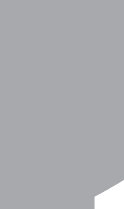
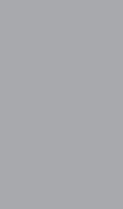
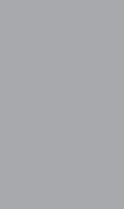
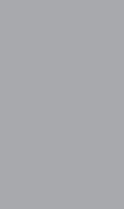
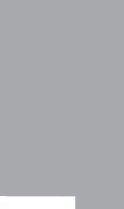
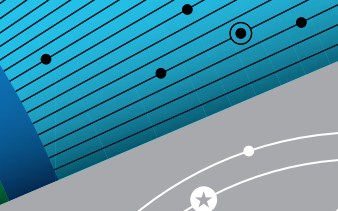


Your every online transaction, from renting  
requires you to establish your  
reputation dashboard will soon matter

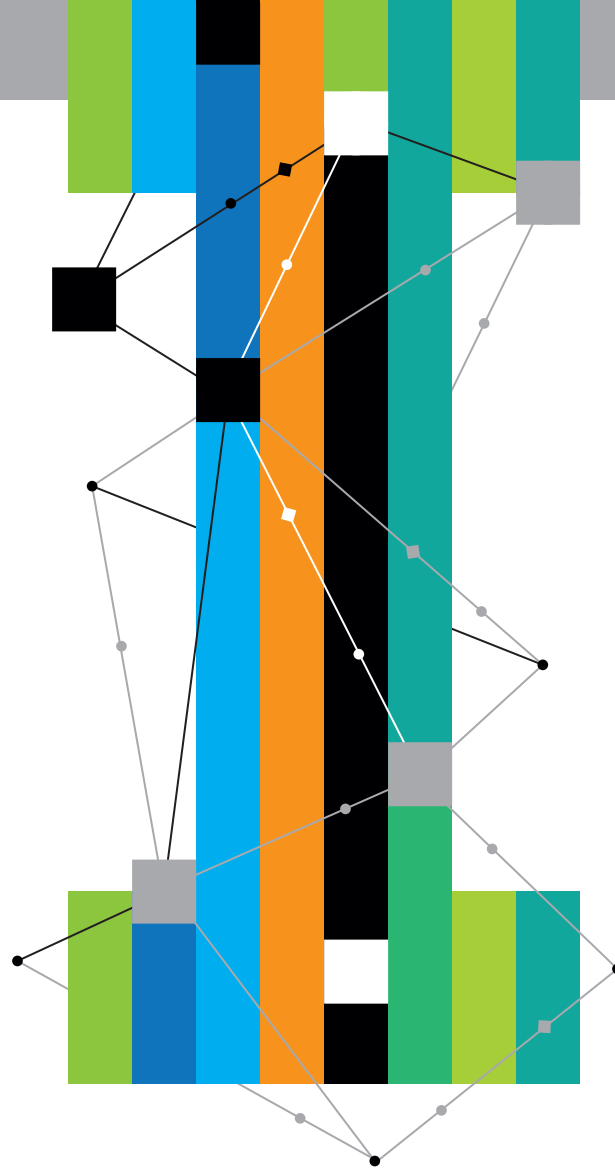
an Airbnb house to posting your CV,  
trustworthiness. That's why your personal  
more than your credit record.

ILLUSTRATION Carl De Torres

BY Rachel Botsman



WELCOME TO THE NEW REPUTATION ECONOMY



Imagine a world where banks take into account your online reputation alongside traditional credit ratings to determine your loan; where headhunters hire you based on the expertise you've demonstrated on online forums such as Quora; where your status from renting a house through Airbnb helps you become a trusted car renter on WhipCar; where your feedback on eBay can be used to get a head-start selling on Etsy; where traditional business cards are replaced by profiles of your digital trustworthiness, updated in real-time. Where reputation data becomes the window into how we behave, what motivates us, how our peers view us and ultimately whether we can or can't be trusted. Welcome to the reputation economy, where your online history becomes more powerful than your credit history.

The value of reputation is not a new concept to the online world: think star ratings

on Amazon, PowerSellers on eBay or reputation levels on games such as *World of Warcraft*. The difference today is our ability to capture data from across an array of digital services. With every trade we make, comment we leave, person we "friend", spammer we flag or badge we earn, we leave a trail of how well we can or can't be trusted.

An aggregated online reputation having a real-world value holds enormous potential for sectors where trust is fractured: banking; e-commerce, where value is exponentially increased by knowing who someone really is; peer-to-peer marketplaces, where a high degree of trust is required between strangers; and where a traditional approach based on disjointed information sources is currently inefficient, such as recruiting.

Joel Spolsky and Jeff Atwood, programmers and influential bloggers, saw the window of opportunity to reinvent the way

people found jobs through online reputation a few years ago. "Traditional wikis and Q&A platforms drove me crazy," Atwood says. If you had questions, say, on Chrome extensions, double pointers or Tiny Pixels, "you had to wade through endless conversations that went in every possible direction and where no comment is more or less important than the previous one. We realised there was a need to optimise the way people got answers, to unearth the little gems buried among a lot of dreck." The way to solve this seemed obvious to Atwood. "Have people vote on the best answers, and rank answers," he says.

In September 2008, Atwood and Spolsky launched Stack Overflow. A sort of Digg meets Wikipedia meets eBay, it is a platform for programmers to post detailed technical questions and receive answers from other programmers. "As soon as I touched it, I was hooked," says Marc Gravell, a 33-year-old user based near the Forest of Dean, who, with more than 315,000 points, has the site's second-highest reputation score. Stack Overflow reports more than 24 million unique visitors a month and around 5,500 questions are submitted to the site every day.

Voting on and editing questions are just two ways in which users can earn reputation points on Stack Overflow. "Reputation is earned by convincing your peers that you know what you are talking about," Spolsky says. "The reason why the site is 100 per cent spam-free and that around 80 per cent of all questions get answered is entirely a function of the community. The way we do that is as you earn more reputation points, you get more powers on the site."

Shortly after the site launched, Atwood and Spolsky heard that programmers were putting their Stack Overflow reputation scores on their CVs, and headhunters were searching the platform for developers with specific skills. "A CV tells you what schools they went to, what companies they worked for and how well they did on a standardised test when they were teenagers," Spolsky explains. "But if you read the writings of someone on Stack Overflow, you immediately know if they are a skilled programmer or not." In February 2011, Stack Overflow launched Careers 2.0, an invitation-only job board where companies can find skilled programmers.

Stack Overflow demonstrates how a person's reputation score created in one community is starting to have

value beyond the environments where it was built. By answering questions in an expert forum, you create more opportunities to find a better job.

Reputation information can also be used to look forward rather than back – for instance, using past actions to work out the likelihood of someone honouring an agreement in the future, which could be particularly useful in the financial services industry. "Any kind of business based on credit has to take into account people's ability to repay and their propensity to pay," says Errol Damelin, founder of Wonga, the online short-term cash lender (WIRED 06.11). "Even when they are able to repay, will they or won't they? It's a totally different question. That's when reputation really comes into play." Wonga claims to crunch on average 8,000 pieces of data to get a sense of how trustworthy its applicants are.

Brett King, author of *Bank 2.0* and founder of New York-based banking startup Movenbank, founded in 2010, agrees with Damelin. "Credit scores are a lagging indicator – they only look at what has happened in the past," he says. "They [credit agencies]

**"BANKS REJECT AROUND 50 PER CENT OF CREDIT APPLICATIONS. IT'S A STRANGE BUSINESS WHEN YOU REJECT HALF OF YOUR POTENTIAL CUSTOMERS AND DON'T EVEN TELL THEM WHY" – BRETT KING, MOVENBANK**

don't use data to look into whether your behaviour is risky or not now."

Movenbank's goal is not just to use technology to personalise the banking experience, but to reinvent the traditional risk model. King spent more than 18 years working for traditional banks and was struck by the opacity of much of the credit assessment process. "Most banks reject around 50 per cent of credit applications. It's a pretty strange business when you reject half of your potential customers and don't even tell them why."

At the heart of Movenbank is a concept call CRED. This takes into account an

individual's traditional credit score but also aspects such as their level of community involvement, social reputation and trust weighting. Do they have a good eBay rating? Do they send money peer-to-peer? It also measures their social connectivity – how many friends do they have on Facebook? Who are they connected to on LinkedIn? Do they have an influential Klout score? It combines this data, not just to assess their risk, but to measure the potential value of the customer. If you refer other customers from your network or pay your bills on time, your CRED score will go up. "It's not about your credit, but your credibility," King says.

A big question mark lies around people's readiness to open up their social data, but King believes consumers are willing to make a trade-off if they know how it is going to be used and what they will gain in return. "People are currently underusing their networks and reputation," King says. "I want to help people to understand and build their influence and reputation, and think of it as capital they can put to good use."

Social scientists have long been trying to quantify the value of reputation. In 2008, Norihiro Sadato, a researcher at the National Institute for Physiological Sciences in Aichi, Japan, along with a team of colleagues, wanted to determine whether we think about reputation and money in the same way, by mapping the neural response to different rewards. "Although we all intuitively know that a good reputation makes us feel good, the idea that good reputation is a reward has long been just an assumption in social sciences" Sadato says. "There has been no scientific proof."

In order to prove his hypothesis, Sadato devised an experiment: participants were told they were playing a simple gambling game, in which one of three cards would result in a cash payout. Using functional magnetic resonance imaging, the researchers monitored brain activity triggered when the subjects received a monetary reward. When the subjects returned on the second day, they were each shown a picture of their face, with a one-word descriptor underneath that a panel of strangers had supposedly written about them. Some of the descriptions were positive, such as "trustworthy", others neutral, such as "patient", and others negative. When participants heard they had a positive reputa-

## THE NEW IDENTITY BROKERS

A RAFT OF SERVICES HAVE BEEN FOUNDED OVER THE PAST YEAR, ALL PROMISING TO MONITOR AND POLICE YOUR ONLINE REPUTATION

1

**CONNECT.ME**  
Aims to turn your social profile into a personal reputation network, making it easier to find trustworthy people, from accountants to babysitters. (In beta.)

2

**TRU.LY**  
Enables users to verify their digital identity against their real-world one by authenticating social profile data against official government data.

3

**LEGIT**  
Correlates reputation data from a number of P2P marketplaces into a "LegitScore" and a report that summarises user behaviours. (In beta.)

4

**TRUSTCLOUD**  
Aggregates public data and correlates it into a "TrustScore" that measures online behaviour. Its aim: to let you own your online trustworthiness.

5

**SCAFFOLD**  
Builds easy-to-use APIs and tools that enable P2P marketplaces to conduct background checks and verify a user's identity and reputation.

6

**CONFIDO**  
Wants to become the "FICO of social commerce" by providing a portable profile that users can carry across P2P marketplaces. (In beta.)

7

**BRIEFLY**  
Working on combining indicators from across social networks and offline activities to create a trust profile and score. (In beta.)

8

**REPUTATE**  
Aims to create a snapshot of a person's online reputation by aggregating reviews and ratings across P2P marketplaces. (In beta.)

500

Number of blogs that need to link to your blog over six months, in order to make it on to technorati.com's high-authority site-list.

20%

The discount on final fees for eBay's top-rated Power Sellers. Power Sellers need at least 98 per cent positive feedback.

tion, a part of the brain, the striatum, lit up. The same part would also light up if they had won money. As Sadato puts it: "The implication of our study is that different types of reward are coded by the same currency system." In other words, our brains neurologically compute personal reputation to be as valuable as money.

Personal reputation has been a means of making socioeconomic decisions for thousands of years. The difference today is that network technologies are digitally enabling the trust we used to experience face-to-face – meaning that interactions and exchanges are taking place between total strangers.

Trust and reputation become acutely important in peer-to-peer marketplaces

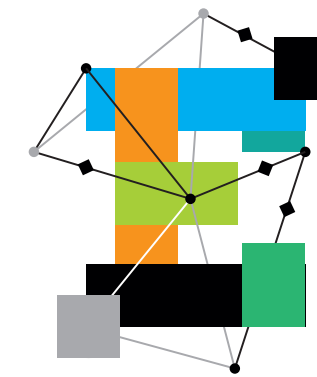
trusting the idea (staying in or renting the homes of complete strangers), trusting the system (Airbnb) and trusting the recipient. "By the time a host has their 20th guest on Airbnb, they start blindly accepting people. They don't need to talk on the phone or need lots of information," he explains. "You start trusting people. So really what we are doing is not just renting out spaces but helping to change the way people trust humanity."

**Chesky is aware of the value of the data users are building on Airbnb.** "The platforms that will become the centre-

reputation on a competitor's platform, they can feel locked in. "I imagine that people will leverage their Airbnb reputation in ways that we can't yet imagine," Chesky says. "Airbnb could become a story of your life and that story should be able to follow you." A wave of startups, including Connect.Me, TrustCloud, TrustRank, Legit and WhyTrusted, are trying to solve this problem by designing systems that correlate reputation data (see box, previous page). By building a system based on "reputation API" – a combination of a user's activity, ratings and reviews across sites – Legit is working to build a service that gives users a score from zero to 100. In trying to create a universal metric for a person's trustworthiness, they are trying to "become the credit system of the sharing economy", says Jeremy Barton, the 27-year-old San Francisco-based cofounder of Legit.

standardised format for how they frame and collect reputation data. "We think companies will share reputation data for the same reasons banks give credit data to credit bureaux," says Rob Boyle, Legit cofounder and CTO. "It is beneficial for one company to give up their slice of reputation data if in return they get access to the bigger picture: aggregated data from other companies."

When asked for the sources upon which a user's trustworthiness is based, reputation startups list the usual suspects – LinkedIn, Facebook, Twitter – but refuse to go further, saying that the algorithm is proprietary. For these trust-validation services to become credible they're going to need to differentiate their products from those offered by companies such as Peer-Index, Kred and Klout, which collect digital information from different social-media sources. Their metrics – who I "follow", who



**arly influence and reputation aggregators** will undoubtedly learn by trial and error – but they will also face the significant challenge of pioneering the use of reputation data in a responsible way. And there's a challenge beyond that: reputation is largely contextual, so it's tricky to transport it to other situations. Sure,

It's the culmination of many layers of reputation you build in different places that genuinely reflect who you are as a person and figuring out exactly how that carries value in a variety of contexts.

The most basic level is verification of your true identity – is this person a real person? Are they are who they say they are? It's also foreseeable that data giving a good indicator of character, such as reliability and helpfulness, in one marketplace is a baseline of how you will behave in another marketplace. Do we do what we say we are going to do? How well do we respect another person's property? Can we be trusted to pay on time? But the big, sticky area around porting reputation lies in the space of shared interests, values and connections that can be pulled from the social graph. Currently platforms such as Airbnb are only using this data to connect a person with some kind of mutual connection, such as going to the same university. The larger opportunity is carrying social matches based on like-minded individuals across marketplaces.

These multifaceted sources of reputation will not be a single algorithm: we will be able to perform a Google- or Facebook-like search and see a picture of a person's behaviour in many different contexts, over a length of time. Slivers of data that have until now lived in secluded isolation online will be available in one place. Answers on Quora, reviews on TripAdvisor, comments on Amazon, feedback on Airbnb, videos posted on YouTube, social groups joined, or presentations on SlideShare; as well as a history and real-time stream of who has trusted you, when, where and why. The whole package will come together in your personal reputation dashboard, painting a comprehensive, definitive picture of your intentions, capabilities and values.

"We are only at day one in the whole idea of global reputation," Chesky says. "There really could one day be this reputation economy that allows us to do so many different activities that we can't even imagine right now."

By the end of the decade, a good online reputation could be the most valuable currency in your possession. ■

*Rachel Botsman is social innovator, writer and speaker who is writing a book on reputation capital. She wrote about conscientious consumption in 03.12*

## THE TEN-STEP REPUTATION PLAN

WANT TO BE A TRUSTED MEMBER OF THE ONLINE COMMUNITY? FOLLOW THESE TIPS ON BUILDING YOUR REPUTATION CAPITAL

1

### BE A MAVEN

Demonstrate your knowledge on something – music, maths, movies – on MavenSay, Mahalo or StackExchange.

2

### GET TAGGING

Use a platform such as Skills.to to tag your strengths and make it easy for others to know at a glance what you can do.

3

### BECOME SUPER AT SOMETHING

Be a great host, runner, seller, renter, lender, in an online marketplace such as Airbnb, WhipCar or Zopa.

4

### BUILD A PORTFOLIO

Make a note of references, ratings and reviews on various platforms that give a snapshot of your online value.

5

### COLLECT TRUSTED OPINIONS

Ask people who know and trust you to write about your skills and trustworthiness on platforms such as LinkedIn.

6

### FOLLOW, LIKE, BEFRIEND

Concentrate on building a deep social network on at least one platform. Interact, follow and "like" on a daily basis.

7

### REVIEW AND RECOMMEND

Get your name out there: be active in writing reviews and vouching for friends and colleagues on a range of websites.

8

### MONETISE YOUR PROFILE

Build some kind of virtual currency account, whether it's Linden Dollars, Gold Coins, IMVU or Facebook Credits.

9

### SPRING CLEAN YOUR REPUTATION

Use a service such as Reputation.com or Veribo to clean up any misleading or false information about you.

10

### GAIN SOME SOCIAL CAPITAL

Become an active part of your local community and demonstrate you are trustworthy in your personal life.

such as WhipCar and Airbnb, where members are taking a risk renting out their cars or their homes. The difference between these community-driven marketplaces and e-commerce sites is that they are connecting real people with real names in the offline world. When you are trading peer-to-peer, you can't count on traditional credit scores. A different measurement is needed. Reputation fills this gap because it's the ultimate output of how much a community trusts you.

"Reputation allows you to bring over some of the history of who you are as a person, whether it's in the digital or the real world," says Brian Chesky, cofounder and CEO of Airbnb, the peer-to-peer marketplace that matches people with space to rent with those looking for accommodation. "What has surprised me the most about reputation is that the need for it actually goes down as the marketplace matures."

In other words, a host's or a guest's reputation gets users comfortable with

piece of online reputation are the ones that create some kind of meaningful relationships, and carry the data on defining who you really are as a person," says the 30-year-old. He believes, however, that Airbnb has a trust currency that is "super interesting for others because the transactions are in person and not just online. We capture data about people's real-world behaviours that could not be captured on any other website."

But this wealth of data raises an important question – who owns our reputation? Shouldn't our hard-earned online status be portable? If you're a SuperHost on Airbnb, shouldn't you be able to use that reputation to, say, get a loan, or start selling on Etsy? "I know we are creating a really important currency that could be useful outside of Airbnb," Chesky says.

Presently, reputation data doesn't transfer between verticals. Consequently, if a host has a high rating on Airbnb, but no

His company, and other reputation ventures, face some big challenges if they are to become, effectively, the PayPal of trust. The most obvious is coming up with algorithms that can't be easily gamed or polluted by trolls. And then there's the critical hurdle of convincing online marketplaces not just to open up their reputation vaults, but create a

**"IT IS BENEFICIAL FOR A COMPANY TO GIVE UP ITS SLICE OF REPUTATION DATA IF IN RETURN IT GETS ACCESS TO THE BIGGER PICTURE: DATA FROM OTHER COMPANIES"**  
– ROB BOYLE, LEGIT

"follows" me, who I know professionally, where I check in, what I chat about – are measuring social influence, not reputation. "Influence measures your ability to drag someone into action," says Joe Fernandez, cofounder of San Francisco-based Klout (WIRED 08.12). "Reputation is an indicator of whether a person is good or bad and, ultimately, are they trustworthy?"

Influence aggregators are trailblazers for the bigger reputation economy. Yes, it's easy to point out that a Klout score is merely a popularity contest, but what the likes of Klout and PeerIndex are starting to show is that it's possible to extract value from the information exchanged by groups across networks. "Think about people on social media," says Azeem Azhar, the 39-year-old founder of PeerIndex. "They are spending around 500 minutes a month investing time on their networks. It's like they are building a living CV across their lives, so it makes it important for them to get value out of that."

you might be an impeccable Airbnb host, but does that mean I would trust you with my car? "When you build reputation in a specific system," explains Coye Cheshire, an associate professor at the UC Berkeley School of Information, whose work focuses on trust dynamics in online interactions, "it must be seen in light of the social dynamics, the population and the unique characteristics of that system."

Many of the ventures starting to make strides in the reputation economy are measuring different dimensions of reputation. On Stack Overflow, for instance, reputation is a measure of knowledge; on Airbnb it's a measure of trust; on Wonga it's a measure of propensity to pay; on Klout and PeerIndex it's a measure of influence.

Reputation capital is not about combining a selection of different measures into a single number – people are too nuanced and complex to be distilled into single digits or binary ratings.

57%

Percentage, in 2010, of adult internet-users in the US who searched for information about themselves. In 2006, it was 47 per cent.