They have previously calculated that they save 8 tonnes of CO<sub>2</sub> daily. Their maths assume, however, that all of their users would otherwise have driven their own car. But a CONCITO survey of GoMore's customers showed that a GoMore trip is more likely to replace public transportation or just not taking a trip in the first place. That obviously gives a different set of results with respect to the environment.

GoMore may take comfort in a promising new study made by UC Berkeley's Transportation Sustainability Research Center (TSRC). It showed that for every vehicle used on a one-way shared trip, 11 vehicles and 13 tonnes of greenhouse gases are removed from the roads. The reason? The sharing made some of the users sell their car, while others changed their minds about buying one.

Right now Berkeley is reviewing data from Uber and Lyft to evaluate whether their services are good or bad for the environment. For example, if the platforms encourage users to combine these services with public transportation then it is positive for the environment. However, if these services encourage users to travel instead of staying at



home, then it is negative for the environment. In 2014 Berkeley researchers discovered that 8 percent of 380 passengers who used sharing transportation platforms in San Francisco would otherwise not have chosen to go on the trip. This obviously harms the environment.

Human behaviour is the unpredictable joker in any economy, including the sharing economy. The Danish environmental economist Inge Røbke sums it up in a nutshell: “If swapping and sharing activities encourage us to say that we can get along with less, then it is really good. On the other hand,

if they encourage us to increase our consumption, then it is not so good.” (CONCITO 2015).

Economists talk about the rebound effect. In other words, that the lower price of a consumable energy product causes the consumption of the product to increase or gets people to consume more of something else. For example, the members of the ride sharing initiative LetsGo who refrain from buying their own car, thereby saving DKK 3,000 a month, may end up experiencing an indirect rebound effect with a total value of 230 kg CO<sub>2</sub>/month (CONCITO 2015). That erodes the positive environmental effect of the ride sharing.

Rebound has the potential to be that unpredictable “joker” in the deck. Studies have calculated this direct rebound effect to be on the order of 10–30 percent for initiatives that improve car emissions and home heating efficiency (Sorrell 2007). The European Environment Agency estimated the rebound effect to be significant when household appliances are made more energy efficient since it encourages consumers to buy more of these appliances.

The uncertainty of the rebound effect is just one more argument in favour of action. The challenge is to exploit the sharing economy’s environmental potential in a far more consistent manner. This requires a public sector that proactively supports sharing economic platforms and exploits their underused assets – from electric cars to office equipment. It requires more businesses, also established ones, to test out new business models based on a sharing or leasing concept. The big strength of these models is that they promote quality instead of junk. This can be supported by incentive-based models that expand the producer responsibility and makes the manufacturer pay proportionately less for disposal the longer the product lasts.

CONCITO has highlighted other areas where politicians may enhance the positive environmental potential of the sharing economy. This can be done, for example, by supporting higher occupancy rates in vehicles during rush hour via carpooling or experimenting with initiatives that ease the burden on infrastructure, such as ride sharing, reserved express lanes or car parks. The point is: The sharing economy can only turn into that “green trump card”, if we insist. ■



**Charlotte Fischer** is director of CONCITO Sustainable Business. This is the business platform of the Danish green think tank CONCITO gathering small and large businesses with an aim to drive green development. Prior to her employment with CONCITO, she was the director of the network Sustainable Business Denmark founded in 2009 on the initiative of the international pump manufacturer Grundfos’ chairman Niels Due. Charlotte has prior experience working at the Danish Parliament as press officer and political editor and later as elected Member of Parliament of the Social Liberal Party of Denmark. For a number of years, she was the communications director of the Danish Insurance Association, where she among other things also worked with responsible investments. Her areas of expertise are the circular economy, including the sharing economy, public procurement and sustainable consumption.

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Expert Perspective

# The Technological Fix is Not a Solution!

**C**ities and regions are comprised of social, technological, geographic, cultural and digital mobilities networks and they're an important part of the global "network society". This mobility (both virtual and physical) has created new types of social and cultural relationships that are fundamental in our modern everyday lives. The inseparable bonds between cities/regions and mobilities have developed over time. Via a number of significant technological developments in transportation and communication, cities have changed their pulse, pace and reach. But these changes don't just deal with individual choices, technological changes or economic forces.



**Malene Freudendal-Pedersen** is an Associate Professor at the Roskilde University's Department of People and Technology (Denmark). Her research is centred around how mobilities (both physical and virtual) is an integrated part of modern life, planning and policy formulation and not just a personal practise that's dictated by rational choices. She focuses first and foremost on understanding and analysing the design of the city, its public spaces, buildings and infrastructure and the mobilities related to this and obvious urban planning requirements. The research is theoretically based on post-modern everyday life with a focus on central concepts like time, place, community, freedom, risk and ambivalence when viewed primarily from a sociological and geographical perspective.

### **Technological Breakthroughs**

We have a tendency to believe that technology alone can create change, but it needs to be followed by changes in the culture of mobilities. When every day our lives unfold in a specific way based on certain technologies, there's a foundation for us to add meaning and context, and for most people this is not easy to change. Nonetheless, there is something that suggests that there will be a massive change in the future, spurred on largely by the progress of sharing economic initiatives. Jeremy Rifkin even saw this clearly back in 2000 when he wrote the best seller "The Age of Access". In this book, he maintains that modern societies in the future won't be organised around individual ownership. Instead, new collective forms of consumption and sharing will play a central role in the organisation of everyday life, the business world and the economy.

### **Sharing Economy Gives Us the Opportunity To Act**

This magazine provides a good picture of how these new cultures of sharing and participation have already emerged: people share cars, bicycles, houses, things and expertise. What was previously a radical vision (see e.g. Wolfgang Sachs' work) has become a part of a slowly emerging but steady transformation of norms, routines and capitalistic principles. It can also be interpreted as an emerging political awareness or perhaps an opportunity to act, which is tightly interwoven with the global environmental crisis. The consequences that our consumption has on the condition of the planet, which our children and grandchildren will inherit, has been front and centre in the media and thus in our daily lives. However, this is often ignored since it's hard to determine how to act on these concerns. The sharing economy provides an opportunity to act collectively.

### **The Promises of a Better Life Through Mobility**

Historically, mobility embodied the idea and promise of frictionless and fast movement that would lead to better lives. But we need to recognize today that increasing mobility has also produced congestion, noise and environmental problems. With this knowledge in mind, people need to decide every day on the best way to navigate through everyday lives in order to pursue the good life for

# “Everyday life and its emotional reactions is not a hermetically sealed, closed system.”

themselves and their loved ones. There's a tendency to look at everyday life and its ethics, morals, hopes and dreams as something that can be objectively studied – something clearly delineated that doesn't affect planning, politics or research. Based on this perspective, the idea is that we can regulate or encourage people to change their praxis. But everyday life and its emotional reactions is not a hermetically-sealed closed system. What happens in everyday life is also a part of e.g. our professional lives. When the concept of a self-driving car is realised, will people whose everyday lives revolve around personal vehicle transportation see eye-to-eye with us on this perspective?

## Which Problems Are Solved by Self-Driving Personal Vehicles?

Countless times I've heard stories about self-driving cars giving the impression that you “curl up in your car with your comforter and coffee and can get a couple more hours of rest while being transported to work”. Here the self-driving car is a technology that works in exactly the same way as an ordinary car except that the user has more time available for other things. Based strictly on an economic perspective, this would be meaningful in terms of more work produced, more taxes paid (and improved production in businesses) and thus a better overall economy. However, this approach in no way solves the many local and environmen-

tal challenges we face that are also important to the economy. There's also a notion that builds on the historical perception of the personal automobile as something creating effortless, flexible motion without any unforeseen consequences.

On the one hand, modern ideals like wealth, flexibility and freedom support this personal mobility, but on the other hand, it contains numerous elements that are destructive for cities. In order to have fully automatised cars that glide effortlessly from place to place, it also means that we're need to empty their pathways of other forms of unregulated movement – even more than we already do today.

## Common Areas and Communities

Modern everyday life is stuffed full of choices. Virtual mobility, smartphones and computers provide a formerly unseen awareness of options. These options increase our physical mobility – we want to get out and see, notice, taste, smell or participate in some of the opportunities we discover on the internet. Most people are aware that this increased mobility plays a role in allowing our “cattle” to overgraze our “community pasture” as Annika Agger describes it in her article. But the ability to act for the common good in a world where individualisation plays a major role is the big challenge.

This shouldn't be confused with egotism or a lack of ethics or common responsibility. “Paralysis by analysis” has become an increasing problem in a world where information saturates our everyday lives, especially when it comes to information about environmental crises. In many ways, the sharing economy can be viewed as an opportunity for individuals to step up to these challenges. The sharing economy therefore has an opportunity and a responsibility to establish new types of communities that can handle local/global responsibilities and transform them into positive futuristic ideas for cities and regions. ■



## GreenDriveThinking

greendrivethinking.com

### What is GreenDriveThinking

GreenDriveThinking's goal is to change public perception so that every vehicle with an empty seat and a safe driver is regarded as a bus, and that there are plenty of these "buses" available even in rural areas. This educational outreach is done through their Young Villagelift Workshops, where they engage young people to solve their own transportation issues. These issues are solved by encouraging adults to offer their services as drivers for school classes and other safe groups in the local community. This involvement of both young people and adults is supported by a circular crowdfunding financial model that also involves local businesses, so that money that otherwise would have left the community goes into the pockets of young people and local causes. The intelligent Coofle (a contraction of co-op and fleet) smartphone application will not be released in an area before there is a larger number of adults participating. Otherwise young people would struggle to find a lift and just toss the app before giving it a fair shake.

Coofle expects this model to receive enough local support that the number of lifts offered can

reduce the leisure time driving demands on parents up to 75%. Coofle can thereby help restore the freedom many young people feel they've lost as bus routes have been shut down, while restoring their parents' freedom, which they feel was lost from having to drive their kids to school and extracurricular activities.

Most of Coofle's users are young people, while the drivers are primarily parents with cars. Once there's a decent selection of drivers, it will be easier for groups other than just young people to use the app. Groups can be arranged for giving rides to the elderly, and once adults discover they won't have any issues coordinating rides, the scene will be set for workplace carpools without infringing on anyone's freedom.

The Coofle solution is a combination of two apps. The first is a social platform, where you can sign up and join safe groups and develop many practical friendships. This is where the necessary supply of rides will be established.

The Intelligent Coofle is a smart app using real-time technology like Uber, Lyft and others, but unlike those solutions, Coofle doesn't offer taxi services. With Coofle, passengers can only

select trips that the driver would be taking anyway and makes it a ride-sharing service.

By dividing the project into an initial introductory phase consisting of the Young Villagelift Workshop in combination with the Coofle Driving Friends app, organising young people into groups with safe drivers, followed by an implementation phase consisting of the Intelligent Coofle driver and passenger app, a large number of available rides can be assured right from the get go. At the same time, the circular business model ensures that there's strong local roots with a financial incentive to motivate success. This should counteract the sad fate of many other fine ride sharing projects that had good intentions but failed to gain traction with users.

### What are the Sharing Economical Aspects of GreenDriveThinking?

The model is considered to be a solution to the leisure time transportation issues faced by young people in the rural districts. Longer-term the solution can also help solve the transportation issues faced by the elderly and enhance mobility of the adult workforce. This solution is often presented under the



# OPI Thing Bank for Everyone

## Sønderborg

topic of “Mobility, Growth and Well-Being in the Rural Districts”. Additionally, there’s the inherited effect of a substantial reduction in CO<sub>2</sub> emissions.

From a sharing economy perspective, many ideas have emerged about additional uses for the organisation of safe and practical groups, such as elderly assistance, sharing of trailers and neighbourhood groups where people can share everything from grills to drills. Organising university students on the development team into “Crowd Implementers” offers the promise of many add-on apps to solve specific needs on the same data platform. ■

### What is the OPI Thing Bank for Everyone?

OPI is a “thing bank” that allows residents of Sønderborg municipality to borrow outdoor, recreational and sporting gear deposited in the thing bank. OPI’s mission is to make these items available for everyone. Whether it’s gear for outdoor events, sporting activities, excursions, birthdays, town events, etc., community members can safely and easily borrow or lend equipment and receive instructions for outdoor activities that might otherwise have been expensive or cost-prohibitive.

OPI is an innovative partnership between the public and private sectors. Town councils, public institutions and private individuals are cooperating to establish and operate the Thing Bank. Our partners include Sønderborg’s town forum and private individuals, while the House of Health and Sønderborg’s nature schools are currently evaluating a partnership.

Initially, OPI Thing Bank plans to create a digital booking system, where anyone can post items and lend or borrow them. Longer-term, the items (or some of them) will be stored in a physical locale that will be centrally located in the

municipality and staffed with an attendant and an outdoor guide. The outdoor guide will additionally provide area schools with the opportunity to embark on safe excursions, where the guide can direct and teach the students about the use of e.g. kayaks, GPS units for geocaching, etc., while serving as an extra adult on the trip.

Looking forward, the innovators behind the project expect that the Thing Bank will inspire people to get out and enjoy more activities on land and at sea, encourage them to experience the great outdoors, and lead to a more physically active community in Sønderborg, which will improve public health as more and more people get off their sofa and venture outside.

### What Are the Sharing Economical Aspects of OPI Thing Bank?

OPI Thing Bank participates in the sharing economy by allowing members of the community to share expensive resources. This resource optimisation is designed to ensure that more residents have the opportunity to experience nature and improve their knowledge of the natural wonders around them. ■

Article

# Mobility Aspects of Sharing Economy

**T**he UN's World Urbanization Prospects estimates that 70% of the world's population will live in cities in 2050. Some Danish municipalities will experience a rising population, while others will experience depopulation. Some communities will also see their population within the municipality move from villages, small towns and suburbs to urban centres.

This restructuring leads to more mobility. In several of the larger cities, for example, new solutions need to be found for overcrowding problems, while in the rural districts, for example, new solutions must be found to cover the transportation needs of the citizens.

Today, classic hitchhikers are being replaced by ride sharing facilitated by an app on the smartphone, helped along by social media. Further, money is exchanged between the car driver and the hitchhiker. The pick-up and drop-off locations and the schedule are agreed beforehand and a certain amount of trust is ensured thanks to the ratings and reviews from drivers and hitchhikers. Picking up a stranger for a ride was a rarity ten years ago, but today thousands of people carpool on a weekly basis with total strangers.

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→ It is not possible to predict the future, but we can influence it. If we manage to understand developments and are able to plan around them, it is possible for us to find smarter and cheaper solutions in the future, while at the same time developing new sharing economy businesses. Maybe it is also possible for us to find effective, new solutions to the overcrowding problems in our urban centres, while simultaneously building stronger relationships between our small towns, suburbs and large cities? ■



Expert Perspective

# Mobility in the Future

**W**hat's really unique about the future of mobility is the unknown perspective. This might sound self-evident, and for some people it truly is. To others, envisioning mobility in the future is much easier since, from their perspective, they expect transport systems to be very similar to what we know today, just more efficient and streamlined. Even if this is likely, it's not certain that things will work out this way. Fortunately, the future can be influenced if we decide to turn the development of the transport system in a different direction. With a focus on the emergence of the sharing economy and technological development, I will now describe some of the issues we should consider when designing effective and sustainable mobility for the future.



#### Søren Have

Ever since Søren Have left the mathematical research world in 2000, he has advised a large number of private businesses and public organisations as a consultant. Søren has substantial expertise in general IT strategic development and in transport in the broader sense of the term. Søren is passionate about making the services of the transport sector attractive, efficient and sustainable. This is where the sharing economy enters the picture.

Søren often describes his experience and insight through blogs, articles and conference white papers. One example is his work back in 2012 on the economic consequences of the sharing economy (Have, 2012).

## Rising Challenges in the Transportation System

In both rural and urban areas, there are an increasing number of challenges in providing citizens and businesses with the mobility they need to meet their basic sustenance needs (such as food, shelter, energy and raw materials), income (such as work, labour and exports) and interaction (such as innovation, culture and “the good life”). By nature, these challenges can vary geographically. In cities, the problem is largely traffic congestion and pollution, while the challenge in more thinly-populated areas is the lack of income to pay for a conventional public transport system, such as buses. In addition, the transport sector is responsible for a large percentage of Denmark's CO<sub>2</sub> emissions, and the EU is expected to demand a reduction by 40%.

## Fortunately, Technology Offers Plenty of Options

Fortunately, we're already aware of solutions to the abovementioned problems. The electric car is now a mature technology, and we hear news almost weekly that traditional car manufacturers will make models that are cheaper than the Tesla Model S, while having the same or longer range. Other electric technologies are on the way: electric bikes (both ordinary ones and ones with a cabin), electric skateboards, buses, trucks, etc. However, these will only solve the emissions problem. But what about traffic congestion in cities, and the high transport costs in rural areas? For these issues, the rapidly-developing driverless technology may be a helping hand.

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### → ... In rural areas:

Many tests have already been made around the world on (small) self-driving buses, and in Denmark in Himmerland and Aalborg (in the northern part of Jutland), there are similar tests in progress. Buses are thus expected to be able to service thinly-populated areas more cost-effectively.

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### → ... and in cities:

Naturally, a self-driven car can calculate a road usage fee that varies with distance, time and location. It would be nice – and maybe even necessary – in order to avoid additional congestion – to



# “The sharing economy is already changing the transport system in both rural and urban areas.”

charge such a fee on these self-driving cars for road use. Also such a fee could be charged when the cars wait in certain areas. Cities can thereby manage congestion and parking, and ensure that their limited space is used as efficiently as possible.

## How Can Sharing Economy Business Models Help?

The sharing economy is already changing the transport system in both rural and urban areas. In Copenhagen, there are a number of car-sharing initiatives (e.g. *DriveNow*, *LetsGo* and the recently launched *GreenMobility*). *Bycyklen* is seriously gaining ground, and now there's also *Donkey Republic*, and *GoMore*'s P2P car-sharing and ride-sharing services are being used nationwide. The car-sharing company *Tadaa!* has also just opened the first car-sharing initiative in the small town of Fynshav (according to Landdistrikternes Fællesråd/"The Joint Council of Rural Districts", 2016). Peer-to-peer taxis (such as *Uber*, etc.) are also gaining strength, in spite of verdicts that they are operating pirate taxis (DR 2016). There's no doubt that P2P taxis have great potential – also in the countryside. I believe (and recommend) that the Danish taxi regulations will be changed, so the following situation becomes legal:

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→ Mr. Nielsen (an early retiree who wants to work a certain number of hours a year) doesn't have anything special planned on a Saturday, so he sits down and while reading his newspaper, he logs on

to the *FlexTur+* app and indicates that he is available for a trip sometime between 10 am and 2 pm.

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→ Mrs. Jensen, a retiree who doesn't have a car or a driver's license, needs to do some grocery shopping in a town 10 km away, so she orders a trip with the same app. *FlexTrafik* sends Mr. Nielsen to drive Mrs. Jensen to the shop. (This could be expanded so that Mr. Nielsen gets paid a little bit extra for waiting and helping with the groceries).

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→ It's a win-win situation for municipal revenues and for residents.

But at the same time, there's an ongoing trend to integrate sharing economy solutions with mass transport. In Northern Jutland, for example, ride-sharing, taxis and carpools will be integrated in the national travel planner *Rejseplanen* (Ingeniøren/"Engineering"] 2016). In Copenhagen, the *DriveNow* car-sharing cars can be unlocked with the *Rejsekort* public transport travel cards. And efforts (Movia 2016) are currently underway to create a comprehensive solution – a so-called "Mobility as a Service Solution" – so that people in Greater Copenhagen only need a single subscription to all public transport, car-/ride-sharing, taxis, *Bycykler* bicycles and anything similar to come in the future.

Although the technologies mentioned above can be introduced without sharing economy business models, there are many examples of how a sharing economy approach can promote their widespread

adoption and contribute to this happening in a socially responsible manner. You can see it already with electric cars that are spreading like wildfire via car-sharing and rental/leased cars. Once many people have tried an electric car-sharing vehicle, they have a completely different opinion about driving an electric car. I also expect that many of the young people who frequently use the electric bicycles from *Bycyklen* in Copenhagen will increasingly consider purchasing an electric bike if they move away from the city.

At the same time, a sharing economy/P2P approach enables a much better utilisation of resources. We see this already now, and this will be especially important when the self-driving cars arrive. The data shows that it will make a big difference whether the self-driving cars have the same number of passengers (around 1.2 on average currently) or will be more prone to sharing – both with respect to their use and their ownership (OECD Insights 2015). If they are not shared, then the congestion in the cities will continue to grow, whereas if they are shared (also as mini-buses), the number of cars on the road can be reduced by around 80%. At the same time, a fleet-managed approach allows a faster ongoing replacement of the fleet to more energy and space-efficient vehicles.

If I were to provide some final advice to our decision-makers, it would be:

1. Yes, go ahead and prepare for the self-driving cars, but consider first which kind of cities and rural areas do we really want (in terms of density, sprawl, liveability, health, etc.)?
2. Demand that self-driving cars be electric (then of course, they can drive themselves to a recharging station).
3. Make self-driving cars cheap to purchase, and require instead that a road usage fee is imposed that varies according to time and place.
4. Support sharing economy models so resource usage is minimised. ■

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## SnappCar

[www.snappcar.dk](http://www.snappcar.dk)

### What is SnappCar?

SnappCar is a free peer-to-peer car hire service that's available to everyone. SnappCar operates as an online service connecting car owners with people who want to hire a car.

The car owner publishes an advertisement, where he or she can set a price, describe the car and so on. The car owner is put in touch with the car renter once the renter has searched and found a car that meets his or her needs. In order to keep SnappCar secure, both car owners and car renters must have a complete profile, including a photo ID and identity verification, which is carried out by SnappCar. SnappCar also serves as an administrative middleman for rentals by facilitating payment, insurance, etc.

SnappCar operates throughout Denmark, Sweden and the Netherlands. The company also collaborates with various investors, car leasing companies, municipalities and the EU.

SnappCars is managed by active, visionary members with a mission to enhance peoples' mobility, improve the economy, contribute to a healthier environment and empower social cohesiveness.

### What Are the Sharing Economical Aspects of SnappCar?

SnappCar contributes to the sharing economy by allowing car owners and car renters in the community to deal directly with one another. The company's mission is to reduce the number of cars in Europe by 1% by promoting sharing. By facilitating community

sharing of vehicles, SnappCar believes it can enhance people's mobility, reduce traffic, create a healthier environment, improve the economy and strengthen social cohesiveness.

This means though that the "owner" mentality must be changed to a "have access" mentality, which the company has found can be a challenging mindset to break. ■



Expert Perspective

# Better Mobility and the Sharing Economy



**Søren Riis** is an Associate Professor in philosophy and science studies at Roskilde University (DK) and the co-founder of the ride-sharing and car-sharing platform *GoMore*. In addition, Søren started *UrbanWineBox* in 2015 and is an Associate Partner at the Copenhagen Institute for Future Studies. Søren is also a member of Danish Philosophy Association

**G**oMore currently has more than 500,000 members in Denmark distributed over both small and large towns. A significant portion of the Danish population now supports the type of sharing economy that GoMore offers. Picking up a stranger for a ride was a rare sight ten years ago, but today there are thousands of people who carpool on a weekly basis with total strangers. This is both a cultural and a mobility revolution. If we understand this development, it's possible to develop more intelligent and cheaper transportation in the future, while at the same time create new, effective sharing economy businesses.

GoMore's services involve optimising the use of the car, thereby transforming it to a more environmentally-friendly, more intelligent and a more social means of transportation. A car often just transports one person even though it's designed to transport four or five people. Additionally, a car is used on average just one hour a day. If you add up these figures, you'll see that only 1–2% of a car's capacity is being used in our current culture.

It's on the basis of this suboptimal transportation culture that GoMore is working to make it increasingly easier to organise carpools and enable people to rent their cars out when they're not using them to other people who don't own one. If we think and act intelligently, it shouldn't be an issue to reduce the number of cars significantly and save a lot of money in the process.

In a city like Copenhagen, it's theoretically not too difficult to reduce the number of cars by 50%. If we just get better at sharing many of our existing cars, then an astounding number of cars become unnecessary. This would provide substantial economic, environmental and logistical savings. However, to achieve these savings, a number of different stakeholders must collaborate and set some ambitious common goals. Specifically, a number of public/private sector initiatives in the larger cities can support this development: For example, parking fees can be reduced for motorists who are sharing their car with their neighbours, [Rejseplanen.dk](http://Rejseplanen.dk) travel planners could add carrides, shared cars and bikes and our infrastructure could both physically and virtually support the new types of sharing mobility.



# **“For this to succeed it’s just as important to strengthen the cultural and behavioural sharing revolution as it is to make quantum leaps in the underlying technology.”**

With regard to mobility in small towns and between rural communities and larger cities, there are also significant opportunities for carpooling and car renting among neighbours. Traditional public transportation in the form of buses and trains is difficult to sustain in rural districts, where it’s often both expensive and not especially environmentally-friendly. At the same time, there are a lot of small roads in rural districts that are trafficked by cars with empty seats every minute. If we view these cars as small mini-buses, then regular cars can make a significant contribution toward better and cheaper mobility in rural districts as well, while simultaneously providing the positive social side effect of bringing neighbours closer together. Furthermore, an ambitious goal for sharing mobility would include having crucial infrastructure such as bridges reduce the tolls for cars that are transporting several people. This type of initiative already exists on the Golden Gate Bridge in California. Denmark has previously experimented with opening the emergency access lanes on freeways to regular drivers. It would be interesting if the politicians could set up an experiment where these lanes were opened for carpoolers instead. This type of measure would create more environmentally-friendly and more efficient mobility, but it requires that we Danes are able to think about alternative solutions in the area of transportation.

If we look to the future, car engines will become more and more environmentally-friendly, but to realise the full potential of the automobile, it shouldn’t just be transporting one person – and we shouldn’t all be buying our own car, but should find smarter ways to share our vehicles. Right now, many politicians and residents have high hopes for the self-driving car as a way to solve many different transportation-related issues. In many conceptual renderings of the self-driving car, it’s just taken for granted that these cars will be a type of ride sharing car. But it’s certainly not a given that these self-driving cars will be ride share vehicles that allow for carpooling and have many different users. If this is possible, based on the logic prevalent today, many people would still choose to buy their own self-driving car. If the self-driving car is ever really going to fulfil its potential and not create more traffic problems, such as congestion, then it really should be developed as a type of ride sharing car. For this to succeed it’s just as important to strengthen the cultural and behavioural sharing revolution as it is to make quantum leaps in the underlying technology. The self-driving car can only become a success if we unite the sharing culture with technology. ■



Article

# Findings and Openings — Which Changes Are Sharing Economy Creating?

**T**his Sharing City magazine presents a cross-section of the manifold sharing economic services and solutions that can be found in Denmark. Whether you consider sharing economy to be a new marketing model, a pathway to green transition or a strengthening of social cohesion, sharing economy is reflected in cities and local communities – *for* and *among* people, *with* and *without* technology as a tool or mediator. Cities and local communities are created from movement and the exchange of materials, resources, energy, data, capital and consumption *in* places and buildings and *by* and *between* human beings. The sharing economy exposes these movements, and from this perspective the culture of sharing can be said to set the table for the existence of cities, societies, and communities. What the Sharing City project also has shown is that cities and local community enables and makes sharing occur.

In particular, urbanisation, climate change and the financial crisis seem to have created the momentum for people to find other ways to inhabit the planet. This brings forth innovation and new inventions impacting the way we manufacture, consume and organise ourselves. The arrival of the sharing economic phenomenon can be said to change and challenge our customary thinking on resource consumption and provides us with the inspiration to re-evaluate what resources are, where they're located, how they can be utilised (not exploited), distributed differently, and how to organise and classify them.

Sharing economic thinking seem relevant to the market, the government and civil society and in its new configuration (as digital platforms) has emerged from the civic society, new start-ups and co-ops. This has provided consumers with the opportunity to consume in a different way and this thinking has spread from business models to other parts of society. Once the hype has subsided and when sharing economy no longer is referred to as something unique, it will be because it has assumed a form that is relevant and meaningful in everyday life – has become a truism in people's everyday lives, in businesses, in organisations and public works – and thereby in urban life. At that time, it will probably be called something else.

### **Sharing Economy as A Stepping Stone**

It may seem that I am providing reasons to believe that a significant change in the market has occurred, but this has not yet happened due to the number of engagements with sharing economy – at least not in a Danish context. The latest major disruption cannot be ascribed to just one event, financial crisis or invention, but is actually an accumulation of many repeated actions, achievements and events over time, and the revival of sharing economy as a digital innovation seem to be part of a larger movement or transition.

Though, sharing economy is not insignificant. It should rather be perceived as a stepping stone towards a world that will con-



**“In the rural districts we have seen innovative ways to manage business development and revitalise neighborhoods and villages via sharing economy.”**

tinue to be a place to live for both humans and non-humans. The articles “Elements of Green Transition with Sharing Economy”, “New Business Models: Chickens, Chocolate and Vinegar” and “Communality in Sharing Economy” present three different viewpoints for how and where the potential for change can be found in sharing economy businesses and organisations.

In English, Spanish and French many different words are used to describe sharing economic activities, but in Danish the word “*deleøkonomi*” (“sharing economy”) – sometimes platform economy – is used as a collective term for the activities and trends that can be seen. What has been found throughout the Sharing City project is that sharing economy basically deals with the fact that a number of private individuals, businesses, public authorities and organisations have resources that they share with other private individuals, businesses, organisations or public authorities via a digital platform, collaborations or networks. The resources that are shared and re-thought can be human, material, organic, or spatial. And this act or practice of sharing encompasses both exchange, common ownership, joint consumption, renting, leasing, trading co-creating, and co-financing. This occurs via one-time payments or subscription payments, where you pay for access to the resource, or you contribute your own possessions, skills, data, money and/or time.

### **Change, Transition, Development**

Solutions for global urgent issues such as climate change, urbanisation or food security are in high demand, and this is one of the reasons why we deal with change, transition and development. These three words are truisms within almost every business, organisation, and authority, and these must have a goal or a direction towards where we must move. Goals and directions that city leaders must set, and ask what kinds of cities and local communities they want. This question must be a starting point for the investigation and evaluation of the *potentials* of sharing economy solutions and services.



Thanks to sharing economic businesses – with sharing economic thinking – the divide between the commercial and the socio-economic and the conflict-filled relationship between growth and environmental-friendliness appears to be a tad outdated. Several of the businesses and organisations involved in the Sharing City project, which either work with sharing economy as providing a platform for others to share or have integrated sharing economy in their business model, fight for sound bottom lines *and* social responsibility, along with sustainable cultivation, manufacturing, logistics, consumption and re-use.

When we look at the active participation in what we could call the commercial sharing economy (AirBnB and Uber), the future projections seem limited due to the general Danish attitude towards sharing economy. That is demonstrated by the articles from Ann Lehmann Erichsen and Geertsen, Mulalic and Håkonson in this magazine. When you look at the activities based on new business and manufacturing concepts, in civil society (such as in associations and leisure activities and in several of the Sharing City innovators) this activity appears to be completely different and not included in the available statistical data on participation in sharing economy.

### **Making Sharing Economy Meaningful for Cities and Local Communities**

With the Sharing City project we have experienced that sharing economy is much more and different from an underground market economy and underpaid workers, and much more than a tech-development. Especially if we do not just consider the areas where the large sharing economic businesses flourish – mainly the large urban city centres. In the rural districts we have seen innovative ways to manage business development and revitalise neighbourhoods and villages via sharing economy. Our analysis of small and mid-sized Danish sharing economy businesses shows that both the arrival of new sharing economy businesses and the integration of sharing economic elements in the business models of existing small and mid-sized businesses can provide a significant opportunity for growth, well-being and jobs in Denmark. That many of the small and mid-sized sharing economy businesses are so tightly interwoven with the social cohesiveness of their local environment should be viewed as a beneficial side effect.

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→ *Sharing City – A Co-Created Magazine on the Sharing Economy of Cities and Local Communities* – on the whole is a testament that sharing economic thinking can enrich not just healthy business, but also innovation and creativity, green transition and social cohesiveness. All of these are aspects that help enrich a sustainable society and create liveable cities and local communities. ■



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