

IN 2017, A COMPANY CALLED QUID LANDED ON CNBC's Disrupter 50 list and broke onto Deloitte's Technology Fast 500 rankings at No. 208, with three-year growth of 493 percent. That followed a 2016 Technology Pioneer Award from the World Economic Forum.

With a roster of clients that range from NASA and Walmart to Samsung and various media giants, buzz about Quid is intensifying. Its technology has proven effective at helping battle disease, identify fake news and bolster cybersecurity, along with the more routine monitoring of clients' competitors.

Quid may be the world's most voracious reader. The technology it employs devours text in volumes and at a speed no man will ever equal (even if humankind, as some experts say, yet engages only a fraction of its brain). Quid scours corporate filings, scientific journals, books, government databases, social media and media of every other sort. Then its systems – featuring nine patents – chart patterns, make connections and detect trends. If there were a Marvel Super Nerd, its name might be Quid.

The résumé of Quid's Co-Founder and CEO Bob Goodson bears serious Silicon Valley credentials. He was the first employee of Yelp, and a founder of YouNoodle. In launching Quid in 2010, Mr. Goodson attracted capital from the likes of Peter Thiel's and Sean Parker's Founders Fund and from Quid Chairman Charles Lho, publisher of Korea's largest English-language newspaper. Michael Patsalos-Fox, McKinsey's former Chairman of the Americas, also sits on Quid's

SILICON VALLEY

SHAKESPEARE

BOB GOODSON is CEO of Quid, a tech company that can trawl through vast troves of words to find patterns and connections humans can't. He speaks with Brunswick's **ANTONIO ORTOLANI**

board, and is an investor. But Mr. Goodson's route to Silicon Valley was via academia, not tech.

A British native who studied literature on scholarship at Oxford, he says that Quid was founded in large part upon his love of language. In analyzing medieval poetry, he discovered a need to look at language in a new way.

"The world is awash in data – most of it numbers," he told the World Economic Forum in 2016. "But floating along in the sea of data is language, arguably the most important way in which humans make sense of the world."

When did it occur to you to subject words to data analysis?

My first degree was in literature and philosophy. I went on to grad school to focus on language theory, because I had this curiosity about what language is. I was in grad school in Oxford, on track to be a professor of language, when I came across challenges in reading that I assumed had been solved by computer scientists, for instance the search for patterns across large volumes of text. But it hadn't been done. This was about 2002. It seemed to me that there was a missing field where computer science meets the arts.

What fascinated me was that the way we read has not changed for a couple of thousand years. Despite the rise of computing, we haven't made any real changes to how we read. Even though what we read today is on a web page, your eyes are still scanning one line at a time. And yet we have way more content around us than ever; it's been growing exponentially

now for over 15 years. There are so many things that we want to understand in the world around us, I would say that traditional ways of reading no longer really serve us effectively. Even Google just points you to a specific web page that you can go read as you would an index in a book from a thousand years ago. At Quid, we're looking for ways to help people read and consume information on a much larger scale using a combination of visual and verbal cues. And trying to find completely new



PHOTOGRAPH: COURTESY OF QUID

ways to read large amounts of text that don't rely on traditional methods.

Methods beyond traditional speed reading?

As a child I bought a couple of books on speed reading and taught myself basic techniques like using your finger on the page, only reading the middle part of each line, because the brain can actually fill in the left and the right. Now I definitely look at reading differently. I don't see it in such a linear way as I used

to. I occasionally go through the data science work that we do and get a glimpse of methods that I think will eventually become a lot more popular. Like seeing patterns across entities. And extracting events across large corpuses of information. Seeing explicit and implicit connections between things. And being able to track and discern concepts that are related across the corpus.

In all these things, machines have a bit of an edge. And there are certain things they can do instantly

"Today, if you wanted to read everything that's published in one day, it would take over 90 years of continuous reading. That's just in English"

BOB GOODSON

Bob Goodson is Co-Founder and CEO of Quid, an AI company that uses a search engine to analyze and visualize the world's written content. Goodson was the first employee at Yelp. He has a Master of Philosophy degree in Medieval English Literature from the University of Oxford.

ANTONIO ORTOLANI is a Director specializing in global media analytics and measurement. He's based in New York.

that would take us many hours. I can see it moving toward a computer-and-human hybrid, where we put the best of those two together. There are certainly things the human brain can do that computing is very, very far away from, and may never catch up. And so how do we lean on the best of both?

What was your vision for Quid?

When Quid got started, I didn't know if it should be a consumer product, or B2B. Then three large companies approached me in the first six months or so, laid their problems on the table, and said, "Look, we don't feel we have a good solution to these problems." For Quid, taking on those problems was a massive step in product development because we could see these were problems other companies were probably struggling with, so we focused on honing our platform and data to answer those questions.

We figured out the 10 or so most important questions that companies and governments have. They're mostly questions that any large organization would have. What are our competitors doing?

That is a question that even governments are asking: What are other players like me doing? It's hard to answer, and it's a question you have to keep asking, because if you answer it in February, there's new stuff happening with your competitors in March – and there are new competitors.

It used to be that a large company could know who its competitors are, the two or three that matter. But technology has disrupted that. Quid is used by various players in the automotive industry, where there are now potentially 500 players that the traditional industry needs to monitor.

Have there been results that surprised you?

Oh, hundreds of cases over the years. And I'm sure thousands more that we don't ever hear about, because the software is deployed with the clients. I'm trying to think of one I can discuss, because obviously we're under an NDA with our clients.

There's an analysis we did for the UN a few years ago. The UN wanted to know why people in certain countries either weren't adopting or had stopped adopting vaccines. Why weren't people in Pakistan, Kenya and a few other countries adopting them, even though the vaccines were available? It was a shift, this problem had just started. And it was causing a potentially huge world health problem.

Now, the traditional research method would have had you get on the ground and run surveys on a large scale with people, trying to understand their attitudes and ideas around vaccines. And you'd be

looking at three to six months in order to get those insights back, at the potential cost of a lot of lives.

What the UN did was, it ran the news, it ran social media coverage, through Quid, and when we looked at all the discussion around vaccines we found that people had developed a skepticism about vaccines because of the outbreak of Ebola, for which there was no vaccine. It was very surprising.

Using Quid, it took basically three days to figure this out. And then the UN was able to act on this information. I don't know if that connection between Ebola and vaccine skepticism would ever have been found through surveys.

For clients in financial situations, how can text analytics feed into investment decisions?

We have the world's largest dataset of venture-funded companies, with global coverage for both private and public companies, including financial information and rich written descriptions. You can search Quid using the precise language you want to find those companies, you're not restricted to categories, you can search any words, and we'll find the companies who are the most relevant strategic partners, acquisition targets, competitors, etc. And then we overlay the financial flows – so you can see the capital flows in the different spaces. That's a very powerful combination. So that continues to be one of our most popular use cases. And it's used heavily in corporate strategy and for monitoring the many competitors companies face these days.

Can Quid be part of the solution to the problem of fake news?

Absolutely. We recently partnered with The Wall Street Journal on an investigation that found thousands of fake comments on the Federal Communications Commission website.

And Quid is a solution to the overabundance of news. Twenty years ago, pre-web, you could get up in the morning and read a newspaper over breakfast and get an overview of everything that's happening in the world. And for the most part everyone read the same newspapers, so you could have a meaningful exchange with your colleagues that day about what happened. Today, if you wanted to read everything that's published in one day, it would take over 90 years of continuous reading. That's just in English.

Are you an outlier as a Silicon Valley executive who studied literature, the liberal arts?

Two entrepreneurs that I admire are Reid Hoffman, the founder of LinkedIn, and Stewart Butterfield, the

founder of Flickr and Slack. Reid studied philosophy at Oxford and Stewart studied philosophy at Cambridge; they're both students of literature.

I was on a panel with Reid once where we were talking to students, and I asked him a question about his study of philosophy, and he said that the analytic methods he learned in studying philosophical arguments were a great training ground for starting and running a business, for the real-world application of logic, and for breaking down arguments into their distinct parts.

Where do you stand in the debate about whether liberal arts degrees are worthless next to the sciences or computer programming?

Computer science degrees are very important. They have a role. But there's so much you can learn in your free time and, in fact, most programmers are people who learned it as a hobby. I taught myself to program when I was about 8, when I started programming video games.

It's not so much a question of do you get this degree or that degree. A degree ought to be one percent of everything you learn.

That traditional model of training, learning, working and then retiring won't be relevant any more. One reason is that we're going to live way longer. We now have 60-year careers. If you graduate at 21 or 25 as an accountant or a lawyer, those skills are probably not going to hold you for 60 years. In that span, entire professions will cease to exist. How do we set up our careers – how do we set up our companies – to be based on continuous training?

When it comes to innovation, it helps to have a wider combination of interests, knowledge and experiences than other people looking at the same problem. If everyone at the table trying to solve a problem has the same background, education and experience, then you're going to get a lot of the same answers. If you want a competitive edge, a vast array of knowledge, interests and experience positions you to see a solution that isn't obvious to everyone else.

How does one develop a wide range of expertise and experience?

When someone, especially an adult, gets intrigued by something, it's easy to say, "Well, why would I learn that? It doesn't fit with my career." I'd recommend taking away that filter. When I was a teenager I developed this habit that I still have of going really deep into topics that interest me without asking myself why. Last year, I started training wild birds. I have no idea why.

MAPPING THE ONLINE CONVERSATION

MILLENNIALS & CARS: What's been written about those topics, what are the common threads, and what phrases tend to appear most often? Answering those questions would be a daunting prospect for a human researcher.

It is precisely problems like these that Quid is designed to address. Its analysis begins with individual articles represented by nodes. As the platform begins

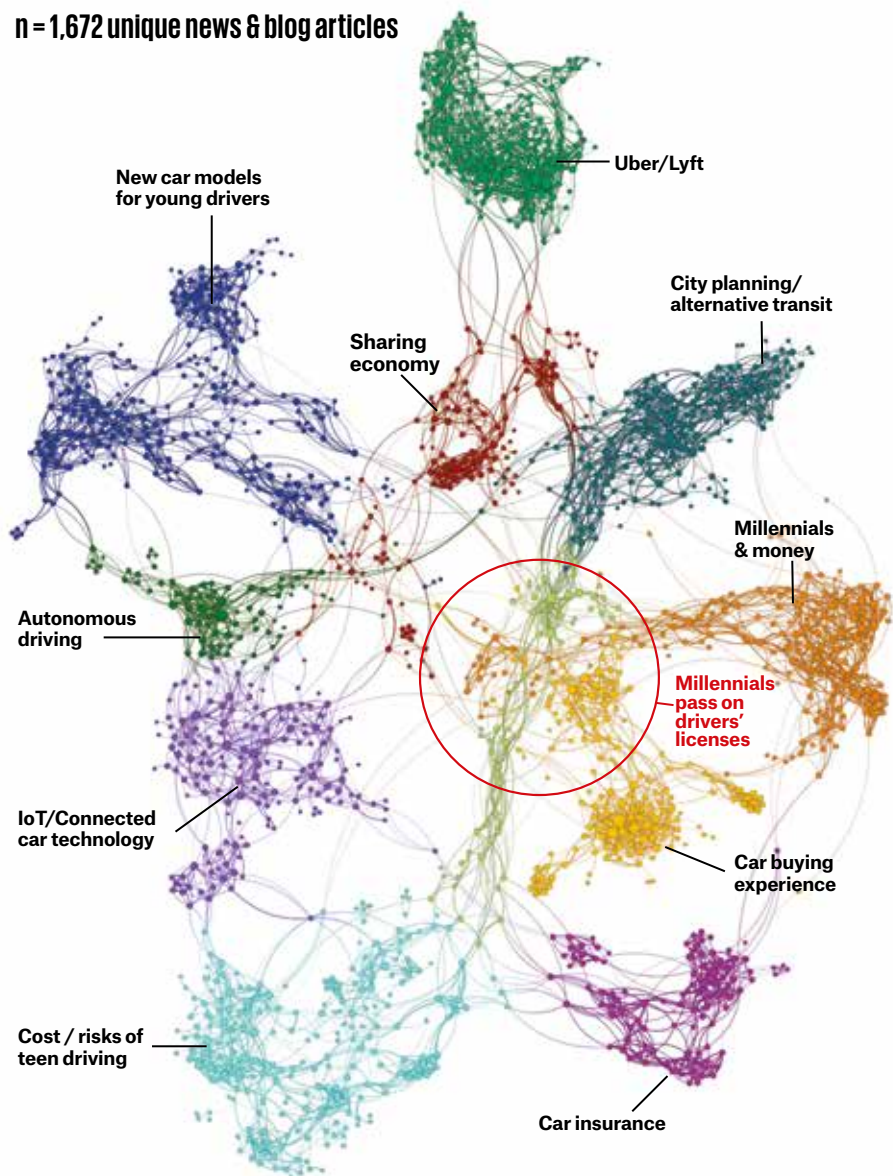
to uncover shared language, it groups articles into clusters that represent a wider theme or topic. Different colors distinguish the different clusters.

Once the clusters have been defined, they are visualized on a network map that categorizes individual articles for analysis at a glance – without having to have read thousands of articles. Clusters in the middle of the map are the most

central to the topic; those toward the periphery are less so. Some clusters interconnect, indicating shared characteristics.

The map below shows few strong connections in the center, reinforcing a growing awareness that diversity among Millennials makes their behavior difficult to predict. The map shows, however, that one of the few things they have in common is a disinterest in driving and owning cars.

n = 1,672 unique news & blog articles



Source: Quid, Inc. 2015