



# VTT Technical Research Centre of Finland Business, Innovation and Foresight



# **Business-to-Business Resource Sharing**

Salla Paajanen Research Scientist



# White paper:

# **Business-to-Business Resource Sharing**

Author: Salla Paajanen

# **Contents**

Summary	3
Business-to-business sharing economy	4
Business models in the sharing economy	5
Platform ecosystem	9
Shared assets	11
Online sharing platforms	12
B2B sharing platforms	13
Supplies and raw materials platforms	14
Hospitality and office space platforms	24
Equipment, inventory and logistics platforms	29
Business travelling platforms	36
Knowledge and skills platforms	39
Company cases described	42
Supplies and raw materials	42
Austin Materials Marketplace	42
Materials Marketplace	43
Hospitality and office space	43
Storefront	43
PivotDesk	44
Equipment, inventory and logistics	44
cargomatic	44
FLEXE	44
Business travelling and commuting	45
Uber for Business	45
Zipcar for Business	45
Knowledge and skills	46
Cint	46
Opportunity Peterborough	46
References	47



**Summary** 

With the success of innovative ventures like Uber and Airbnb, the sharing economy is turning into a

booming business for B2C. The biggest sectors are crowdfunding, peer-to-peer mobility and car

sharing, household management and micro tasks. Yet, the B2B sector is lagging behind in utilizing

sharing platforms for boosting circular economy. As technology shifts, the B2B sector is looking to

evolve in a way that also allows it to partake in the lucrative sharing economy.

Sharing economy refers to a common or communal economy that includes the production,

consumption and use of commodities. Sharing economy is based on temporary access instead of

ownership, by utilizing the development of technology and the popularity of social media, such as

sharing platforms. Sharing space, goods and skills is guided by three principles of: 1) efficient use of

resources, 2) crowdsourcing, and 3) communality.

Sharing economy platforms and applications are already being used widely in the B2C markets, such

as Über and Airbnb, but sharing economy solutions for the B2B markets still includes a lot of

potential. The principles of sharing economy are being utilized in the B2B markets for instance by

sharing machinery in agriculture and forestry. In addition, other tangible assets, such as equipment,

raw materials, office space and warehouses can be shared between companies (Gesing 2017).

Intangible shared assets include for instance companies' brainpower, knowledge and intellectual

capital.

Ideal B2B sharing economy includes: 1) external resource orchestration instead of controlling internal

resources, 2) external interactions between producers and consumers instead of internal optimization,

and 3) focusing on ecosystem value instead of individual customers (Van Alstyne et al. 2016). B2B

sharing economy still includes several unsolved challenges, such as legislation at national and EU

level, in addition to liability and security issues.

This report studies existing literature of the B2B sharing economy, including different business

models and the platform ecosystem. After the literature review, B2B sharing platforms are

benchmarked in categories of: 1) supplies and raw materials, 2) hospitality and office space, 3)

equipment, inventory and logistics, 4) business travelling and commuting, and 5) knowledge and

skills.

Website of the project: www.vtt.fi/sites/SHARE

https://twitter.com/AarreResearch



# **Business-to-business sharing economy**

There are different definitions of the sharing economy in the literature (Belk 2014; Codagnone & Martens 2016; Hamari et al. 2016; Liimatainen 2017). Sharing economy can be considered as part of the collaborative economy (Owyang 2014), or using the terms sharing economy, collaborative economy, gig economy, access economy, and on-demand economy interchangeably (Gesing 2017).

**Table 1.** Definitions of the sharing economy

Definition	Reference
Sharing economy is potentially an entirely new socio-economic system with sharing and collaboration at its heart enabled through 10 building blocks (people, production, value & systems of exchange, distribution, planet, power, shared law, communications, culture, future).	(Matofska 2016)
Sharing economy is an economic model where people are creating and sharing goods, services, space and money with each other.	(Miller 2016)
Sharing economy is the product of a new age where underutilized assets become peer-to-peer services for hire, enabled by the internet and smartphones.	(Cusumano 2014)
Sharing economy is a way for individuals to succeed by sharing privately owned assets and by sharing information about a market demand for those assets.	(Dyal-Chand 2015)
Sharing economy is a market, which satisfies the following conditions: 1) Users are individuals, businesses, or machined, 2) There is excess supply of an asset or skillset and sharing creates economic benefit for both the sharer and the user, 3) The internet provides means for communication and coordination of the sharing.	(Olson & Kemp 2015)
Sharing economy facilities community ownership, localized production, cooperation, small-scale enterprise, and the regeneration of economic and natural abundance; and encourages innovative forms of sharing underused facilities.	(Posen 2015)
The sharing economy is the growing ecosystem of providers and consumers of temporary access to products and services.	(Santana & Parigi 2015)
Sharing economy is the collaborative consumption made by the activities of sharing, exchanging, and rental of resources without owning the goods.	(Choi et al. 2014)
Sharing economy is an internet mediated economic model based on sharing, swapping, trading, or renting products and services, enabling access over ownership.	(Botsman & Rogers 2010)



According to sharing economy expert April Rinne, sharing economy refers to sharing space, goods and skills, which is guided by three principles of efficient use of resources, crowdsourcing and communality (Liimatainen 2017).

As recognized by (Gesing 2017; Puschmann & Alt 2016), drivers of the sharing economy include changed consumer behavior (e.g. sustainability, need to share, and state of mind of millennials), and increased use of social networks and electronic marketplaces (e.g. reducing transaction costs, easier to find commodities), mobile devices and electronic services (increasing use of portable devices and applications). Furthermore, implementation of rating and verification systems (e.g. creating trust and transparency), and platform specific technology (e.g. using algorithms, APIs, geographic information) has boosted the sharing economy.

Business-to-business (B2B) sharing economy shifts the businesses mentality from ownership to access (Siitonen 2016; Slagen 2014). B2B sharing economy includes acquiring and requiring easily replaceable parts and components from their suppliers and subcontractors. The products should be repairable instead of fixed and disposable. It also includes offering maintenance services for the solutions. (Sitra 2016)

Shared ownership, sharing platforms and the 24-hour economy enable a shift in the manner space and services are used and accessed. Most sharing economy businesses use online platforms or applications for collecting and sharing real-time data, and maximizing the use of assets. (Lemmens & Luebkeman 2016) Development of technology and urbanization have created conditions for successful sharing economy. There are even millions of people in geographically small areas, from which almost everyone possesses underused goods and skills. Thus, sharing economy works best when implemented locally in one country, city or district. (Liimatainen 2017) The principle of sharing economy is not new in B2B domains, due to sharing of machinery in agriculture and forestry (Puschmann & Alt 2016). However, the amount of B2B sharing economy continues to grow increasingly. Sharing resources streamlines companies, resulting to faster operations and quick reactions to market changes in a less expensive and more efficient way. Determining factors in B2B sharing economy are quality and user experience in terms of increased convenience, speed or satisfaction of the final deliverable. (Slagen 2014)

# **Business models in the sharing economy**

The tools and attitudes used for sharing tangible or intangible assets are influenced by the development of technology, e.g. smartphones and mobile technologies. In addition, shifting societal



values allow companies to create new business models to grow at unprecedented speed, scale and valuation. Network-based business models that include small transaction commissions characterize the sharing economy companies. (Gesing 2017) Companies, e.g. Philips, change the way they do and grow their business with the new platform-based business models, including network effects, distribution power law and asymmetric competition (Daugherty et al. 2016).

B2B sharing economy business models can be identified as marketplace, access-based or on-demand service provider business models (Demary 2015).

The marketplace business model (Fig. 1), matches supply and demand on a platform. Sharing economy company acts as a middleman between two sides of customers.

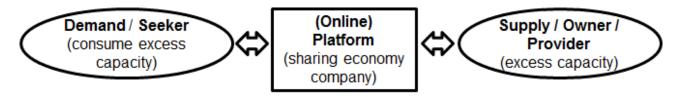
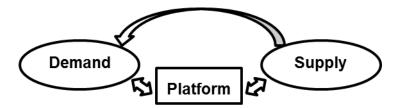


Figure 1. Marketplace business model (Demary 2015)

In the access-based (hybrid) business model (Fig. 2), the sharing economy company offers access to (tangible / intangible) resources, which can be created, leased or owned by it or its partners.



**Figure 2.** Access-based business model (Demary 2015)

The on-demand service provider business model (Fig. 3) is centered on a product or service, which is conducted towards a customer or a group of customers through a platform.



**Figure 3.** On-demand service provider business model (Demary 2015)

Whether a company owns a platform ecosystem or enters into another's, the critical part is to have a platform strategy and business expertise to exploit it. Progress begins from a clear understanding of main features of the platform business models, and the parts that are most vulnerable to unexpected attacks from other platforms. (Daugherty et al. 2016)



In studying the business models of sharing economy, six key dimensions each consisting of three decisions can be identified (Fig. 4). B2B is one of the available platform types in addition to business to crowd and P2P (Cohen 2016).

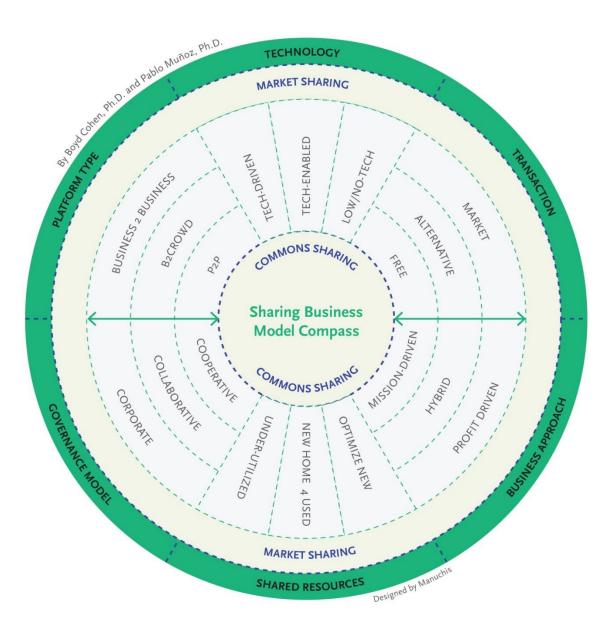
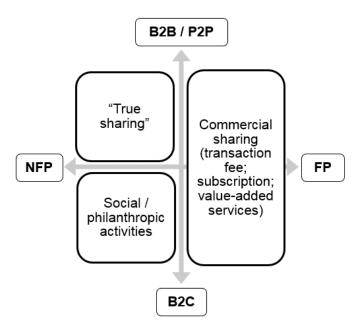


Figure 4. Sharing Business Model Compass (Cohen 2016)

Four of the dimensions (transaction, business approach, governance model, platform type) consist of choices on a continuum from more market-based sharing (e.g. platform capitalism) towards commons-based sharing (e.g. platform cooperatives). The other two dimensions (technology, shared resources) have decisions relatively agnostic to market or commons orientations. (Cohen 2016)

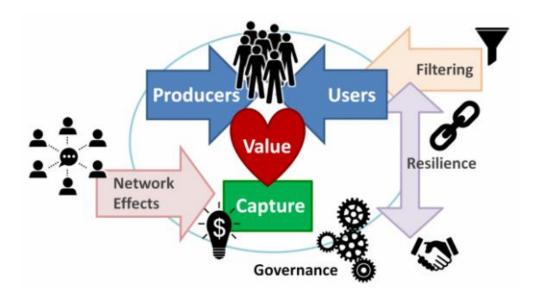


The sharing economy concepts can be mapped (Codagnone & Martens 2016; Moricz 2016) on dimensions not for profit / for profit, and B2B (P2P) / B2C (Fig. 5). Most of the sharing economy companies fall into the profit segment whether B2B or B2C.



**Figure 5.** Conceptual mapping of the sharing economy

The platform canvas on the other hand includes key elements describing critical characteristics of platform business: users, producers, value, value capture, network effects, resilience, governance, and filtering (Fig. 6).



**Figure 6.** The platform canvas (Korhonen et al. 2017)



The platform canvas helps to guide the platform ecosystem participants: platform owners, complementors, infrastructure, and service providers through the key elements, ensuring reviewing all critical perspectives. (Korhonen et al. 2017)

Furthermore, there are different types of revenue generation models, flow of assets and information related in the sharing economy business model (Fig. 7)

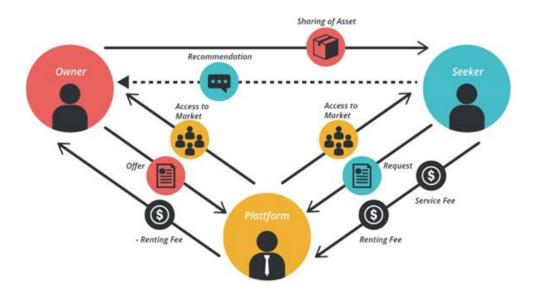


Figure 7. Sharing economy business model (Business Model Toolbox 2017)

## Platform ecosystem

Platforms have an ecosystem with the same basic structure (Fig. 8), consisting of *owners* who control their intellectual property and governance, e.g. Google owns Android, *providers* who are the interfaces for the platform, e.g. mobile devices for Android, producers who create the platform's offerings, e.g. apps on Android, and *consumers* who use the offerings. (Van Alstyne et al. 2016)

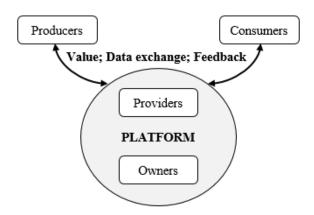


Figure 8. Players in a platform ecosystem (Van Alstyne et al. 2016)



When platforms enter the marketplace of pipeline businesses, the platforms usually always win. Hence, creating platforms and new strategies by utilizing existing assets are the source of value creation and competitive advantage. (Van Alstyne et al. 2016) According to (Van Alstyne et al. 2016), in order to move from pipeline to platform the following three key shifts are needed.

#### 1) From resource control to resource orchestration

The resource-based view of competition means that companies gain advantage by controlling scarce, valuable, inimitable and non-substitutable assets. In a pipeline approach, those include tangible assets, such as mines and real estate, and intangible assets like intellectual property. With a platform approach, the assets that are hard to copy are the community and the resources its members own and contribute, like rooms, cars, ideas and information. Thus, the network of producers and consumers is the chief asset.

## 2) From internal optimization to external interaction

Pipeline firms organize their internal labor and resources to create value by optimizing an entire chain of product activities, from materials sourcing to sales and service. Platforms create value by facilitating interactions between external producers and consumers. Because of this external orientation, they often decrease variable costs of production. The emphasis shifts from dictating processes to persuading participants and ecosystem governance.

#### 3) From focus on customer value to focus on ecosystem value

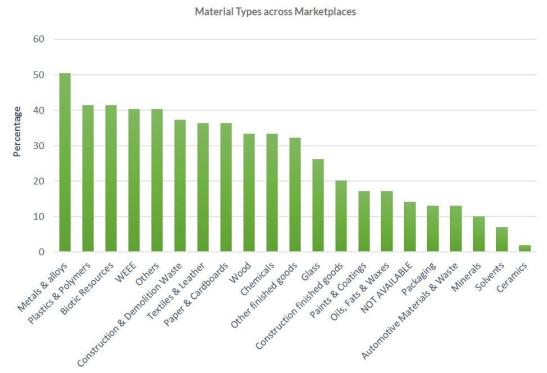
Pipelines seek to maximize the lifetime value of individual customers of products and services, which are at the end of a linear process. On the contrary, platforms seek to maximize the total value of an expanding ecosystem in a circular, iterative, feedback-driven process. Sometimes that requires subsidizing one type of consumer in order to attract another type.

In addition to the benefits and opportunities of the sharing economy, different challenges are recognized in the literature (Belyh 2015; Demary 2015; Miller 2016; Munkøe 2017). Some of the most important challenges include security issues, especially in sharing information, and accountability issues, such as the insurance coverage. It can also be noticed that regulatory side is lacking behind both in national but also EU level in the sharing economy. Furthermore, launching disruptive business involves risks, and economic self-interest of the sharing economy companies might be predatory and exploitative.



#### Shared assets

Need for B2B sharing platforms derives from the desire to use physical assets more efficiently and receive access to a larger amount of potential buyers through online marketplaces (Hepler 2015). Major B2B players in the sharing economy enable businesses to share access to assets such as collaborative office space or underutilized machinery in the supply chain (Slagen 2014). Perhaps the most widespread sharing company practice involves unused real estate (Vaughan 2014). Furthermore, many different material types, e.g. metals, plastics, textiles and paper, are being exchanged across marketplaces worldwide (Fig. 9), as per a web-based research conducted by the MarketplaceHUB in 2016.



**Figure 9.** Material types across marketplaces (MarketplaceHUB 2016)

In addition to tangible assets (e.g. heavy industry) (Gesing 2017), the sharing market for intangible assets, such as company's brainpower, knowledge and intellectual capital also has great potential. The real potential is for new platforms to evolve that offer a segment of a company's intellectual property base worldwide, in order for other actors to benefit from it and patent holders to profit. (Vaughan 2014) The exchange of information facilitates the adoption of best practices (Lemmens & Luebkeman 2016).



# Online sharing platforms

The development of information technology has influenced this century's platforms by diminishing the need to own physical infrastructure and assets. Digitalization enables completely novel solutions such as the platform ecosystem or leasing services (Nores 2017). Information technology enables building and scaling up platforms easily and inexpensively, allows participation of actors within the networks, and improves the ability to capture, analyze, and exchange large amounts of data, which increases value of the platforms to all. In addition to existing marketplaces, there are platforms, such as New Me (<a href="http://www.near-me.com/">http://www.near-me.com/</a>), that allow companies to create their own online marketplaces. The primary value of the sharing platforms is the use of software to drive customer experience associated in the shared assets (Gesing 2017).

The sharing economy is an emerging economic-technological phenomenon that is fueled by developments in information and communications technology (ICT), growing consumer awareness, increase of collaborative web communities and social sharing. (Hamari et al. 2016) consider the sharing economy as an umbrella concept that encompasses several ICT developments and technologies, among collaborative consumption, which endorses sharing the consumption of goods and services through online platforms. Activities of online sharing platforms can be separated into two main categories of exchange 1) access over ownership, and 2) transfer of ownership. However, one platform can facilitate both modes of exchange. This occurs when the platform has more than one type of trading activity, such as lending (access over ownership) and donating (transfer of ownership), causing an overlap between the main categories. (Hamari et al. 2016)



# **B2B** sharing platforms

In this chapter, different B2B sharing platform are introduced categorized in 1) supplies and raw materials, 2) hospitality and office space, 3) equipment, inventory and logistics platforms, 4) business travelling and commuting, and 5) knowledge and skills. Platforms that are presented in the last chapter through company use cases are highlighted in light grey.

**Table 2.** Summary of the B2B sharing platforms

Supplies and raw materials	Hospitality and office space	Equipment, inventory and logistics	Business travelling and commuting	Knowledge and skills
Amazon Business [US]	Airbnb for Business [US]	AgTribe [AU]	Lyft for Business [US]	Cint [SE]
Austin Materials Marketplace [US]	breather [US]	cargomatic [US]	TwoGo [US]	Maglis [GE]
Cooksmill NetSystems [US]	Collective Works [SG]	Cohealo [US]	Uber for Business [US]	Opportunity Peterborough [UK]
Excess Materials Exchange [NL]	LiquidSpace [US]	Farm-r [UK]	Zipcar for Business [UK] (+Local Motion)	Upwork [US]
Globechain [UK]	PivotDesk [US]	FedEx Supply Chain [US]		
GreenTrade.net [FR]	Share My Office [UK]	FLEXE [US]		
Harvest Map (+Superuse.org) [NL]	ShareDesk [US]	FLOOW2 [LU]		
INSCX <sup>TM</sup> [UK]	Share Your Office [US]	HarvestPort [US]		
Material Exchange [US]	Storefront [US]	myTurn [CA]		
Materials Innovation Exchange [US]	WeWork [US]	Share Your Farming Gear [AU]		
Materials Marketplace [US]		Trringo [US]		
SMILE Resource Exchange [IRL]		Yard Club [CA]		
ScrapMonster [US]				
Warp It [UK]				



# Supplies and raw materials platforms

#### **Amazon Business**



Website: https://www.amazon.com/b2b/info/amazon-business?layout=landing

Founded: In 2015

Amazon Business provides purchasing solutions that allow registered businesses to shop for business supplies on Amazon. The platform consists of a wide range of products and enters new business and industrial product categories. The B2B portal offers at least 9 million business-specific products. Amazon Business is also continually expanding its purchasing and selling services designed to make online transactions easier and faster for businesses.

The platform also consists of business-ready purchasing analytics dashboards that enable to track and monitor spending on Amazon Business with dynamic charts and data tables.

**Austin Materials Marketplace** 



Website: <a href="http://austinmaterialsmarketplace.org/">http://austinmaterialsmarketplace.org/</a>

Founded: In 2014

The Austin Materials Marketplace brings together businesses of all sizes and entrepreneurs in the City of Austin and Travis County to create closed-loop systems in which one company's waste is



another company's raw material. Approximately 300 transactions have been completed through the platform by 235 active businesses and organization. The transactions account to roughly 36 000 ft<sup>3</sup> diverted from landfill and 640 MTCO2E avoided, resulting to at least \$ 277 000 in disposal savings and value creation.

### **Cooksmill NetSystems**



# Cooksmill NetSystems Network of Exchanges & WebSites

Website: <a href="http://www.cooksmill.net/clients.html">http://www.cooksmill.net/clients.html</a>

Founded: In 1995

Cooksmill NetSystems network of exchanges and websites includes several B2B sharing platforms in various industries, such as agriculture and food, composite and fiberglass, energy, glass, metal, mineral, paper, plastic, recycling, rubber, textile, tire and wood. Different platforms are presented in the following page.





















Scrap Plastic Recycling Marketplace

\*\*Street Street\*\*

\*\*WWW.POLYchange.com\*\*













ScrapIndia.com India's Used & Recycled Goods Marketplace







































































Home About Contact

# Want to tap into a global pool of knowledge on the Circular Economy?

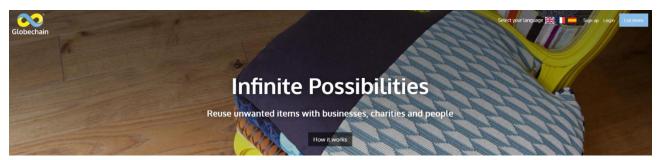
Website: http://excessmaterialsexchange.com/about/

Founded: In 2016

The Excess Materials Exchange (EME) is a digital marketplace where companies can exchange excess materials with each other. Online traditional and non-traditional waste streams are matched with new product and revenue opportunities. They help scale cross industry business-to-business collaboration to transition to a circular economy. EME's mission is to help customers transition to the circular economy as fast as possible by helping them to understand their value chain better while decreasing their impact on the environment and creating a more resilient circular economy. EME is built around three pillars of 1) materials, 2) knowledge, and 3) innovation.

"The platform uses an award winning tool developed by the World Business Council for Sustainable Development (WBCSD), US Business Council for Sustainable Development (USBCSD) and Connecting Europe Facility (CEF) to optimize resource effectiveness in networks. EME offers a reliable and transparent source of non-virgin materials. Besides being a materials marketplace it provides knowledge about circularity from other users from around the world. EME helps the participating organizations create new business models and move them on the leading edge of the transition towards a circular economy. We do this together with renowned knowledge institutes from all over the world including Yale University." - Maayke-Aimée Damen, Co-founder

#### Globechain



Website: <a href="https://www.globechain.com/">https://www.globechain.com/</a>



Founded: In 2015

Globechain is an online reuse platform that connects people, charities and businesses to enable them to reuse unwanted items within a global supply chain network creating a waste audit and social value for members. They aim to create a local supply chain within a global community to enable the redistribution of goods to social causes rather than landfill. Globechain consists of a network of 10 000+ members ranging from corporates, charities, schools and universities, social enterprises, start-ups and individuals in industry sectors ranging from retail, banking, fashion, food, construction, education and health. Globechain provides a solution to a problem of what to do with unwanted or redundant items by offering a convenient, easy to use platform whereby you only connect with members that truly want the items and are motivated by the possibilities it can create.

#### GreenTrade.net

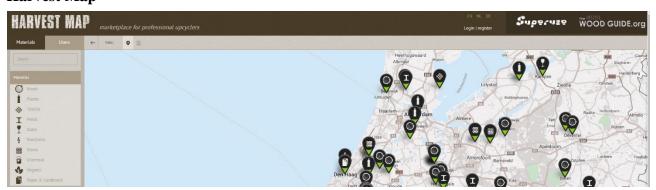


**Website:** http://www.greentrade.net/

Founded: In 2003

GreenTrade.net is a marketplace for companies that sell organic certified products. The companies can benefit from international visibility since the platform is equipped with the world's largest database of the industry. The directory includes 3957 companies that are listing 13153 products, and on the other hand 1720 companies looking for 8811 products. The organic marketplace consists of 1351 offers to sell and 607 offers to buy.

#### **Harvest Map**



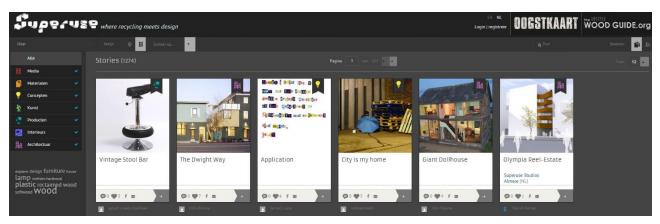
Website: <a href="https://harvestmap.org/">https://harvestmap.org/</a>



Founded: In 2005

Harvest Map is a marketplace for professional upcyclers, and is an open-source online tool created by Superuse. Visitors to the site can identify pools of plastics, textiles, wood, metal, chemicals and a range of other resources available to collect nearby.

The related site **Superuse.org** (<a href="https://superuse.org/">https://superuse.org/</a>) displays publicly submitted projects that incorporate materials re-use.



# **Integrated Nano-Science & Commodity Exchange (INSCXTM)**



Website: http://inscx.com/about.html

Founded: In 2009

INSCX<sup>TM</sup> exchange was founded through collaboration between experts in nanoscience and the securities and commodity industry. Joining the NanoCentral® Alliance of Specialist Providers in nanoscience in 2010 and featuring at the 2010 and 2011 Nanomaterials series of conferences, INSCX has progressed from concept in 2009 to represent the global Exchange for speciality materials. The model adopted by INSCX<sup>TM</sup> exchange is aimed at providing the tools required by producers to strive toward greater commercial dependence on nanomaterials while enabling a market-driven system to



embed self-regulation in a commercial and societal context. Registered and approved users of the Exchange can access to obtain real-time price/trade data on polymers, base oils, titanium dioxide and ENMs. These developments represent the first Exchange-led initiative to establish real-time transparency and hedging ability in physical delivery trade in these commodity categories.

#### **Material Exchange**



**Website:** <a href="https://www.materialexchange.ca/en/default.aspx?AspxAutoDetectCookieSupport=1">https://www.materialexchange.ca/en/default.aspx?AspxAutoDetectCookieSupport=1</a>

Founded: In 2008

Material Exchange facilitates online exchanges of materials between organizations, and service providers to divert resources from landfill, lower operating costs, and move towards a circular project economy. It is and operated by **Partners** in Project Green (https://www.partnersinprojectgreen.com/). The network allows organizations to connect online, browse listing, offer and request materials. Only industrial, commercial and institutional organizations with operations within the Greater Toronto Area are eligible to participation on the platform.

# **Materials Innovation Exchange**



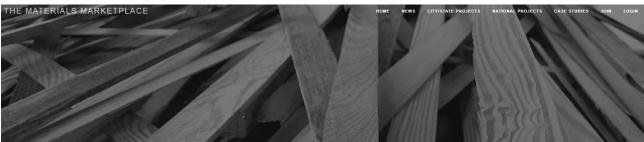
**Website:** http://www.materialsinnovationexchange.com/

Founded: In 2008



Materials Innovation Exchange is a project of *By-Product Synergy* (BPS) NW and the Network for Business Innovation & Sustainability. The Materials Innovation Exchange is a regional marketplace and a global resource supporting innovation in materials management and waste reduction. The members of BPS NW saw the need for a central clearinghouse of information about materials exchange and reuse, entrepreneurial opportunities, case studies and best practices. In taking a regional approach to materials, they created a marketplace for buyers and sellers of materials (maps and directories will be included in the next phase of site development). The Materials Exchange can be used to buy, sell or trade industrial by-products. Waste can be turned into revenue and local sources for materials can be utilized (more regional marketplace hubs will come online later).

#### **Materials Marketplace**



Website: <a href="http://materialsmarketplace.org/">http://materialsmarketplace.org/</a>

Founded: In 2015

The Materials Marketplace is an award-winning regional and national platform to facilitate company-to-company industrial reuse. Through the cloud-based platform, traditional and non-traditional industrial waste streams are matched with new product and revenue opportunities, ultimately enabling the culture shift to a circular, closed-loop economy. In addition to diverting waste from landfills, these recovery activities generate significant cost savings, energy savings, and create new jobs and business opportunities. Materials Marketplace projects are hosted on the award-winning Materials Marketplace software platform from the US Business Council for Sustainable Development and Pathway21. This online tool enables participating companies and project staff to easily post materials available or desired, identify reuse opportunities, and exchange underutilized materials. Hundreds of large and small companies, academic institutions, non-profits and entrepreneurs are using the Materials Marketplace around the world.



# Saving Money through Industry Links and Exchanges (SMILE) Resource Exchange

Website: http://www.smileexchange.ie/



Founded: In 2010

SMILE Resource Exchange is Ireland's national program for industrial synergies. The program aims at assisting companies in reusing unwanted materials to minimize the waste going to landfill. Businesses can request or offer reusable materials, by-products or surplus stock that could potentially be a raw material for another business. When synergies are identified through the free online platform, members can take advantage of technical support in completing the transaction. Delivered by consultants based in each of the three (Connacht-ulster, Eastern-midlands and Southern) waste regions across the country, the service facilitates the exchange by providing materials reprocessing expertise.

After six years, the program now has about 1 400 members, completed over 300 successful synergies and diverted 8 000 tons of material from landfill. These transactions have translated into € 2.1 million euros of cost saved for businesses.

#### **ScrapMonster**



Website: <a href="http://www.scrapmonster.com/">http://www.scrapmonster.com/</a>

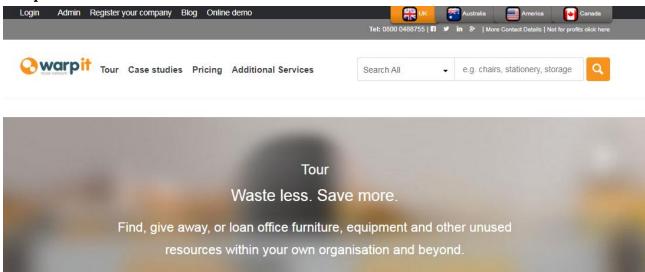
Founded: In 2009

ScrapMonster is a trading platform for buying and selling scrap metals. ScrapMonster has been developed by recycling professionals, with years of research and experience. The platform's mission is to provide accurate and updated recycling news, prices, and information to the industry, along with



connecting buyers and sellers of local, national and global markets. The platform includes scrap industry information, such as scrap metal prices, company details with key executive information, scrap yard profiles with addresses, recycling equipment listings, market reports and news.

Warp It



Website: <a href="https://www.warp-it.co.uk/tour.aspx">https://www.warp-it.co.uk/tour.aspx</a>

Founded: In 2011

Warp It is an reuse network for organizations. The online portal allows staff in large organizations to legally, conveniently and safely share (give away, loan, rent and sell) their physical surplus or underused resources within their organization and externally. Setting up the portal in Warp It is quick and easy, and the system is highly configurable to reduce risks and fit with current practices. By approving staff members, accepting friend requests and sending requests to other organizations through the portal facilitates sharing assets. Administrator of the platform can view transactions occurring in the platform, and has the ability to allocate different levels of permission to different members, decide if/when items are open up to third parties, and what kind of assets are traded internally and externally.



# Hospitality and office space platforms

#### **Airbnb for Business**

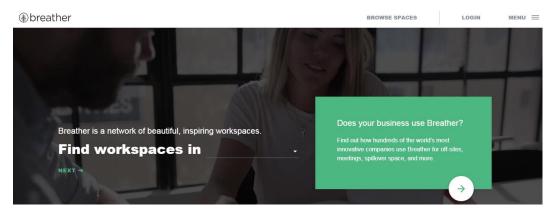


Website: <a href="https://www.airbnb.fi/business-travel">https://www.airbnb.fi/business-travel</a>

Founded: In 2017

A new feature in Airbnb allows professionals to filter homes and apartments that Airbnb has deemed *Business Travel Ready* (BTR). To qualify for a BTR listing, as the company calls it, the house must have a desk, Wi-Fi, self-check-in through a door attendant or digital lock and various facilities that would be available also at a hotel, such as free shampoo, a hairdryer and iron.

#### breather



Website: https://breather.com/

Founded: In 2012

Breather is a network of inspiring workspaces. Teams regularly hold offsites in breather spaces for activities, such as brainstorming, strategy sessions, product sprints and general team building. Getting away from their workplace for a full-day or multi-day offsite allows for the creative spark that comes with being in a beautiful new space. Leaving the office also lets the team escape the usual daily interruptions.



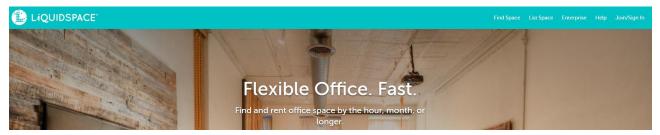


Website: <a href="http://www.collective.works/">http://www.collective.works/</a>

Founded: In 2012

Collective Works is a coworking platform, that offers working environments that foster innovation and success. Access to a community of like-minded businesses and high value individuals is provided. The memberships take into account changing business needs of the companies. Collective Works advocates collaboration either online through the members' applications or in person.

## LiquidSpace



Website: https://liquidspace.com/

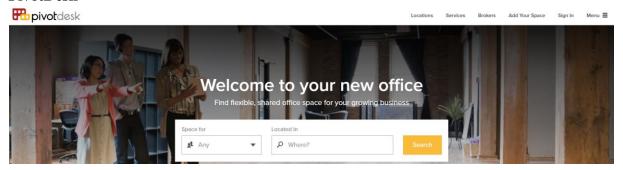
Founded: In 2010

The Marriott hotel chain has converted empty conference rooms into rentable workspaces through the online platform LiquidSpace. The platform is the largest, real-time network for office space. Built to simplify the discovery and transaction of office space. Their intelligent network infrastructure effectively brings each member of the complex commercial real estate supply chain together, seamlessly connecting growing teams and professionals looking for space, directly with venue partners, space providers, real estate professionals and service providers. The first end-to-end digital platform for flexible office procurement, LiquidSpace combines powerful, technology-driven solutions with real-time space availability across the industry's largest, most diverse marketplace of flexible workspace. The network of 72 000 teams and professionals and 3 200 verified venue partners



eliminates costs and complexities of traditional leasing and delivers transformative simplicity and efficiency to a fragmented industry. 2.3 million transactions have been made through LiquidSpace in 750 different cities.

#### **PivotDesk**



Website: <a href="https://www.pivotdesk.com/">https://www.pivotdesk.com/</a>

Founded: In 2012

PivotDesk enables businesses to grow fluidly within the static real estate infrastructure by connecting companies with excess space to companies that need it. Flexible agreements eliminate the risk of a long-term lease, allowing entrepreneurs to offset costs so they can focus on growing their business.

## **Share My Office**



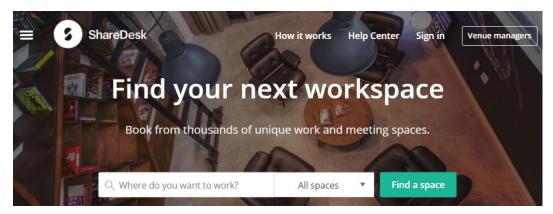
Website: <a href="https://www.sharemyoffice.com/">https://www.sharemyoffice.com/</a>

Founded: In 2011

The platform allows businesses worldwide to advertise their spare desks or office space for free. The portal enables startups to find their first commercial business space, benefiting both parties. The Share My Office is not involve in the actual rental transaction, thus charging no commissions. Based in Scotland the service is global and constantly growing, with space currently being advertised on nearly every continent.



#### **ShareDesk**



Website: https://www.sharedesk.net/

Founded: In 2013

ShareDesk is a platform for finding workspace from thousands of unique work and meeting spaces when needed. The platform includes 4500+ verified venues, in 440 cities across 70 countries, that can be booked easily through the portal. Users can book a co-working space, business center or shared office space nearby by an hourly, daily or monthly rent.

With ShareDesk Optix, the company provides cloud-based solutions to help real estate managers and companies create smart and flexible office environments with a beautiful mobile-first experience. ShareDesk is evolving the way people work and the way that companies manage and optimize space.

#### **Share Your Office (SYO)**



Website: <a href="https://www.shareyouroffice.com/">https://www.shareyouroffice.com/</a>

Founded: In 2007

Share Your Office (SYO) is a platform for sharing spaces (offices, open space, meeting rooms). Users can search and prioritize the spaces based on multiple criteria, such as type of the space, location, budget, area, and size of the team. After finding a suitable space, companies can contact the space manager and visit the site. On average it takes 15 days to find a tenant or s rentable space through the SYO platform.



#### **Storefront**

# Storefront

Sign Up Login List Your Space



Website: <a href="https://www.thestorefront.com/">https://www.thestorefront.com/</a>

Founded: In 2012

Storefront is a platform for sharing temporary rentals for pop-up shops in areas with good visibility. From white-cube spaces to corner stores, hotel residencies and industrial lofts, Storefront provides an exclusive catalogue of 10 000+ spaces available for short-term renting. The platform uses in four steps of 1) search and signup of the brick-and-mortar market, 2) send requests after browsing spaces, 3) launch a project after booking a pop-up space, and 4) receiving excellent customer service, easy and secure payments and insurance coverage.

#### WeWork



Website: <a href="https://www.wework.com/">https://www.wework.com/</a>

Founded: In 2010

WeWork is a global network of workspaces where companies grow together. They transform buildings into dynamic environments for creativity, focus, and collaboration, moving towards a new way of living. They believe that CEOs can help each other, offices can use the comforts of home, and work can be meaningful and pleasant. WeWork consists of a global network of 100 000+ members, enabling access to networking, advice, and opportunities in a particular field worldwide.



# Equipment, inventory and logistics platforms

#### **AgTribe**



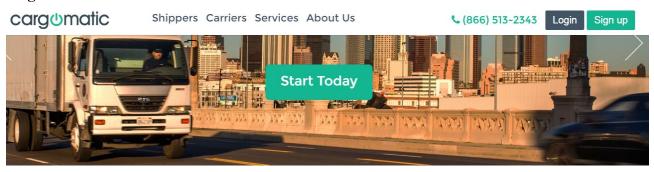
Website: <a href="https://www.agtribe.com.au/">https://www.agtribe.com.au/</a>

Founded: In 2015

AgTribe is a machinery sharing platform where farmers can advertise their idle machinery for hire. Agtribe machinery hire will be beneficial for the following people:

- For those who are not able to justify buying something due to the fact they only need it for a short period of time throughout the year
- Farmers who own machinery which breaks down at a crucial time
- Buying equipment to then hire it out if you can not quite justify having the ag machinery
- To become more efficient in the way you run you farming operation by not having too much money tied up in machinery finance
- Contractors wanting to list up an add about machinery

#### cargomatic



**Website:** https://www.cargomatic.com/

Founded: In 2013



Founded by a tech entrepreneur from Silicon Valley and a logistics expert from Los Angeles, Cargomatic understands the challenges of local trucking and is dedicated to creating new solutions with technology. By seamlessly connecting shippers and carriers through their web and mobile apps, they facilitate truckers to grow their businesses and shippers track their freight in real time.

Cargomatic connects shippers with licensed carriers in San Francisco, New York and Los Angeles. They offer on-demand products for businesses in need of commercial services such as short-haul trucking. The platform enables to save money and space in warehousing, in addition to tracking drivers and taking loads in those areas. With Cargomatic, companies can potentially avoid purchasing and maintaining a local fleet, or directly hiring a contractor, rather using the on-demand services when needed.

#### Cohealo



Website: <a href="http://cohealo.com/">http://cohealo.com/</a>

Founded: In 2012

Cohealo is a technology company that helps health systems share medical equipment across facilities, so they can optimize spend, accelerate cash flow, and improve access to care. Simply put, the platform facilitates the sharing of expensive hospital equipment between hospitals. Their cloud-based platform, supporting logistics capabilities and analytics, enable health systems to manage equipment centrally and make it available across facilities on-demand. Cohealo enables to 1) optimize equipment spend by increasing asset utilization while avoiding unnecessary purchases and rental, 2) accelerate cash flow by launching or expanding service lines quickly based on demand, and 3) bring treatments to patients by caring for patients in where they live rather than where the equipment is located.

#### Farm-r



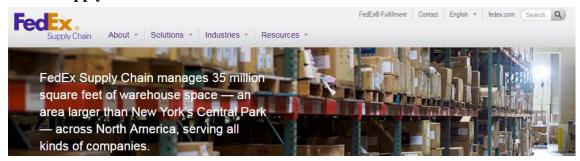


Website: <a href="https://marketplace.farm-r.com/">https://marketplace.farm-r.com/</a>

Founded: In 2016

Farm-r is an online marketplace that allows farmers to rent out unused farm machinery to farmers who need to use it. This results in improved efficiency and profitability for both businesses. Owners can rent out their machine with an operator, which increases earning potential and adds a useful service. Users can also search for agricultural contractors, ensuring to find the best service at the best price.

#### FedEx Supply Chain



**Website:** http://supplychain.fedex.com/solutions/supply-chain/

Founded: In 2015

FedEx Supply Chain offers solutions for designing, building and operating best-in-class logistics ecosystems. Leading supply chain solutions, paired with the global FedEx network, give customers endless possibilities in an interconnected world. The solutions include engineering, warehouse operations, technology and packing, kitting and value-added services. Companies can gain competitive advantage by integrating FedEx Supply Chain's experts into their teams. They will receive resources, decades of supply chain experience and industry-specific knowledge to work, so they can focus on guiding the business to success.

#### **FLEXE**



Website: <a href="https://www.flexe.com/">https://www.flexe.com/</a>



Founded: In 2013

FLEXE is the industry-leading warehouse space and services marketplace. They connect organizations that need warehousing space to organizations with extra space. The platform transforms how logistics and supply chain professionals manage growth, inventory peaks, returns and new market entry by creating warehouse networks that scale as necessary. Based in Seattle, Wash., the FLEXE online marketplace includes more than 800 warehouses in over 45 markets across North America.

The business concept of offering shared warehousing space is stimulating competition from incumbent 3PL providers. FLEXE enables to leverage industry scale, create unprecedented flexibility in operations and turn the supply chain into a competitive advantage.

#### **FLOOW2**



Website: http://www.floow2.com/sharing-marketplace.html

Founded: In 2012

FLOOW2 is the first B2B sharing marketplace enabling companies and institutions to share overcapacity of equipment, knowledge and skills of personnel. Registration is free, but participants pay a subscription to advertise their equipment on the platform. (Brennan 2016) The Netherlands-based company wants to share every aspect of the supply chain between companies to increase efficiency and sustainability. With Floow2, businesses can share all of their assets including machinery, vans, workers or office supplies. (Slagen 2014)

"I foresee the sharing economy becoming an integral part of the future. It will be inevitable for any good and responsible entrepreneur. No business in the world will be able to go without asset sharing anymore. FLOOW2 is sustainable, brings financial benefits and strengthens the social cohesion between organizations and people. Multiple value creation at its finest." - Kim Tjoa, Co-founder

"When businesses implement asset sharing into their organization, they should be aware of the professional game they're playing. Asset sharing is an additional, value creating, business model so



organizations should treat is as one and put in the proper amount of effort. Implementation is easy, and can be done in six simple steps." - Kim Tjoa, Co-founder

- See the financial sustainable and social opportunities
- Acknowledge underutilized equipment and personnel
- Form policy and appoint manager
- Take inventory of supply and demand
- Use FLOOW2 sharing marketplace
- Ensure commitment to culture in daily business

#### **HarvestPort**

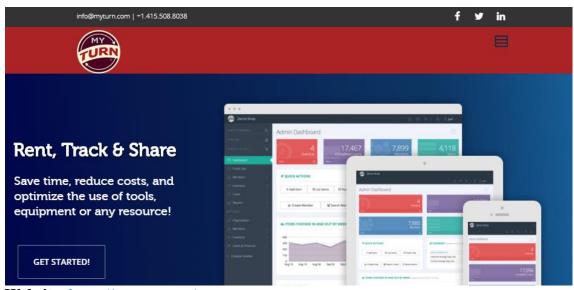


Website: https://harvestport.com/

Founded: In 2015

HarvestPort is a shared-economy marketplace for seasonal farming assets. The platform consists of e.g. electric pallet jacks, portable restrooms, forklifts, equipment haulers, sand filtration units and pallets. It offers a marketplace for farmers and agricultural professionals to rent assets and equipment according to their seasonal needs. The service includes documentation of available assets and equipment, matching of requests with qualified lenders, analyzing profiles and making targeted recommendations, managing transactions, and billing for the assets and equipment.





Website: <a href="https://myturn.com/">https://myturn.com/</a>

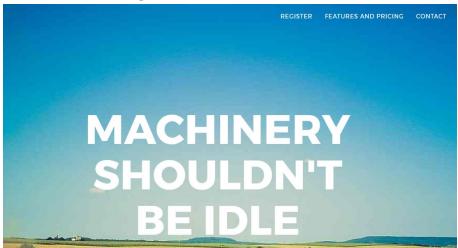
Founded: In 2013

MyTurn is an IT company that provides software infrastructure for businesses to track, rent, and share tools and other products. With a modern cloud-based platform, myTurn combines the best and most essential features of asset tracking, rental, and the sale of surplus equipment. Their unique platform enables to easily tap into the emerging collaborative and circular economies. The platform facilitates in reducing costs by focusing on making it easy to find and track the usage of tools, equipment or any product. MyTurn allows companies to turn assets into revenue by renting underutilized equipment to other organizations or individuals.

MyTurn operates a best-in-breed, easy to use, platform that is helping communities to regional partnerships save money and increase resource utilization in several countries. Communities are becoming more equitable and resilient as more people have access to resources they need and previously might not have been able to afford. Universities are more efficiently sharing equipment between labs, setting up bike sharing programs, and establishing partnerships with communities. Governments and business are putting equipment that was often sitting idle in warehouses and storage back to work.



# **Share Your Farming Gear**



Website: <a href="http://www.shareyourfarminggear.com/">http://www.shareyourfarminggear.com/</a>

Founded: In 2015

Share Your Farming Gear exists to help Australian farmers and contractors increase profits through increased machinery utilization and efficient access to rental machinery and contractors. It has the following five main features:

- An efficient national marketplace for machinery rental and contractor hire
- Intelligent matching of farmers with compatible schedules who could profitably share machinery
- Automated administration for all renting, sharing and contracting
- The provision of insurance to guarantee machinery availability
- A market for sharing trusted labor

#### Trringo



Website: https://www.trringo.com/

Founded: In 2016



Trringo is a revolutionary tractor and farm equipment rental platform that harnesses the power of technology and a strong franchise network to make farm mechanization easily accessible, affordable and reachable to every Indian farmer. Trringo is a first-of-its-kind, tractor and farm equipment rental business that aims to raise the level of mechanization in Indian farming.

#### **Yard Club**



Website: https://www.yardclub.com/

Founded: In 2013

Yard Club, founded by Caterpillar, facilitates the rental of Caterpillar tractors for construction sites. In the previous year 2016, the platform has helped 2 500 construction professionals and managed \$ 120 000 000+ equipment transactions across the United States and Canada. With next generation web and mobile apps, Yard Club makes it easy for construction professionals to streamline communication, optimize utilization and remotely manage their owned and rented equipment fleet.

# **Business travelling platforms**

#### **Lyft for Business**



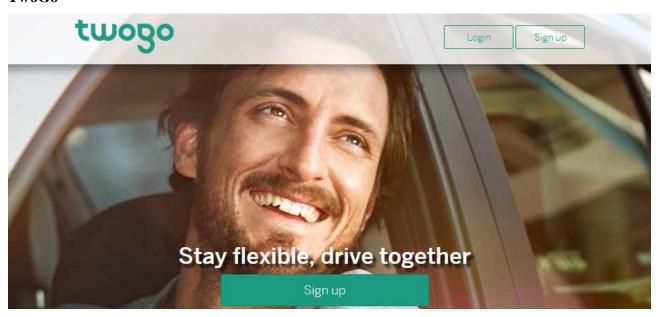
Website: <a href="https://www.lyft.com/business">https://www.lyft.com/business</a>

Founded: In 2014



Lyft for Business is a one-stop shop, featuring a management portal for employees and stress-free travel for teams. The service is available in 300+ cities in the United States. The platform operates 24 hours per day, completing 28+ million rides per month. Fortune 500 companies, major event venues, and even medical centers depend on Lyft as their preferred mode of ground transportation. Some of the benefits that teams can achieve by using Lyft for Business are easy expensing through an integrated business portal, travel options for different occasions and price ranges, and reliable airport rides.

#### TwoGo



Website: <a href="https://www.twogo.com/">https://www.twogo.com/</a>

Founded: In 2011

TwoGo by SAP is a smart and flexible carpooling service for commutes. The intelligent technology finds a perfect match by connecting drivers and passengers. TwoGo is a solution for businesses, cities, and institutions to support the ride sharing of users as they travel to work, travel between locations of their companies or go on business trips.

SAP TwoGo integrates with corporate email via open standards, so that employees can communicate with each other to arrange a meeting place using their company email accounts. SAP TwoGo also integrates with their corporate calendar systems.

### **Uber for Business**



# Laita yrityksesi liikkeelle

yhdessä maailman johtavan yritysten maakuljetusratkaisujen tarjoajan kanssa

REKISTEROIDY NYT →



Website:

https://www.uber.com/business/

Founded: In 2014

Uber for Business is a ride management platform for large and small businesses. *Administrators* can implement, monitor and manage the organization's ability to Uber for different needs, such as business trips, customer transfers or employees' commutes. *Employees* receive access to flexible business travelling through the platform.

### **Zipcar for Business**



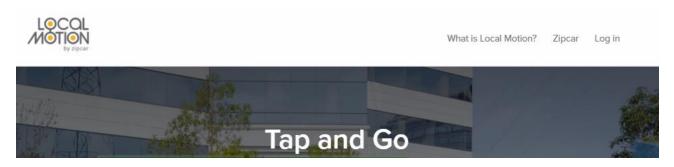
Website: http://www.zipcar.com/

Founded: In 2000

Zipcar brand is the world's leading car sharing company, with nearly one million members in the United States, Canada and Europe. The leading global provider of mobility solutions, Avis Budget Group, operates the Zipcar. The platform enables to drive cars by the hour or day, including gas and insurance. By car sharing, users can save hundreds over car ownership.

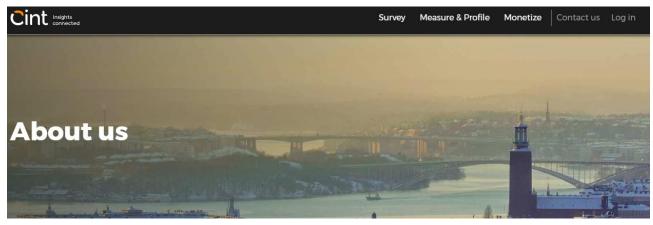


**Local Motion** (<a href="https://www.getlocalmotion.com/">https://www.getlocalmotion.com/</a>) by Zipcar is a platform for sharing vehicles, increasing fleet utilization and streamlining operations with Local Motion's keyless access and webbased motor pool management technology.



# Knowledge and skills platforms

#### Cint



Website: <a href="https://www.cint.com/about/">https://www.cint.com/about/</a>

Founded: In 1998

Founded in Stockholm, Sweden, Cint is the world's insights exchange platform. Hosting 40 million registered consumers worldwide, Cint maintains an online insights exchange platform that connects community owners to researchers, agencies and brands, for the sharing and accessing of consumer data. The platform includes 1 500 community owners and 160+ application programming interface (API) partners, reaches 80+ countries, receives 130 000 new members daily and 12 000 000 new data points monthly.



### **Maglis**

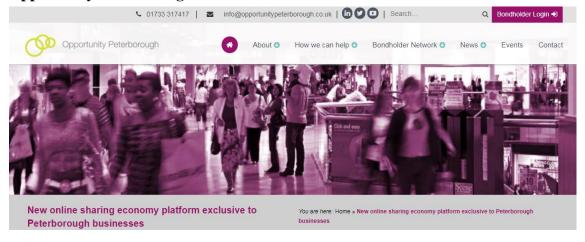


Website: https://agriculture.basf.com/en/Crop-Protection/Decision-Support-Maglis.html

Founded: In 2016

BASF launched Maglis which is an online agricultural platform set to become a key partner in helping farmers manage their crops. With the platform, farmers will be able to gather, interpret, and monitor a range of crop-related data that will support them in making better decisions on how to grow and market their crops. Maglis helps farmers use the information at hand in a more efficient way for better crop management decisions. It offers a range of integrated, intuitive and easy to use tools that support decision-making, and help farmers make the connections they need to succeed. New insights and perspectives guide farmers from planning and planting to harvesting and marketing. Maglis addresses many of the key tasks and activities on the farm. It helps farmers use technology to improve crop management, understand their own data better, manage risk and optimize returns.

#### **Opportunity Peterborough**



**Website:** <a href="https://www.opportunitypeterborough.co.uk/new-online-sharing-economy-platform-exclusive-to-peterborough-businesses/">https://www.opportunitypeterborough.co.uk/new-online-sharing-economy-platform-exclusive-to-peterborough-businesses/</a>



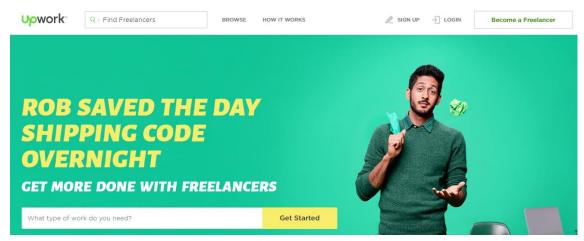
Founded: In 2005

Opportunity Peterborough is a private not-for-profit business, wholly owned by Peterborough City Council. As an economic development company, Opportunity Peterborough's core responsibilities include marketing Peterborough to businesses to attract inward investment, engaging with local companies to support growth and development, and leading the city's skills agenda to ensure the current and future talent pool is trained and work-ready. They also deliver a range of projects to boost the local economy and support Peterborough's aspiration to create the UK's environment capital. Opportunity Peterborough offers support to help local businesses set up and grow, by hosting the Peterborough Bondholder Network, running sector forums and events, sharing economic intelligence and business and funding opportunities.

In 2016, Opportunity Peterborough formed a new partnership deal with Enterprise Nation, bringing a wealth of new business resources to Peterborough entrepreneurs (Future Business Centre 2016).

"We're delighted to partner with Enterprise Nation to bring its vast range of incredibly valuable business support to Peterborough entrepreneurs. Peterborough has a strong entrepreneurial spirit that continues to grow, and we have seen tremendous success in creating new companies in recent years. We want to nurture this momentum and this partnership will help us do that. Partnering with Enterprise Nation blends the strengths of a national network with the expertise of local support that understands our economy, and ensures Peterborough has the right help available for entrepreneurs and growing companies to realize their potential." -Steve Bowyer, Chief Executive

## Upwork



Website: <a href="https://www.upwork.com/">https://www.upwork.com/</a>

Founded: In 2003



Upwork is a platform for connecting companies with the right freelancers for projects. The platform enables to browse employee profiles, reviews and proposals in order to interview and hire top candidates. Upwork includes features for chatting, sharing files and collaborating regardless of the physical location. Invoicing and payments of authorized work are also done through Upwork.

# Company cases described

Two platforms from each of the aforementioned five categories are selected, and company cases from both platforms are described.

## **Supplies and raw materials**

## **Austin Materials Marketplace**

The Austin Materials Marketplace network includes 200+ eco-conscious organizations, businesses and entrepreneurs, including Austin's only commercial scale, food-grade cricket farm **Aspire Food Group**. Aspire joined the Austin Materials Marketplace to discover higher and better uses for their primary by-products: coconut coir, peat moss, and organic cricket feed.

A heritage hog farm **Eden's Cove Farm** that focuses on building community and sustainability, is one of the participants capturing value from the by-product stream. Eden's Cove is picking up thousands of pounds of material per month from Aspire Food Group to use as feed for their heritage hogs. So far, the transaction has diverted 7 470 lbs. from landfill and avoided 5 metric tons of CO2 emissions. Both parties will also save big in 2017 with this ongoing transaction, approximately \$12 000 per year in replacement feed costs, and a little over \$1 000 per year in landfill disposal and new by-product revenue.

Eden's Cove is also using buckets from **Austin Bergstrom International Airport** through the Austin Materials Marketplace, to transport and store the feed. Austin Bergstrom International Airport generates an ongoing supply of these buckets by recycling them, or preferably finding opportunities for the buckets to be reused. With three different organizations finding reuse opportunities through this one transaction, this is truly a win-win-win scenario.

Some of the other companies utilizing the Austin Materials Marketplace are General Motors with Texas Office Products & Supply (TOPS), Any Baby Can with TOPS, HomeAway with Austin ShadeWorks, Gardopia Gardens with Austin Business Recycling, Johnson's Backyard Garden



with Ian's Giving Garden, Goodwill Industries of Central Texas with W-Austin, and Apto Solutions with Liquis Inc.

## **Materials Marketplace**

Initial results from phase one of the pilot project (6-8/2015), include: 23 participating companies, 78 facilities engaged, 150 materials—2.4 million tons total—uploaded to the marketplace, 59 materials being sought, 68 recommended matches and 19 transactions in development, with another 49 possibilities that were still pending action at the close of the pilot.

Some of the companies participating in the 2015 U.S. Materials Marketplace pilot project include Alcoa, Armstrong World Industries, BASF, CH2M, Dow Chemical, Essroc, Fairmount Santrol, General Motors, Goodyear, Greif, LafargeHolcim, Nike, Novelis, Procter & Gamble, Swisstrax, Tetra Pak, Veolia and Waste Management. Their sectors include a diverse mix of cement, primary metal manufacturing, chemicals, and consumer products manufacturing. In 2014, these 23 companies accounted for over \$600 billion in revenue, operated over 600 facilities in the United States, and employed over 1.7 million people worldwide.

Some of the opportunities identified in the 2015 pilot:

- Silica sand and ground silica are important feedstocks for sand production. Two companies are exploring the reuse of a silica by-product to replace virgin feedstock.
- Two participants are currently exploring the use of bauxite residue in a constructed wetland wastewater treatment system to remove phosphorous.

# Hospitality and office space

## **Storefront**

A clothing brand **SELFNATION** launched a London pop-up store with Storefront. SELFNATION combines fashion design with engineering in order to create perfectly fitting jeans in a highly automated, sustainable and transparent manufacturing process. The benefits of opening a temporary physical retail space were getting new clients and having an experience with them in London, seeing how that buzz works well for the brand.

An online fashion and lifestyle magazine **Butterboom** launched its first pop-up store with Storefront in Hong Kong. The Pop-Up benefitted Butterboom as much as the featured brands, since the pop-up



store is a perfect occasion to have more visibility, but also for the brands that Butterboom showcases online to engage more with their customers.

## **PivotDesk**

"As a startup, you have limited money and limited time. PivotDesk saved us both. We were able to quickly secure a flexible solution until we found a permanent space—and only pay for the space we needed when we needed it. Interestingly, what was initially a temp space proved to be ideal and morphed into a long term lease."

Krista Marks @kristamarks / Woot Math

"Spaces for growing companies are few and far between. The ones that do exist come with complexities and cumbersome lease terms that add unnecessary delays and costs to young companies on tight timeframes and tight budgets. PivotDesk's inventory of shared office space coupled with their collaborative payment processing platform provides the perfect solution for our dynamic clients."

Greg Hoffmeister @gwhoffmeister | T3 Advisors

## **Equipment, inventory and logistics**

## cargomatic

Company **UnitedWeShip**, treats four or five Cargomatic orders a day as filler in order to bring the company closer to a vision for a national brand.

Cesar Lopez, who runs his own independent trucking company **Cesar Trucking**, started using the Cargomatic application in 2014 to fill space on his truck with additional shipments.

#### **FLEXE**

Sneaker and accessorize manufacturer **TOMS** used pop-up fulfillment to expand its pop-up stores into new markets. By getting its inventory closer to its pop-up stores, the company saved money and reached more customers. FLEXE made it possible to expand the pop-up stores into three new markets without exceeding budget.

**Westside Baby** is a non-profit organization that collects donations and distributes childcare products to families in need. They were just about to receive pallets of diapers from Kimberly Clark when they realized they did not have the space. Unfortunately, Westside Baby suffered a fire in one of their



facilities, which required them to move to another location that simply wasn't big enough to handle the large shipment from Kimberly Clark. With the task of filling 350 orders per week for the nearly 27,000 children in King County, they needed to find space for those diapers fast. After learning about FLEXE, Westside Baby was able to go to www.flexe.com and within minutes find the exact amount of space in the exact location for the exact amount of time they needed. Using the FLEXE online marketplace, they were able to choose from among a number of warehouse options and find a partner and price that worked for them. The search and selection process took just minutes and they were able to secure the space they needed within days.

# **Business travelling and commuting**

### **Uber for Business**

In the nearly five months since Uber's global head of enterprise, Travis Bogard joined, he's added big corporate customers to Uber for **Business like Goldman Sachs**, **Accenture and Salesforce**. The business platform now offers premium services, like accounting, for a fee, he said. Importantly, the segment would create a recurring revenue stream for the company — an important metric for investors when Uber goes public.

# **Zipcar for Business**

Long-distance business travelers use car sharing for travel from the city to the suburbs for meetings, conferences or client visits. Jack Dorsey, a co-founder of **Twitter**, said he and his colleagues at the popular microblogging company drove Zipcars when they traveled to Manhattan and had appointments outside the city. When Twitter was started three years ago in San Francisco, he and his colleagues were already veteran zipsters — as Zipcar members are sometimes called.

**Google** employees can choose from among two dozen Priuses and Ford Escape hybrids, provided by Enterprise Rent-A-Car's WeCar auto sharing operation at the company's Mountain View, Calif., lot.

Some smaller companies, like **Synapse Product Development**, based in Seattle, also have adopted car sharing for long-distance business travel. Synapse asks its 36 employees to drive Zipcars to Portland, Ore.; Spokane, Wash.; or Vancouver, British Columbia, said its president, Christoph Mack. He estimates that car sharing costs the company about \$5,000 a month, or one-third of what it would otherwise pay to cover employee transportation and parking.



## Cint

Based in Stockholm, Sweden, **Web Service Award's (WSA)** business concept is simple. They offer a quality assured method for measuring the strengths and weaknesses of a website via web surveys, while also allowing for comparable measurements of similar websites. Via Connect by Cint, WSA realized they could offer more to its customers by providing audience analysis based on behavioral tracking that would also uncover the profiling and demographics data of the users navigating their client's websites, while retaining the capability of running survey interviews on the exposed web users.

Founded in Stockholm in 2001, **Research and Analysis of Media AB (RAM)**, is an international media research company. Via their Inviso tool, RAM has been regularly collecting data from over 500 000 registered consumers across 18 countries but they wanted to offer an even bigger reach to their customers so they approached Cint to find a solution.

The proposed solution was simple, extending RAM's consumer reach by combining their own capabilities with Cint's solution Connect. Connect is a real-time tracking tool with similar capabilities to RAM's in house tool Inviso but with the benefit of being powered by the Cint global insights exchange platform, hosting 40 million registered consumers worldwide, essentially boosting RAM's consumer reach from 500,000 to 20,500,000; and from 18 to 80 countries. Using this huge consumer base, Connect focuses on monitoring visitors viewing or interacting with the customer's ad and revealing their demographic and profiling data, turning them from just a number into actual people.

# **Opportunity Peterborough**

Peterborough is firmly placed on the national and international scene and showcased local businesses and innovations to new marketplaces through Peterborough DNA, European projects and the Water Innovation Network. The **Bondholder Network** has been the envy of many other cities with its great opportunities to develop business connections, whilst **The Skills Service**, which Opportunity Peterborough launched in 2011, is inspiring future workforce.



# References

- Van Alstyne, M.W., Parker, G.G. & Choudary, S.P., 2016. Pipelines, Platforms, and the New Rules of Strategy. *Harvard Business Review*, 94(4), pp.54–62.
- Belk, R., 2014. You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67, pp.1595–1600.
- Belyh, A., 2015. An Introduction to Sharing Economy. *Cleverism*. Available at: https://www.cleverism.com/introduction-to-sharing-economy/ [Accessed September 11, 2017].
- Botsman, R. & Rogers, R., 2010. What's mine is yours: the rise of collaborative consumption, Harper Business.
- Brennan, G., 2016. Business-to-business asset sharing. Available at: https://www.ellenmacarthurfoundation.org/case-studies/business-to-business-asset-sharing [Accessed July 26, 2017].
- Business Model Toolbox, 2017. Sharing Economy Business Model Toolbox. Available at: http://bmtoolbox.net/patterns/sharing-economy/ [Accessed October 13, 2017].
- Choi, H.R. et al., 2014. The Business Model for the Sharing Economy between SMEs. WSEAS Transactions on Business and Economics, 11, pp.625–634.
- Codagnone, C. & Martens, B., 2016. Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. *JRC Technical Reports: Institute for Prospective Technological Studies, Digital Economy Working Paper*, (1).
- Cohen, B., 2016. Making Sense of the Many Business Models in the Sharing Economy. *Fast Company*. Available at: https://www.fastcompany.com/3058203/making-sense-of-the-many-business-models-in-the-sharing-economy [Accessed August 1, 2017].
- Cusumano, M.A., 2014. How traditional firms must compete in the sharing economy. *Communications of the ACM*, 58(1), pp.32–34.
- Daugherty, P., Carrel-Billiard, M. & Blitz, M., 2016. Platform Economy: Technology-driven business model innovation from the outside in., pp.1–15.
- Demary, V., 2015. Competition in the Sharing Economy. *IW policy paper*, 19. Available at: https://www.econstor.eu/bitstream/10419/112778/1/830325093.pdf [Accessed August 29,



- Dyal-Chand, R., 2015. Regulating Sharing: The Sharing Economy as an Alternative Capitalist System. *Tulane Law Review*, 90(2), pp.241–309.
- Future Business Centre, 2016. New partnership strengthens support on offer to Peterborough entrepreneurs. Available at: http://peterborough.futurebusinesscentre.co.uk/archives/4455 [Accessed July 26, 2017].
- Gesing, B., 2017. Sharing economy logistics: Rethinking logistics with access over ownership., (May).

  Available at: http://www.dhl.com/content/dam/downloads/g0/about\_us/logistics\_insights/DHLTrend\_Report\_Sharing\_Economy.pdf.
- Hamari, J., Sjöklint, M. & Ukkonen, A., 2016. The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology*, 67(9), pp.2047–2059. Available at: http://doi.wiley.com/10.1002/asi.23552 [Accessed August 28, 2017].
- Hepler, L., 2015. 2015: The year the sharing economy went B2B. *GreenBiz*. Available at: https://www.greenbiz.com/article/2015-year-sharing-economy-went-b2b [Accessed July 28, 2017].
- Korhonen, H. et al., 2017. The Core Interaction of Platforms: How Startups Connect Users and Producers. *Technology Innovation Management Review*, 7(9). Available at: https://timreview.ca/article/1103 [Accessed October 13, 2017].
- Lemmens, C. & Luebkeman, C., 2016. The Circular Economy in the Built Environment.
- Liimatainen, K., 2017. Tavaroiden omistaminen tekee ihmisestä yksinäisen, sanoo jakamistalouden asiantuntija mutta Uber "saastuttaa keskustelun". *Helsingin Sanomat*. Available at: http://www.hs.fi/paivanlehti/31072017/art-2000005308619.html [Accessed August 1, 2017].
- MarketplaceHUB, 2016. Marketplace Stats. Available at: http://marketplacehub.org/marketplacestats/ [Accessed July 27, 2017].
- Matofska, B., 2016. What is the Sharing Economy? *The People Who Share*. Available at: http://www.thepeoplewhoshare.com/blog/what-is-the-sharing-economy/ [Accessed October 11, 2017].



- Miller, S.R., 2016. First Principles for Regulating the Sharing Economy. *Harvard Journal on Legislation*, 53, pp.147–202.
- Moricz, P., 2016. *The business model of the leading sharing economy platforms*, Available at: https://www.slideshare.net/petermoricz/the-business-model-of-the-leading-sharing-economy-platforms-like-airbnb-and-uber [Accessed September 8, 2017].
- Munkøe, M.M., 2017. Regulating the European Sharing Economy: State of Play and Challenges. *Intereconomics*, (1). Available at: https://link.springer.com/content/pdf/10.1007%2Fs10272-017-0641-3.pdf [Accessed August 31, 2017].
- Nores, M., 2017. Kiertotalous on enemmän kuin kierrätys. *Visio*. Available at: http://visiolehti.fi/lue/42017/blogi-kiertotalous-on-enemm-n-kuin-kierr-tys [Accessed August 2, 2017].
- Olson, M.J. & Kemp, S.J., 2015. An In-Depth Look At Its Evolution & Evolution & Industries. *Piper Jaffray*.
- Owyang, J., 2014. The Collaborative Economy is for Business to Business. *Web Strategist*. Available at: http://www.web-strategist.com/blog/2014/06/02/collaborative-economy-business-to-business-moves-in/ [Accessed July 31, 2017].
- Posen, H., 2015. Ridesharing in the Sharing Economy: Should Regulators Impose Über Regulations on Uber? *Iowa Law Review*, 101, pp.405–433.
- Puschmann, T. & Alt, R., 2016. Sharing Economy. *Business & Information Systems Engineering*, 58(1), pp.93–99. Available at: http://link.springer.com/10.1007/s12599-015-0420-2 [Accessed August 1, 2017].
- Santana, J. & Parigi, P., 2015. Risk Aversion and Engagement in the Sharing Economy. *Games*, 6(4), pp.560–573.
- Siitonen, S., 2016. Take a Leap into Circular Economy! Together Towards New Growth, Helsinki.
- Sitra, 2016. *Kierrolla kärkeen, Suomen tiekartta kiertotalouteen 2016–2025, Sitran selvityksiä 117*, Available at: https://media.sitra.fi/2017/02/27175308/Selvityksia117-3.pdf.
- Slagen, D., 2014. From P2P to B2B: The next phase of the sharing economy | VentureBeat | Business | by John Koetsier, TUNE. Available at: https://venturebeat.com/2014/09/08/from-p2p-to-b2b-the-next-phase-of-the-sharing-economy/ [Accessed July 26, 2017].



Vaughan, R., 2014. The Sharing Company. Available at: https://www.strategybusiness.com/article/00281?gko=88e49 [Accessed July 31, 2017].