

#### **PREFACE**

This series of reports on Lifestyle Change provides insights into how consumption patterns will change and respond to some of the major technology-driven trends now reconfiguring the global marketplace.

The methods consist of extensive qualitative analysis including a series of in-depth interviews with 36 academic researchers, experts, authors, entrepreneurs and forerunners; a broad range of literature and articles on the topic; and many blogs and websites on the digital economy and homepages of digital companies.

The report series consists of four parts: "Disruption of the old consumption logic," "The sharing economy," "Emerging consumer values," and "The consumer in the Networked Society." Supporting the whole series is a fifth report – "A tale of two transforming cities" – with contrasting case studies of two rapidly transforming urban areas, Detroit and the Bay Area, which highlight the emerging opportunities of the Networked Society.

Special thanks to Jan Unkuri, Fredrik Öhrfelt and Josef Conning at Augur, a Stockholm-based insight agency, as well as to all the people whose interviews contributed to these reports.

## CONTENT

Preface	2
Content	
Introduction	4
Organization of consumption	6
The sharing economy	
Local currencies	9
Barter trade	10
The maker movement	
Local cooperatives	13
Consumption and production are converging	14
Organized consumption as work	
Conclusion	

#### Ericsson Networked Society Lab

The Ericsson Networked Society Lab is focused on delivering unique insights about the emerging opportunities in society enabled by information and communication technology (ICT). Since 2008, we have conducted research into vital aspects of the technology-driven transformation of industries, business, society and everyday life. Our lab community includes a dedicated core team, Ericsson experts, and partners such as university professors and independent thought leaders. By gathering a wide range of perspectives and experiences, the Networked Society Lab aims to provide a deeper understanding of the fundamental changes empowered by ICT.

#### INTRODUCTION

"The social contract is broken. The deal is gone."

Neal Gorenflo, Founder of Shareable

"Don't think of [future] consumption as consuming items or services, think of it as people customizing their paths through life, their day-to-day or week-to-week routines, how they earn money and how they spend their time off."

Kurt Bollacker, The Long Now Foundation

The 20th century was the height of industrialization but also saw the emergence of the so-called consumer culture in Western societies. The separation of work from private life and the division of life into work hours and leisure time led to people to entertaining double identities; one professional and one private. However, society and politics as a whole has primarily been focused on work and employment opportunities and how to organize these - and still is. One of the major projects of 20th century industrialization was accordingly to organize labor and the workforce. For-profit businesses organized labor for efficient production in their corporate organizations, unions organized workers to counter-balance the power of capitalistic for-profit businesses, and governments focused huge resources to organize society for work and employment.

Throughout the 20th century, consumption became increasingly recognized as central and critical to the economic system. However, in many ways consumption was still treated as a result of how for-profit businesses and the mechanisms of competition treated the market. The practice of consumption was allowed to take form in a relatively unorganized manner, mainly according to the principles of the free markets of Western societies. As society focused on production and labor, consumption was something that occurred as a consequence of what businesses offered for sale in the market and what people had the economic means to buy in the market (depending on their income levels).

In the 21st century it's becoming all the more obvious that a major challenge facing developed societies is how to also organize consumption, not only production. There are, as we see it, three overall reasons for focusing on the organization of consumption as an important project for the 21st century:

- Technological automation is eliminating jobs (as we know jobs from the age of industrialization).
  Technology also comes with new types of jobs, but people will more and more take part in society as users, consumers and citizens rather than as workers.
- Governments and large for-profit enterprises, the two main uniting institutions of 20th century capitalism, are today failing to provide the same

- social contract between society and its citizens as they did during the age of industrialization.
- The world is starting to realize that reckless massconsumption of the kind we have seen throughout the late 20th century and early 21st century is not sustainable for the planet, people or businesses in the long-term.

Chong Kee Tan, founder of Bay Bucks, talks about the need for a new type of economic system, and believes that organized consumption is part of the answer:

"We need a sense of community in the economy. We need a more humane economy, one that is community based, where it's less easy to screw people, and which helps us develop relationships instead of alienating one another."

April Rinne at the World Economic Forum agrees when she talks about the appeal of the sharing economy:

"Short-term, the number one driver [for the sharing economy] seems to be economics. On day one, most people would say the reason they get involved in the sharing economy is to make or save money. But long-term, if you ask them why they stay involved, they will say it's the community."

## ORGANIZATION OF CONSUMPTION

#### CONSUMPTION IS ORGANIZED AT A GRASSROOTS LEVEL

The answer to how consumption can be organized is not an obvious one, especially when central organizing institutions like governments and large for-profit enterprises are losing their position in society and their trust among citizens. However, organization of consumption is currently happening at the grassroots level in many parts of the world, through various non-profit or low-profit initiatives, social entrepreneurs, and local and community based projects outside the institutionalized market.

It is difficult to predict the level of impact that various grassroots movements of today will have on the overall system of the future, but the emerging Networked Society makes it easy to get these types of initiatives going and makes it relatively easy to spread them to a larger share of the population. Therefore, we expect that the grassroots movements that are today trying to organize consumption for the 21st century will come to have a direct or indirect impact on how the consumption of the future will play out. Below we will take a closer look at some of these grassroots movements in order to draw on them in analyzing the future for consumption and commerce.







THE MAKER MOVEMENT

LOCAL CURRENCIES





#### THE SHARING ECONOMY

To begin with, it should be stated that the sharing economy is not a coherent and organized movement with a focused aim. Depending on who you ask, it may include different types of projects and businesses. For instance, new digital enterprises like Uber and Airbnb are often used by the media as examples of the sharing economy, while they are viewed by sharing economy insiders as mere businesses that have simply built a business model based on networked access to existing resources.

In essence, the sharing economy is the idea of shifting consumption from ownership and individual purchases of newly produced goods, to access to existing and idle goods. There already exists a vast bulk of material resources that could as well be shared among the population rather than have every individual buying their own piece of everything. The common example used is cars, that are estimated to sit idle for about 95 percent of their life span, but which make up a great resource of transportation that networked access can open up through car sharing. The Bay Area-originated services City CarShare and Getaround are typical examples of sharing economy non-profits and businesses. Similar entrepreneurial startups are forming around tools, clothes, food, furniture, and even services, with the aim to tap into the vast surplus of resources that currently sit unused among consumers all around the world.

Advocates of the sharing economy point out that sharing consumer goods also has an important social component which traditional models of ownership-based consumption don't have. The act of sharing your resources with your neighbors or local community, it is argued, gives you a stronger relationship to your peers. It fosters responsibility, reciprocity and understanding and helps people come together to accomplish things (instead of turning to, and only relying on, the traditional institutions).

The sharing economy is an example of a grassroots movement and an entrepreneurial movement that uses networked access to organize consumption in a different way than we are used to from 20th century industrialization and the traditional economic system. As a movement, it wants to organize consumption in a more sustainable way in order to counter reckless over-consumption and the unnecessary mass-production preceding it. It wants to integrate social responsibility, fairness and awareness of community into the process of consumption, in order to counter the distanced and relatively isolated transaction between a commercial provider and an individual customer. This social component is expected to eliminate some of the greed, wrongdoings and ultra-capitalistic ambitions of the industrial economic system.

If the sharing economy movement continues to grow and eventually has more than a niche impact on consumption, it will re-organize consumption to occur as much between individuals in a peer-to-peer relationship as between individuals and commercial providers. It will also remove a significant amount of spending (and tax revenue) from the institutionalized economy and enable people with limited financial means to be able to use certain goods and resources (for example, on Rent the Runway people can rent designer clothes at a fraction of the cost of buying them). The sharing economy will also educate the consumer market that it can consume in new modes. This will eventually lead to a more access-based mindset in general (rather than a mindset based on ownership). In a recent PWC study about the Sharing Economy, 57 percent of the respondents agreed that "access is the new ownership," and in another study, they project the sharing economy will grow from \$15 B by 2013 to \$335 B by 2025.



https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf

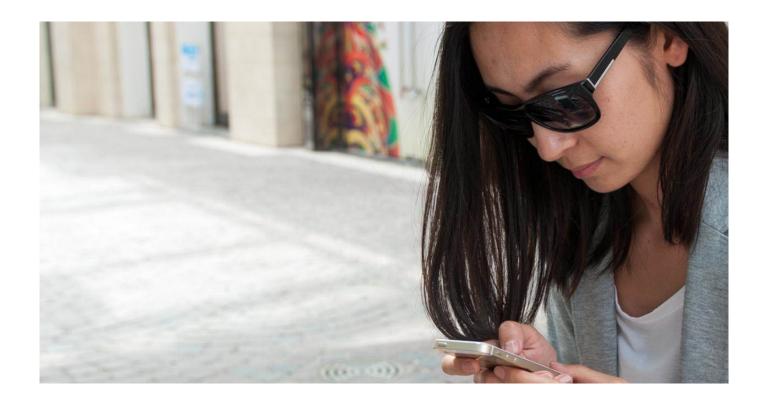
#### SHARING CASE: MARIA AND CHRIS IN SAN FRANSISCO

Maria and Chris are married and live in San Francisco. Chris works in property management and Maria in catering. One of the key issues that society faces today, according to Maria and Chris, is superfluous and unsustainable consumption. They are contributing to rduced consumption by producing things themselves and by sharing things with others. For instance, they create cleaning products themselves, using only ingredients they know are safe for both your health and the environment. They also grow vegetables in their backyard, and use a spare room in the house for raising chickens for egg production.

According to Maria and Chris, the sharing mindset has many benefits – not only for your personal economy and the environment. It also brings people

together, which they feel is necessary in a society that is too individualistic and egocentric. Maria first came in contact with sharing when she used various couch-surfing services travelling through Europe. Since then she and Chris frequently use all kinds of sharing services, such as Airbnb, Project Borrow and Lyft. Maria is also an occasional Lyft driver. Driving others is one way of connecting with your fellow San Franciscans, according to Maria. Participating in communal dining, which they do regularly, is another way.

Building a sense of community is very important to Maria and Chris: "We're open-minded, social, connected, and we're not possessive of our things. We are definitely moving towards a community-based and green society."



### LOCAL CURRENCIES

Local currency systems have been around as a phenomenon for a long time, but the idea has had a bit of a revival since the financial crisis of 2008. Local currencies are alternative economic systems, usually tailored to promote a local economy and to activate productive resources in the local community.

Many different types of local currency systems exist today. The common denominator is that the system only allows the currency to be traded for goods and services in the local community (instead of on a national or global scale). Usually the local currency model is based on individuals offering goods or services into the system for which they get credits that they can use to purchase goods or services from other individuals in the system.

The vision behind many local currencies is to create economic systems that maintain the economy within the local community, that is, they encourage people to sell to and buy from their peers in their own community. This is the opposite of how the industrial economic system of the 20th century works, where most products and services are consumed in local contexts but offered by large global businesses and created somewhere else in the world. Local currencies strive to avoid a situation where a majority of what is produced in a local society is consumed somewhere else (exported) while a majority of what is consumed in the local community is produced somewhere else (imported).

Another aspect of the local currency vision is to create a buffer against the boom and bust pattern of the overall financial system, which to a large extent is created by unsound speculation in the economy. A local currency becomes a sort of back-up system that people can resort to when the overall system fails them during periods of economic downturn. If a financial crisis eliminates a person's traditional source of income, namely employment, they still have their abilities and can offer these abilities on the local market. The Swiss local currency WIR has been able to even out economic downturns in Switzerland ever since it was introduced in 1934.

As with the sharing economy, local currency systems come with a social component that is supposed to drive a sense of community that opposes greed, speculation and exploitation in the economic system, and instead promotes trust and humane values in all economic activities that people engage in.

Local currency systems are another example of grassroots movements striving to organize both production and consumption in order to keep it local rather than big and global. The idea is that if the economy can be retained in the local community then the local consumption will activate local production. What's more, local job opportunities on an individual basis are also more likely to feel meaningful and embedded into something that feels reals to people. April Rinne at the World Economic Forum foresees a future where people will mix both established macro level currencies with micro level local currencies in their digital wallets:

"My future wallet has different currencies. Different stores of value, some of which are pegged to the dollar or the euro. Others are just based out of my neighborhood. Another one is based out of my global community. You can think of a lot of sharing economy platforms being able to create currencies that operate within the community. So anyone in that community – they might be in New York or in Brazil – can exchange currency with them because it has value to that community. Like reputation, that is a store of value as well, or being a member of a community time bank."

If local currency systems evolve as an alternative to what some would call a dysfunctional overall economic system, we can expect a more local and community-based economy to take shape in the future. This will also be a system that is not based primarily on capitalistic aggregation of resources but on genuine productivity, as every transaction in the system must be backed by a productive input. Or as Yassi Eskandari-Qajar of the Sustainable Economies Law Center says: "Communities without dollars aren't communities without wealth."

#### BARTER TRADE

Thanks to large scale networked access, barter trade is making a comeback in the digital economy of the 21st century. It is also contributing to the organization of consumption according to other principles than we are used to from 20th century industrialization. What digital networked services really enable is many-to-many barter instead of the very inefficient mode of one-to-one bartering.

Yerdle is a good example of a Bay Area startup that is set up as a marketplace for exchanging idle goods of any kind. The individual user offers an item (for example an idle pair of jeans, a trolley, or a guitar) at Yerdle and gets credits for the item. The person can then use their credits to acquire some other item in the Yerdle marketplace. Yerdle's long-term vision is to reduce new purchases in the US economy by 25 percent. If Yerdle, or some other company, manages to accomplish even a fraction of this vision it will have a significant impact on consumption and the economy of today's markets.

Bay Bucks is another interesting example that builds on both barter trade and the local currency model. In Bay Bucks' model, small local businesses can offer their services into the system and get credits for the hours of service or goods that they provide. They can use these credits to "buy" services from other local businesses that are part of the system. An example is a doctor who provides 10 hours of consultation into the system and uses their credits to buy meat from a local farm, while the local farm has provided locally produced meat and uses the credits it acquires to buy bookkeeping services from an accountant.

Systems that promote barter trade are also examples of grassroots organization of consumption, with the aim to foster a local economy over a global one, or steer consumption away from new purchases to idle and used items, as with Yerdle.



#### THE MAKER MOVEMENT

The maker movement is not a way to organize consumption per se, but will potentially have organizing effects on consumption anyway.

In general, maker movements consist of spontaneously formed networks of individuals who come together in communities, online and in maker spaces, because they have a common passion for tinkering with, creating and building stuff. It can be anything from consumer electronics, clothes, vehicles and furniture to pure software programming (usually called the hacker movement).

Makers are individuals who take their interest in certain categories of consumer products further – to become a productive practice. In many cases makers just want to tinker around with the things they are interested in, but in some cases the tinkering is a starting point to actually educate oneself, learn to create and produce for real, innovate and possibly even start up an independent enterprise. Jeff Sturges at Mt Elliott Makerspace in Detroit says:

"The maker movement tries to reduce our dependence on big organizations, institutions and companies. It's better if we don't have only three big automakers, but a thousand small automakers instead. I think that traditional companies will decline and smaller community business will take over."

Many maker spaces also take on an educational role outside of the institutionalized school systems and strive to engage kids and other people in the local community to take part in the "making" as an interest-driven side education. It's also common that maker spaces join forces with schools and locate their workshops in school buildings (or close by) to form natural bridges between formal education and the

self-realizing education that maker spaces can offer.

Because in some cases, maker movements take on an educational role at a grassroots level it is relevant to understand them as another way in which consumption is being organized. The maker movement starts off with – in a traditional 20th century sense – categories of consumer goods and engages people to take a more active and productive role. In doing so, the maker movement helps transcend the industrial border between production and consumption. Individuals who would have been consumers in a traditional context now become producers. They take more control over certain categories of consumption and start to organize these categories according to a user-based mindset and framework, rather than simply consuming according to predefined business logic.

This is probably most obvious in the category of software and with the hacker movement. This has empowered users over businesses to an extent we have never seen in the history of capitalism. However, with the advent of emerging technologies like 3D printing it's reasonable to expect that other categories beside software will follow in the footsteps of hackers.

As some groups of people become increasingly interested in and able to produce products and services on their own – as part of the maker movement or just for themselves – it will also increase barter trade of homemade products. This sees the activities of production and consumption converge even more. People can start to offer what they produce as consumers in maker marketplaces like Maker Market. Their productivity as private citizens and consumers – not as professionals – becomes a way of coping with and taking part in society.

#### MAKER CASE: LACY AND BEER CAP JEWELRY

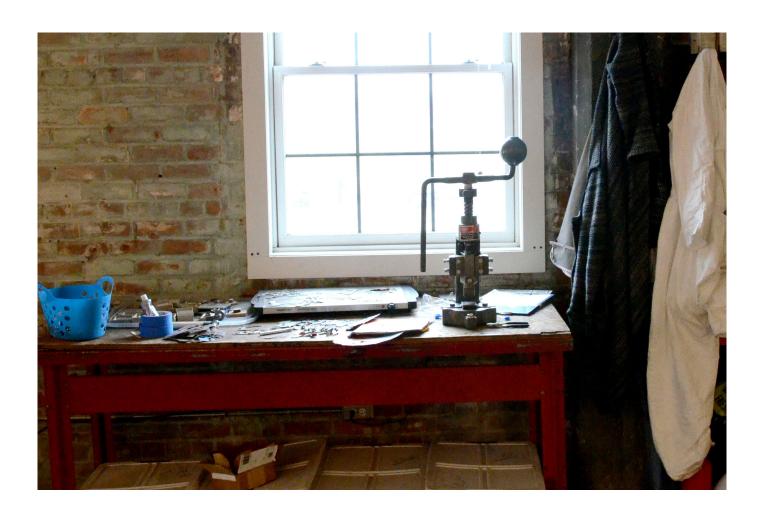
Lacy is 34 years old and lives in a house in a suburb to metropolitan Detroit, together with her boyfriend and their six year old son. Lacy used to work for a transportation company in Detroit but was laid off in the aftermath of the financial crisis in 2008. Being unemployed she spent plenty of time around her house, watching daytime TV and hanging out with other unemployed friends.

After some time of passive unemployment Lacy begun to potter around with beer caps and turn them into earrings and bottle-openers. She did this mainly to kill time and have something to do. Soon she had manufactured quite a few pieces of beer cap trinkets and eventually also started to wear her self-made rings and earrings. This made her friends, neighbors and people she met at bars take notice and become interested and attracted to her creations. Soon enough Lacy was selling her trinket jewelry to her network of peers and, as her first circle of customers

posted about her creations on Facebook, her customer base grew.

Today Lacy is running an independent business called Mirak Star based on her maker skills. She manufactures rings, beer openers and earrings at her kitchen table and sells them not only to peers in Detroit but to people all over the US and even internationally. She still has no traditional or regular job but makes enough from her creations to get by. She also uses her creations for barter trade; she can trade beer openers for beer at local bars. Some local breweries have also approached her by giving her boxes of their beer caps so that she can make collections based on their specific caps.

Lacy is still selling through Facebook but her vision is to start up a web shop where she can present her products in a better way and manage digital payments.



#### LOCAL COOPERATIVES

Local, in many cases community-based, cooperatives are an emerging phenomena in the 21st century. Urban community farms, green energy cooperatives and creative collectives are three typical – and common – examples to be found in the United States.

Local cooperatives are formed around the idea that groups of people, usually in a local community, get together in a cooperative effort to produce a base of consumption of a certain product for the local community. In some cases the idea is also to create self-sufficiency regarding the particular product and even to be able to sell off the surplus at local markets or online.

Urban farms, for example, are currently popping up in cities like San Francisco and Detroit. The aim is to bring farm production to a local level instead of acquiring the produce from large-scale global – factory-like – manufacturers, and to engage the local community in the actual production. Everybody in the community takes part in the local farm and gets to share and consume the produce. Any surplus is sold at local markets and the profit is reinvested in the farm. Green energy cooperatives operate according to the same concept, but harvest solar energy through a shared park of solar panels. Creative collectives, in turn, are made up of creators and artists who join forces to nurture a creative environment and small-scale creative businesses.

The Detroit Creative Corridor is a great example of the latter. It is a cooperative joint venture between various artists – painters, street art artists, musicians, jewelry manufacturers, micro brewers – who have bought up cheap vacant land around one of the main roads leading into the city of Detroit, Grand River Avenue. The idea is to develop a "creative corridor" of art galleries, independent designer boutiques, music venues, cafés and restaurants that will eventually boost this currently declined area of the city.

Local cooperatives are yet another example of how consumption is being organized by grassroots movements. Local cooperatives strive to create more or less self-sustaining ecosystems that enable their members to both access and consume certain categories of products and services, while also engaging the members in productive activities. Local cooperatives make one small step on the way to relieving people from the need to work at a company to earn money that they can then spend on other companies' products. Instead, they bring this cycle of production and consumption down to the local community and provide and take responsibility for the community at the same time – which big corporations often fail to do. It's possible that we will see something resembling the farming communities of the 19th century pop up here and there in modern versions in the Networked Society.

# CONSUMPTION AND PRODUCTION ARE CONVERGING

All of the previous examples of grassroots organization of consumption point in the same direction: the convergence of production and consumption.

The grassroots movements that we see emerging today are all, in different ways, engaged in eliminating the industrial barrier between production and consumption. They have identified a flaw in the capitalistic systems of the 20th century and are founded on the principle that people need a greater sense of involvement and

meaning in both what they produce and consume. The ultimate sense of involvement and meaning occurs when production and consumption merge into one process, rather than being kept separate and distanced from one another according to industrial logic.

In a sense, this is a sort of return to the farming community that preceded the age of industrialization, although with other motifs and in other forms.



## ORGANIZED CONSUMPTION AS WORK

Thinking of consumption as work may be a strange notion in the currently established context of industrial division of labor and the private sphere. We would argue that it's not a stretch to say that the notion of organized consumption indicates that consumption in the 21st century is, to a large extent, becoming entangled with much more work-like practices than what we were used to being the case during the 20th century. By engaging in organized consumption, there's an opportunity for some groups of people to sustain themselves in a better way than if they rely on the traditional 20th century institutions: government and large corporations.

The grassroots movements that we have discussed all connect one individual's productivity directly with another individual's productivity, indicating a much more tangible, hands on, close and transparent economic system. What you put into the system you get out from the system. Consumption is a consequence of production and vice versa.

If we extend the concepts of local currency systems, barter trade and local cooperatives beyond the independent entrepreneur level, it's possible to see systems where various productive activities in society will earn people credits for doing productive things. These credits would differ from traditional money in that they can be traded in for (local) products and services.

An example of such a system is the local currency of the Brazilian city of Curitiba. At the beginning of the 1970s, the mayor of Curitiba introduced an economic incentive system to encourage citizens in the city's favelas (slums) to manage garbage in the favelas by offering tokens that could be used to ride the local public transportation system. This led the inhabitants of the favelas to clean up their neighborhoods. In turn, it meant that the inhabitants of the favelas could access public transportation to take a ride into the city to find

jobs. Eventually the bus tokens became a currency that could be used in local stores. The system boosted the economy in the region in terms of GDP by 48 percent, more than in the rest of Brazil, and in 1990 Curitiba was honored with the United Nations' highest environmental award. The Curitiba story is a fine example of how a local economic ecosystem links meaningful productivity with consumption, and encourages people to act both as producers and consumers in the same micro-system.

If we take this idea even further it's possible to imagine a system where people don't only get credits for active productive efforts but also for desirable "consumer" behavior. One example could be a government awarding citizens with credits for choosing public transportation instead of driving their own car, credits which they would then add to their financial status in some way. Another would be getting credits for buying local rather than imported produce. A third example could be getting credits for exercising on a daily basis. In all these cases, society as a whole would benefit from lower pollution and better health among its citizens, which would lower the costs for maintaining welfare. In this way, the individual would become a productive citizen through their choices as a consumer and could also earn "money" as a consumer. This would be a reversed tax system where productive behavior is rewarded, rather than a traditional tax system where the individual is defined as cost for society and must be taxed accordingly.

If it holds true that we are entering an era that will see the end of work as we know it, it's reasonable to assume that people must be allowed to become productive members of society in some other way. The kind of incentivizing of productive "citizenship" that various forms of organized consumption point to is a plausible future scenario for how people will participate in society in the capacity of citizens and consumers as an alternative to traditional work.

### CONCLUSION

The first report in this series, "Disruption of the old consumption logic," concluded that there are two major parallel developments happening in the field of consumption. The first is the automation of the consumption flow, from how we find products and services to the transaction and usage. The second is the revival of the craftsman and the growth of involved people, co-creating and crowdfunding. These developments are driving the so-called "sharing economy" that is about shifting focus from purchase and ownership of new things to accessing existing idle things. In the wake of this, new ways of organizing consumption are rising, driven by lowering the cost for users and the desire to be socially engaged:

The sharing economy exists in a broad spectrum of areas. The most common is in the shifting from ownership to shared access to products and services. In this field we find many of the well-

- documented services that have been successful in recent years such as Airbnb, Uber or TaskRabbit.
- Local currencies have developed in communities to support the local economy and as protection against the uncertainties of the macro economy.
- > Barter trade is another area in this new economy. Yerdle has the ambition to reduce the number of new things we all have to buy by 25 percent, by matching idle objects with someone who has a need for them.
- > The maker movement engages people outside corporate organizations to challenge traditional industry in terms of who will produce and come up with new products and services.
- > These developments will challenge the traditional economy and the traditional business models.

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