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From Economy to WEconomy: The rise of collaborative economy

“When I worked for Freemap [the predecessor application to Waze] eight years ago, he [Ehud Shabtai, founder of Freemap and Waze] promised that everything would belong to the community. One day he forgot us and took it all for himself. So first of all, it’s not just about the open code, but rather it’s the fact that everyone worked for him and he ‘partied’ at our expense. Then, it’s about us being his partners, and at the end, he abused us” (anonymous talkback to the lawsuit filed against Waze, following its acquisition by Google, March 30th, 2014).

A Quick Preface

On March 26th, 2014, a \$125 million class action lawsuit was filed against Waze(c22), the successful Israeli navigation application, and against Google, which had acquired it just a few months before for a staggering amount of nearly \$1 billion. The lawsuit claimed intellectual property violation for the use of open-source maps and codes originally designed for Waze’s predecessor application, FreeMap, a project which Ehud Shabtai, Waze’s Founder, had contributed for the Windows PocketPC version in 2006. In essence, the lawsuit claimed that the main value of Waze—i.e., its software and world map—was openly and voluntarily developed by a crowd of peer programmers but was eventually sold for a lofty profit by Waze’s founders and investors (Waze did not demonstrate any profits up until its acquisition by Google).

Founded in 2008, Waze is a GPS-based mobile map application (with approximately 50 million users worldwide) that provides turn-by-turn navigation and real-time traffic updates powered by incidents and route information submitted by a community of users. Waze differs from traditional GPS navigation software in that it is a community-driven application that gathers map data and traffic information from users and relies on their driving times to provide routing and real-time traffic updates. By having users report accidents, traffic jams, speed and police traps, road construction, landmarks, house numbers, etc., Waze provides valuable information while maintaining low costs. While Waze tries to monetize its platform through location-based advertising, no official financial information is available at this point.

This case was prepared by Yair Friedman and Zafrir Bloch-David from the Recanati Business School at Tel Aviv University. The case is intended as a basis for class discussion rather than to illustrate either effective or ineffective handling of administrative situations and decisions.

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On June 11, 2013, Google completed the acquisition of Waze for a total of \$966M. It was reported that the Web giant spent \$847 million in charitable contributions and \$188 million in intangible assets, then minus \$69 million in net liabilities. As part of the deal signed, each of Waze's 100 employees should have received an average compensation of around \$1M, representing the largest payout to employees in the history of Israeli high-tech. This deal was reached after Facebook^(c7), Apple and other companies expressed an interest in purchasing Waze but were unable to agree on terms. The acquisition added a social data dimension to Google's mapping business and was expected to enhance the experience of its users by adding real-time traffic information to their daily navigation needs. The acquisition also introduced a WEconomic (collaborative economic) aspect to Google's acquired technologies and may serve as a social platform in the future.

Waze's success story, accompanied by the lawsuit filed against its founder, demonstrates important aspects of collaborative platforms. On the one hand, construction and operation of the company was highly efficient: Its initial development was swift, effective and cheap (the programming time devoted to its development was essentially volunteered by its devoted developers). Also, the road information it presents is established freely without the normally costly expenses, as it derives from its users (drivers) contributing their actual online route information (through GPS data and reports). Waze thus adds value in a unique manner with little effort and virtually no cost. However, the true contributors of the value exhibited by the platform are its users, who benefit from the utilization but not from the financial profits—which at times may be astounding. Moreover, like most WEconomic platforms, Waze's widespread operation also has indirect positive consequences—both financial and environmental. In Waze's case, the increased route-planning efficiency saves driving time and gas, respectively cutting costs and emission of air pollutants (not to mention the risk of car accidents).

Our aim is to highlight major points in the establishment of collaborative economy (hereby regarded as “WEconomy”) as a central force in the modern age and elaborate on some of its prominent characters, attributes and outcomes. It is structured in three main parts: attributes of WEconomy, an exemplary analysis of WEconomic influences on a focal industry, and conclusions and future implications. A few noteworthy questions are raised. For example, what exactly is the WEconomy? How is the value in WEconomic platforms / networks created and distributed? How can we understand the various levels and facets of WEconomy?

What is Collaborative Economy (WEconomy)?

The WEconomy (sometimes referred to as shared economy or collaborative economy) is a social-economic eco-system that utilizes technology to build collaborative networks of human and physical resources. People and organizations connected to these networks collaborate in creating, producing, distributing, trading and consuming goods and services. Such networks create impact and value that were previously attributed to large centralized hierarchal organizations in both the public and private sectors ^(a1 a9 c1 e1 e2 e3 e4).

The Waze application presented is just one of many examples of WEconomic platforms. Waze creates value (e.g., road maps and updated traffic information) for its users by integrating information which was produced and shared by its users (both passively—through their mobile phone's GPS, and actively—by reporting) while allowing free access to its services (thereby luring more users, who supply additional information). By comparison, other navigation software service providers create or buy (highly expensive) data bases containing road maps and traffic, integrate this data and sell it to their users.

Attributes of WEconomic Platforms and Organizations

The WEconomic business models that have emerged in recent years appear to be highly promising. Conforming platforms connect unmet needs with excess resources and bridge peer users, assets and information in such a formidable way, that the collaborative economy now appears to be one of the most staggering new forces in the modern age. The influence of the WEconomy is so evident that analysts, journalists and other thinkers agree that the social-economic and environmental impacts of this emerging phenomenon will strengthen globally. For example, Economist magazine declared 2013 as “The Year of Collaborative Consumption.”

These organizations and platforms appear to have unique characters and attributes, thus producing innovative and sometimes astounding outcomes. At times, even the driving force behind these platforms is foreign to traditional economic models. WEconomic platforms sometimes trade in social currencies such as public data, reputation, and social impact. The building blocks of WEconomic platforms include unique variables such as prosumers, crowd perspectives, network effects, tapping of previously unused and sometimes excess resources and capabilities, or crowd-based trust—which will be outlined and explained hereinafter.

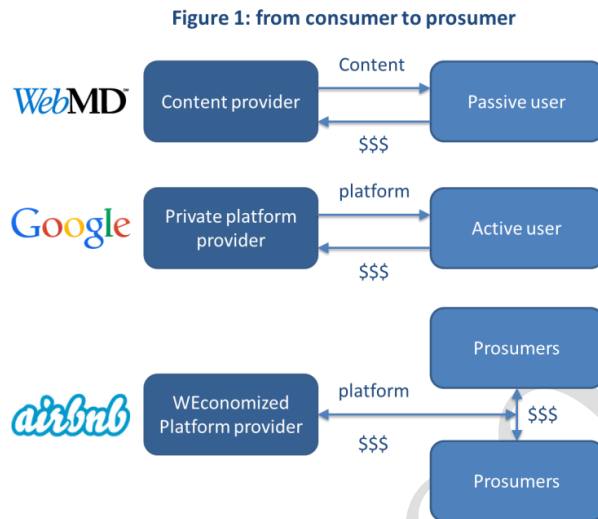
From Consumers to Prosumers (Producing Consumers)

The first distinct attribute of a WEconomic organization is a break in the traditional dichotomy between producers and consumers. For example, when a consumer acquires a Britannica encyclopedia, he or she buys a product produced by editors and other employees of Britannica. When a consumer rents a car from Avis, he or she rents a car owned and maintained by Avis. Distinctively consumers in WEconomic platforms typically use goods and services created by other users for other users. For Example, Wikipedia^(c1) or RelayRides^(c19): articles in Wikipedia are written by other users of Wikipedia, while cars rented through RelayRides, are privately owned and maintained cars of people in the RelayRides community.

In WEconomic platforms at least some of the users contribute to the production of goods and services (i.e., the users provide the platform’s content). These users comprise the backbone of the production chain. Thus, if the number of users of a WEconomic organization drops, it loses not only revenue but also production capability. Platform users can be categorized on a continuum ranging from consumers through passive prosumers to active prosumers. For example, Wikipedia and Britannica users who read articles are consumers. A Waze user is simultaneously a consumer of the service and a passive producer of maps and traffic information (as Waze creates its content by integrating the information produced by the GPS devices in its users’ smartphones). Finally, a Wikipedia user that also writes articles or a RelayRides user that also rents out his private car to other users is an active prosumer. Any person with the right assets or skills can become part of a network that creates the value being supplied. Such an example was highlighted in Forbes magazine (January 2013), where a Chicago sales executive named Dylan Rogers decided to buy a Jeep Grand Cherokee and a Toyota Prius (in addition to his BMW 6 series) purely to rent, while estimating he could net \$40,000 a year for his three-vehicle “fleet” on RelayRides^(a6).

Figure 1 exhibits the shift from the classic producer-consumer relationship (using the example of WebMD^(c11), a provider of medical information and healthcare tools) in which an organization provides a service or a product in exchange for payment from the passive consumer. In a slightly more WEconomized relationship (for example, Google), a private platform offers active users the ability to contribute to the content (in many such cases, the

platform is meaningless without such contributions) but the platform alone monetizes and gains value (e.g., through advertising). The highest level of WEconomy (for example, Airbnb^(c3)) includes a platform provider (market place) and prosumers. While the prosumers provide the content, consume and monetize it, the platform provider monetizes on the platform usage. Clearly, WEconomized platforms offer micro-entrepreneurs a superior solution and encourage enhanced economic activity that is not evident in less WEconomized settings.



From Resource-based to Crowd-based Organizations

The second most distinctive attribute of WEconomy is the shift from a structured resource-based organization to a crowd-based network. Comparing Wikipedia to encyclopedia Britannica illustrates the differences. Britannica's first printed edition in 1768 was written by about 100 full-time editors and more than 4,000 contributors, including 110 Nobel Prize winners and five American presidents. Conversely, Wikipedia has a fulltime workforce of only 60 employees, but enjoys a network of at least 80,000 volunteer editors^(a16 c1). Wikipedia's network workforce enabled the creation of over 4 million (!) articles compared with approximately 120,000 in Britannica. Not only has more content been created by Wikipedia, but its quality is more highly regarded^(a10 a16 c1 d4).

The creation of Wikipedia revolutionized the process of producing encyclopedias. Wikipedia allowed for a larger article base, freely available to the public and easily accessible (it is the sixth most popular website in the world, with nearly 500 million unique visitors each month)^(c1). Such a WEconomized encyclopedia is created at a fraction of the time and costs of traditional encyclopedias such as Britannica. Thus, it appears that WEconomic platforms are able to utilize production capabilities at a level unmatched by traditional organizations.

The Network Effect: Why is "Going Viral" a Good Thing?

On April 23rd, 2005, an 18-second video clip was posted on a new website. The video featured one person (Jawad Karim, one of the website's founders) standing before elephants at a zoo and delivering a short message: "The cool thing about these guys is that they have really, really, really long trunks," he said. "And that's cool. And that's pretty much all." With that statement, YouTube^(c23) was born and became an instant success, reaching a daily upload of over 65,000 new videos and delivering around 100 million video views per day in July that year. In 2012, YouTube said that roughly 60 hours of new videos are uploaded to its site every minute, and that it had reached eight hundred million unique users a month. By 2014,

well over 1 billion unique users were visiting YouTube each month, while over 6 billion hours of video are watched each month on the website^(c23 c1).

How did YouTube gain such popularity so quickly? Well, first, its business model grew out of a strong viable market need: Pictures were easily uploaded and shared but at that time videos were not. Second, YouTube encouraged and facilitated the promotion of users' favorite videos. It demonstrated Internet marketing at its best, characterized by such simple attributes as very short links to videos that were easy to email; capacity to embed videos in profiles of social networking and other sites; video voting features; reliance on "viral" marketing; and word of mouth. Lastly, in the first years of its growth, YouTube downplayed any marketing on its website, enhancing user experience and speeding content streaming.

YouTube is a classic example of a WEconomic platform, centered on video sharing. It supplies the platform while its users supply the content. Its servers host an unimaginable number of videos so that its millions of users will not do so individually. It is these exact attributes—i.e., ease of use and sharing—that allow YouTube and its content to become "viral" (a term used to describe a video that becomes highly popular through the process of Internet sharing, typically through video sharing websites, social media and email) alongside a wide variety of constantly updating content. One such example is a video called "Charlie Bit My Finger"^(b1), viewed over 785 million times (!) since its posting in May 2007 (as of October 2014)^(c23). The video was never meant to be anything more than a family joke, yet it became one of YouTube's most viewed videos of all time. Such fame can easily launch successful careers (as with singers Justin Bieber and Psy, and actor Josh Wiggins) or other lucrative financial successes (e.g., elevating products such as GoPro cameras or Rokenbok toys). Where the term "viral" has negative connotations in the medical field, it is the peak of all ambitions in media and marketing.

Creating Value with Unused Resources and Capabilities

In its February 2013 edition, Forbes magazine presented the story of Frederic Larson, a 63-year-old unemployed photographer from San Francisco. Larson, who had two children in college, required funds. Without a job, he turned his personal assets and possessions into an ongoing steady income. He owned a large house in Marin County and a Toyota Prius, as well as numerous cameras and photography equipment that he did not use regularly. He realized that while he owned these assets, he was not utilizing them to their full potential. He therefore began renting out his home twelve days per month on Airbnb for \$100 a night, of which he netted \$97¹. When renting, he retreated to a separate bedroom. Four nights a week he transformed his car into a de facto taxi via the ride-sharing service Lyft, pocketing another \$100 a night in the process. His photography equipment was rented through numerous websites such as Yelp.com.

While sharing unused assets is not a new concept (this is done within families and certain communities), the scale and reach have changed dramatically in WEconomic platforms. Ease of use, access and effectiveness have allowed platforms such as Uber^(c21) and TaskRabbit^(c20) to emerge and transform industries, create alternative revenue streams for owners, and increase use and value extracted from vacant assets, unused equipment and idle working time. Such platforms bridge privately owned unused assets (such as a car left in a parking lot while the owner is abroad or at work) or abilities (for example, the aptitude to reconstruct IKEA furniture) with corresponding unmet needs.

¹ A recent New York Economic Impact study commissioned by Airbnb confirms that more than 50% of their hosts are non-traditional workers: 23% are supporting themselves while freelancing, and 11% are supporting themselves while launching a new business^(a18).

Uber is a ridesharing service that connects (via a smartphone application) passengers with drivers of vehicles for hire. Its users include customers who request rides and track their reserved vehicle's location and drivers seeking to rent out their partially used car. Uber's services are available in over 70 countries and hundreds of cities worldwide, with an average number of rides requested per week at over 1.1 million (as of April 2013)^(a12 c21).

While Uber is a fine example of a platform increasing effective use of assets (i.e., cars), TaskRabbit exhibits more efficient use of time and human abilities. It was founded in 2008 by Leah Busque, a dog owner from Boston who simply had no time to buy dog food. Aiming to build a marketplace for people to help each other run errands, Busque later expanded the mission into a mobile marketplace allowing users to outsource small jobs and tasks to others in their neighborhoods. TaskRabbit functions by allowing users to name the task they need done, select a pre-approved "Tasker" (contractor) to execute it, and agree on a price they are willing to pay. TaskRabbit operates in dozens of cities and has many thousands of tasks performed on a weekly basis.

In conclusion, WEconomic platforms allow those who control resources (whether tangible assets, time or skills) to use digital clearinghouses to capitalize on the unused capacity of things they already own while allowing consumers to rent from their peers rather than rent or buy from a company.

Access Trumps Ownership

"People don't want to buy a quarter-inch drill. They want a quarter-inch hole." (Theodore Levitt)

A service initially constructed for Amazon's internal use, Amazon mechanical Turk (a.k.a MTurk)^(c17) is a crowdsourcing Internet marketplace that enables individuals and businesses (known as Requesters) to coordinate the use of human intelligence to perform a wide variety of tasks that cannot be done by computers. The service, originally created to allow Amazon to find duplicates among its numerous web pages describing products, was transformed into a marketplace allowing execution of varied tasks (called HITs, short for Human Intelligence Tasks) such as writing product descriptions, transcribing, rating, image tagging, filling out surveys, and more. Workers (called Providers or Turkers) can browse among existing tasks and complete them for a monetary payment set by the requester. As most tasks are simple, the average wage for the multiple micro-tasks assigned, if they are done quickly, is about one dollar an hour, with each task averaging only a few cents. Once a task is completed, payment can be redeemed on Amazon.com via gift certificate or transferred to a worker's US bank account. Requesters pay Amazon a 10% commission on the price of successfully completed HITs.

MTurk—like other crowd-sourcing marketplaces such as Zipcar^(c12), Netflix^(c9) or Kickstarter^(c8)—demonstrates another central characteristic of WEconomized platforms: It not only creates value with untapped resources and capabilities, but also provides easy access to consumer needs without possessing ownership. Crowd-sourcing platforms highlight the experience or outcome conveyed by a product or service while downplaying the importance of owning either. In order to be effective, a WEconomized platform must engage unused resources and capabilities and facilitate access to those resources. MTurk is a fine example of such a WEconomic platform having started with a solid requester base—many of the HITs are uploaded to the system by Amazon itself for some of its internal tasks that require human intelligence. Its effectiveness stems from both its content (underused human intelligence and corresponding tasks) and its ease of access (to both internal and external requesters and

Turkers). Since its launch in November of 2005, its worker base had grown to more than 100,000 in over 100 countries by 2007. By 2007, it had over 500,000 workers in more than 190 countries, corresponding to hundreds of thousands of HITs (usually well over 350,000 open HITs on any given day).

Similarly, tool libraries, object-sharing platforms, and tool-lending and renting banks allow public access (both free and paid) to diverse resources such as gardening and landscaping tools, cooking and baking appliances, serving equipment, pedometers, energy meters, home repair equipment or bicycle maintenance tools throughout the world. Such tool libraries usually operate locally (for example, the MamaZone^(c16) tool library or the Agora^(c2) project in Israel), and center themselves on providing their users with access to resources and opportunities to share.

Creating Alternatives and Decentralization

In July 2012, Psy, a musician from South Korea, released his song “Gangnam Style” which by December of that year had become the first YouTube video to reach one billion views. Popularity continued to grow, with more than 2 billion views recorded by October of 2014. A New York Times article estimated that Psy earned nearly \$2 million from YouTube ads alone, mostly from the “Gangnam Style” clip^(a11 c23).

Before the inception of YouTube, an artist could not have reached such a large audience without signing a binding contract with a successful record label or a production company (such as Warner Music Group, Sony or BPI). These companies manage effective (and costly) systems that are very often critical to the success of musical products and operations. Some examples include access to singers and bands, agents and personal managers; advertising and publicity; manufacturing resources (such as record label and producers); shipping operations (including booking agents); marketing abilities (record and concert promoters); and legal resources (entertainment attorneys). The business model of traditional record companies is founded on the existence of “gatekeepers” with the relevant knowledge and ability to predict the success or failure of potential singers or bands. This working model, derived from the system’s immense production cost, has created a highly centralized market structure that became even more centralized as the industry matured. In 1998 there were six major music media groups. By 2014 this number had shrunk to three: Universal Music Group, Sony Music and Warner Music Group^(a3 d3 e3).

When an artist decides to sign with a record label, regardless of its size, the business decisions lie with the label’s gatekeepers. Today, a new decentralizing alternative option to produce and distribute art exists thanks to YouTube and other platforms that enable distribution of music and videos together with high-quality low-priced recording equipment at virtually no cost. A recording system worth anywhere from \$5,000 to \$10,000 would have cost around half a million dollars in 1993. An artist can potentially gain traction and enjoy fame without using the production and/or distribution capabilities of media companies, depending only upon the propensity of satisfied viewers to share his or her art with friends. The audience has become its own gatekeeper^(a3 d3 e3).

Decentralization and alternative creation is also sweeping through other, more conservative industries such as finance. Peer-to-peer lending and crowdsourcing platforms such as Zopa^(c14), Lending Club^(c15), Prosper^(c18) and Kickstarter have provided an increasingly popular alternative to banks, credit companies, investment funds and other traditional industry gatekeepers (see Figure 2^(a13); size in USD billion). Entrepreneurs today have access to direct public funding while any private investor, no matter how small, may gain access to previously unavailable investment opportunities^(a13 e1 e2 e3 e4).

Figure 2: P2P lending in the US and Britain



From Brand- to Crowd-based Trust

Until not too long ago, for millions of travelers a vacation abroad meant buying a travel guidebook. Lonely Planet, a world leader in this segment, managed to sell over 120 million travel guides from its inception in 1972^(c1). However, since the beginning of the 21st century, travelers have an alternative to traditional travel guides in the form of TripAdvisor^(c10) as well as other user-generated travel guides.

Established in 2000, almost 30 years after Lonely Planet, TripAdvisor has already accumulated 60 million users registering around 80 million unique visits a month and providing over 170 million reviews and opinions of hotels, restaurants, attractions and other travel-related businesses. And while both companies clearly succeeded in obtaining a vast user base over the years (indicating a high degree of public trust), there is a material difference: while Lonely Planet gained trust in its product by employing professional travelers, writers and editors, users of TripAdvisor trust the quality of information generated by other users and then regulated and integrated by TripAdvisor^(a17).

This distinction poses new challenges, risks and advantages. For example, how can a firm assure quality and safety when content and services are created by a huge and diverse crowd outside of the company's employment (for example, how does an eBay^(c6) user insure that customers or suppliers are trustworthy)? Who would be responsible for potential damage inflicted by WEconomic platform users (for example, would damage caused by a car rented through RelayRides be the responsibility of the customer, the car owner and / or RelayRides)? WEconomy platforms generally use three basic tools to address these challenges: crowd reviews, insurance and strict regulations. To assure effective crowd reviews, platforms create digital profiles of both customers and suppliers that include ratings and feedback from other users. Platforms also acquire special purpose insurance policies that cover potential damages caused by users. For example, Airbnb and RelayRides each guarantee a million-dollar coverage policy for their platform users. And lastly, these platforms enforce strict regulations that are constantly being updated. For example, TripAdvisor monitors IP addresses to prevent bogus reviews while eBay limits selling activity for low-rated sellers and may even shut down seller accounts when needed. In summary, although the success of WEconomic platforms indicates high levels of user trust, it must be continually developed to meet new challenges and threats.

Social Effects and Implications

An important outcome of the WEconomy phenomenon is its environmental impact. The term “environmental” refers here to economic, social and ecologic effects. WEconomic players such as Airbnb, Uber, Waze and TaskRabbit have directly and indirectly improved the lives of millions of people in the process of forming a large-scale business ^(a2 a5 a14 a15 e2 e3).

From the economic and financial perspectives, platforms such as Airbnb and Uber help millions of users to thrive in tough times. People who rent out their bikes, rooms, cars, and brains through such WEconomic platforms have made money off assets they own. This produces income (which may even lead to part-time or full-time jobs), lowers unemployment and stimulates the economy. This indirect effect of WEconomic efficiency and diversity boosts economic activity and personal income in periods of low growth allows otherwise unused productive capital (such as spare bedrooms, unused cars and human idle hours) to be utilized and monetized. Collectively, these effects enrich society and expand individual opportunities.

Other platforms, such as price comparison websites, enable shoppers to filter and compare products based on price, features, and other criteria, thus increasing market competition and commercial efficiencies. For example, Zollo ^(a14 c13) is a crowdsourcing platform that enables personalized price comparison. Consumers use their Smartphones to photograph goods at supermarkets and upload the data, enabling price comparison with nearby supermarkets. Before shopping, a user can prepare an online shopping list and find which stores within a given area charge the lowest price for a desired product.

From the social perspective, the WEconomy increases human interaction, thus fostering relationships and facilitating new contacts. And while the idea of sharing a vehicle or renting an apartment to a stranger may seem peculiar or even dangerous, millions of such encounters take place every day. For some, interacting with strangers is actually part of the attraction of sharing, offering an opportunity for authenticity and uniqueness. It’s worth remembering that practices such as online shopping and social media initially faced similar misgivings, yet consumers adjusted. The WEconomy, too, appears certain over the long haul to muscle its way into the mainstream, one encounter at a time. For example, EatWith ^(c5), an Israeli startup, connects private cooks and chefs (hosts) who cater at their homes (thus turning their residences into one-time restaurants) with diners (in most cases tourists). EatWith came to life after its founder visited Greece with his family. By chance they were invited into the home of a local family for dinner, where Guy Michlin and his family got to enjoy truly authentic Greek food (which bore no resemblance to the food served in restaurants) and culture. More importantly, it provided an opportunity to interact and even make new, local friends in the process.

Moreover, platforms such as Facebook and LinkedIn allow for digital interactions (both personal and business oriented) and new encounters, strengthening otherwise neglected connections and enabling new ones. One study at the University of Chicago ^(a7 d1) even suggested that more than a third of marriages that occurred in the US between 2005 and 2012 began online, and that these online couples have happier, longer marriages compared with their peers who met offline. And although digital interactions may appear less meaningful than face-to-face encounters, the future implications of this relatively new phenomenon remain unclear.

Lastly, from the ecologic perspective, platforms such as Waze, Car2go ^(c4) and Uber help to reduce air pollution and lower accident rates due to decreased transportation usage (people are less inclined to use their own car, or even buy one) and increased transportation efficiency

(cars are shared and frequently contain multiple passengers). While sharing assets will not stop climate change, it does reduce waste (fuel, spare parts etc.).

Many consumers view sharing as an ecological imperative that lowers environmental impact by decreasing manufacturing and purchasing demands. It often enables an asset to be used with greater efficiency and at lower cost than previously possible. Tool libraries, lending banks and similar platforms reduce waste by enabling owners to lend or give away unused tools and equipment. For example, Agora in Israel allows owners of a wide range of used items—including clothing, appliances, books, furniture, gardening equipment and plants, etc.—to donate them to interested individuals or charitable institutions rather than discarding them.

The WEconomy might also produce a long-term effect on human consumption perception and habits. As increasing numbers of consumers share cars, bicycles, houses, clothing, tools, and a growing array of other goods, manufacturers that have built businesses on seemingly endless demand for ownership are bound to react and adapt in some way.

WEconomy and its Influence on Industries

In the following example, we will apply the aforementioned antecedents and outcomes to establish whether and to what degree a particular industry is indeed influenced by the WEconomy. We will then try to estimate whether and how integration of WEconomic platforms may take place. The same tools may demonstrate how other industries are and will be influenced by the WEconomy and the effects of its relevant forces.

The Personal Transportation Industry: Navigational and Car-sharing Revolutions

One industry that has been clearly disrupted by the collaborative logic of the WEconomy is personal transportation (as opposed to transportation of goods). A relatively large number of companies have been established and have redefined the way people travel.

- **The existence and proliferation of prosumers**

Companies such as Uber allow people to offer rides to others in their private cars and get paid for delivering the service. This may ultimately lower automobile ownership and fuel consumption. Users of WEconomic navigation systems such as Waze contribute to their peer users by reporting accidents and traffic jams and providing time estimates for various routes. As drivers choose shorter and more effective alternatives, traffic congestion and therefore fuel demand are reduced (among other advantages).

- **From resource-based to crowd-based organizations**

Platforms such as ZipCar and Car2Go enable users to rent cars by the hour at affordable rates while circumventing rental agencies and are easily accessible by mobile phone. This may reduce the relative power of rental and leasing firms. Companies such as RelayRides have evolved even further in the “WEconomic chain,” turning consumers into prosumers as they take on the role of one-person car rental agency. In the process, peer entrepreneurship is encouraged and growth and virality facilitated (whereas Car2Go only operates its own limited vehicle fleet,

RelayRides has none, other than the unlimited number of vehicles owned by its users).

- **Networks and the prospect of “virality”**

WEconomic platforms are often dependent on mass usage. The more people use a platform, the greater its reliability. For example, higher numbers of car-sharing participants indicate more options for timely rides; and more Waze users ensure increased accuracy (i.e., a better chance that every traffic jam, accident and policeman will be noted and displayed). Platforms such as Waze and Uber allow infinite space for additional prosumers (i.e., those wishing to either use a service or produce its content).

- **Creating value with unused resources and capabilities**

The basic antecedent for this industry shift or change may be attributed to the content supplied by users' vehicles (mainly cars) which are relatively expensive but seldom effectively exploited due to idle time in garages, parking lots, etc. Such underuse of resources (in this example, parked cars) and abilities (the ability to drive or to supply reliable traffic information) enables potential value creation for all interested transporters.

- **Access vs. ownership**

The ability to rent or share cars and other vehicles (through platforms such as Mobility, ZipCar, Car2Go or Uber, for instance) provides a real alternative to the expensive option of owning a car. This trend, which may be viewed as a new kind of public transportation, is bound to reduce demand for automobiles and increase efficiency.

- **Creation of alternatives and decentralization**

WEconomized firms such as RelayRides or Getaround create an alternative to the existing market players and decentralize their markets as they reduce the need for car ownership while enabling prosumers to use their private cars as income-generating assets. This novel business model changes the distribution of value created and shifts it from a few shareholders to potentially millions of stakeholders. Specifically, this creates a new alternative for commuters and decreases the market power of public transportation organizations or large-scale industry players.

- **Transition from brand-based to crowd-based trust**

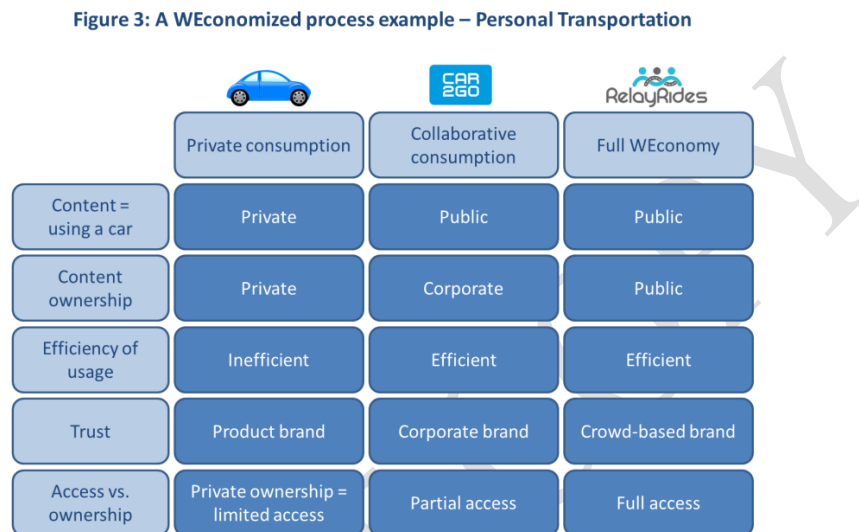
Utilizing a WEconomized platform for transportation indicates that users are willing to shift their trust from large organizations (such as a train or bus company) to the platform and its users (the “crowd”). Users of Uber, for example, trust it to rigorously and thoroughly screen every ridesharing and livery driver and passenger. And indeed, Uber enforces a three-step criminal background screening (in the US) and ongoing reviews of drivers' motor vehicle records. However, anonymous feedback and ratings from users are just as important in WEconomized platforms as they convey satisfaction or dissatisfaction from peers. This feature elevates the probability that the service provider has the desired qualities (such as professionalism or a highly maintained vehicle) and also projects on the consumer (ensuring that aggressive, violent, or disrespectful riders are deactivated from the system).

- **Social effects and implications**

Increasing the number of rideshare commuters and shifting drivers to car sharing could potentially take millions of cars off the road and save millions of wasted hours in congestion. This would also significantly reduce carbon emissions. Governmental

attempts to match such savings by establishing a new public transportation system could run well into the billions of dollars, while by contrast ridesharing costs almost nothing. In fact, it could save governments billions in road maintenance costs, road construction efforts and years of execution as a result of the reduced usage.

Figure 3 illustrates some of the above-mentioned traits depicting the non-WEconomized private consumption level, the collaborative consumption level (minus the user content production part), and the full WEconomized level (where prosumers may freely consume and provide the needed service).



Summary

The WEconomy (sometimes referred to as shared economy, peer-to-peer economy, mesh, collaborative economy, or collaborative consumption) is a rising socio-economic system centered on crowd-sharing of human and physical resources. It includes the establishment of platforms that allow for the shared creation, production, distribution, trade and consumption of goods and services by an open array and wide variety of peers (both people and organizations). These systems leverage information technology and WEconomized content (in most cases, relatively expensive goods or services that are inefficiently utilized or under-used) to empower individuals, corporations, non-profits and governments.

These WEconomized platforms offer the crowd access to resources (rather than ownership), allow for viral growth, increase efficiency through the establishment of crowd-based trust (as opposed to trust in an organization's brand), and often allow consumers opportunities to also produce and monetize upon their resources. The outcome of WEconomized platforms is often considerable, as it increases efficiency and diversity; spurs alternatives not previously evident, and decentralizes industries by shifting some of the market power of pivotal players to the users. Lastly, such platforms offer substantial social and environmental benefits, both directly and indirectly.

WEconomic platforms such as eBay, Uber, and Airbnb were presented and displayed along with many others, including players in evolving sectors such as peer-to-peer accommodation, personal transportation, peer-to-peer travel experiences, peer-to-peer task assignments, and car sharing, to name just a few.

Q&A

1. Is the WEconomy a disruptive phenomenon? Will it co-exist with or eradicate existing business models? Explain, using the case of the information and press industry (i.e., the transition in news media from newspaper to online press and public messaging, for example, Twitter, Facebook or WhatsApp). Pay specific attention to the question of value creation—who creates the value and who owns it? Who experiences the outcomes and side effects?
2. Do you expect any industries to be untouched by WEconomic models? If so, describe one such example in detail.
3. What potential risks and benefits may be associated with the growth of the WEconomy?
4. What regulatory challenges, if any, does the WEconomic model raise? Focus this question on a specific industry.

The WEconomy is an emerging and highly influential socio-economic phenomenon, revolutionizing many industries and evolutionizing others. According to PwC, global sharing economy revenues are expected to exceed \$335 billion by 2025, up from just \$15 billion in 2014^(a8). Platforms such as Facebook, YouTube, eBay, Waze and Kickstarter have already dramatically impacted the lives, perceptions and behaviors of billions of people, with other emerging platforms bound to follow. These platforms also fundamentally challenge cultural and societal norms, regulations and ethical conventions. The WEconomy offers an alternative in the face of increased worldwide centralization and escalating costs. It also raises numerous questions, as it is unclear how it will influence various industries and how such influence will unravel.

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