The Cairo Review Interview

"People Need Tools"

Twitter co-founders Biz Stone and Evan Williams explain the power of social networking, and the promise and perils of the post-Twitter world.

At first, Twitter seemed like another amusement for Internet geeks. It's a service that enables you to send brief digital messages of no more than one hundred forty characters via the Internet for whoever might like to hear what you are thinking or doing. *("My cat is making the cutest face!")* But when you realize that your 'tweets' can be read not only by a few friends, but by millions of people in your country and around the world *("Hey, join the revolution in Tahrir Square!"),* that's no joke.

Just five years after tech entrepreneurs Jack Dorsey, Biz Stone, and Evan Williams brainstormed the idea, one hundred million users log in to Twitter every month—half of those on a daily basis—to transmit messages for others to read, or to view the latest tweets posted on the Twitter pages of organizations, groups, businesses, and individuals they want to be connected with. Hollywood celebrities like Ashton Kutcher (eight million followers on Twitter) and Charlie Sheen (five million) helped popularize Twitter by using the service for self-promotion, but Twitter is a proven tool for informing and organizing people around serious issues. Eleven million users get news flashes from CNN via Twitter. Barack Obama (eleven million followers) used Twitter to rally financial contributors and supporters for his successful 2008 run for the White House. Twitter, of course, is credited with assisting antigovernment protesters during Iran's Green Revolution in 2009 and the Arab Spring of 2011.

While Twitter embodies the awesome force of social networking on the Internet, it's cofounders believe that they have only scratched the surface of what is possible. On June 28 at the Aspen Ideas Festival 2011 in Aspen, Colorado, Aspen Institute President and CEO Walter Isaacson spoke with Stone and Williams on the topic "What Is Next For The Internet?"

WALTER ISAACSON: *We are actually going to start with a piece of news about the future of the Internet and seriously, a significant piece of news.*

◁ Evan Williams and Biz Stone at Twitter's headquarters, San Francisco, May 11, 2009. *Robyn Twomey/ Corbis Outline*

BIZ STONE: Evan and I and our longtime collaborator, Jason Goldman—our dream was always to build our own company where we get to make whatever we want, whatever we think is going to be helpful to the world and make the world a better place. And so we put up a website today and we're calling our company "The Obvious Corporation." And we don't have anything specific to say about exactly what we're going to be working on just yet. We're not ready to reveal that. But we're excited to announce that we have started a new company.

EVAN WILLIAMS: It's actually a relaunch of sorts. "Obvious" was the company that incubated Twitter before spinning it off into its own company. The original idea with Obvious was that we were going to create multiple things and see where they went and we didn't end up doing that many things. What we're really excited about is building systems that help people work together to improve the world in various ways. We think that's really so much of what the Internet promises. At least the bright side is people working together to become greater than they could individually or greater than even organizations and institutions can be.

WALTER ISAACSON: *You're talking about launching a few products of Twitter-like quality that would help people collaborate?*

EVAN WILLIAMS: And collaborate could mean various things and Twitter-like quality could mean various things. Our goal is to have impact. If we get as lucky as we did with Twitter, that would be great. There's a whole wave of new companies and services starting today that are about helping people work together to do things. It's one thing to just find like-minded people and talk about stuff. It's another thing to find like-minded people and then do stuff. And I think that's what we've seen in the Middle East. We've seen much smaller examples throughout the history of Twitter, from stories we heard early on about people saying, "Hey, it's Christmas time. There's a bunch of homeless people on the street. Let's go give them blankets and food. Who's with me?" We heard stories like this and we were convinced that that wouldn't have happened if people didn't have this . . . communication channel—that these thoughts get blocked in people's minds and they don't get out there unless you give them mechanisms to connect to other like-minded people. So that scratches the surface of what's possible in much bigger arenas, I think.

BIZ STONE: It seems like we're just beginning to scratch the surface on the Internet and on specific applications like Kickstarter and to an extent, DonorsChoose and things like this that are allowing people to virtually collaborate to effect real world positive change. And in many ways, Twitter has done that. It's not entirely what it's about, but it has done that in certain cases. But there's a proliferation of startups and of apps that are doing that now.

WALTER ISAACSON: *In some ways, this is the history of the Internet because it was started as a collaborative medium and it became something different for a while, became a "put your stuff out there" medium.*

EVAN WILLIAMS: It absolutely did. [The] original goal was to help scientists collaborate. And then it took on this very, very commercial mode—where the default paradigm for commerce was one-way and we'll push stuff out to people and they will consume. They will buy things and they will consume our media and they will consume our advertisements. And then there's a next wave where we realize, well, this is a two-way medium and people don't just consume, they participate, they create media themselves. And there's many great examples of people collaborating on the Internet to create software, to create information like Wikipedia. I think bringing that collaboration back to the real world is sort of the next phase that we're picturing.

BIZ STONE: The way that I sort of simply think about it in my mind is that there was this pure collaborative seed in the very beginning at CERN [European Organization for Nuclear Research], right? Then blogging came along and some little seedlings started to sprout through the cracks and we lowered the barrier to self-publishing. So the democratization of information suddenly flourished. And now we're entering that sort of third phase where it's not just an overwhelming amount of information. There's people working on relevance to get you the best information as quick as possible, but also this third phase includes taking the virtual and making it real and making true, real, positive global changes in the world . . . Everyone thought for the first nine months of Twitter, everyone thought it was just totally useless. And they said it to our face every day and finally, one day, Ev just got frustrated and said, "Well, so is ice cream. Do you want us to ban ice cream and all joy?"

WALTER ISAACSON: *Before we get into the future of the Internet, let me pick back on something you said, which was the Arab Spring. [New Yorker writer] Malcolm Gladwell comes out with his argument you know, that the revolution will not be tweeted. This is all bull.*

BIZ STONE: His argument was these revolutions aren't Twitter revolutions. No one said they were. So that was weird. Basically, I wrote a rebuttal that said, look, agreed. Huge, major change like the civil rights movement comes from people. People need tools, you know. The telephone was a big part of bringing down the Berlin Wall, but the telephone didn't bring down the Berlin Wall. I just think that his argument was kind of a straw man thing. I just think he was angry that people kept writing Twitter into their headlines. And so he said, "Look, Twitter had nothing to do with it." But in fact, it did have a sideline part because these people were ready to speak up. Twitter was a tool that helped them realize that others felt like them and it emboldened them

and allowed them to feel like, "Okay, maybe we can do this." And so it has a role as a simple tool but at the same time, Twitter must remain a neutral technology, not picking sides, not getting involved, not celebrating any part of helping in any success or anything like that.

WALTER ISAACSON: *Well, you call it a neutral technology, but let me ask you a question. Do you think from Gutenberg to Twitter, the technologies that enable a freer flow of information and communication inevitably bend the arc of history towards democracy?*
EVAN WILLIAMS: What do you think? Yeah, I want to know your answer to that.

WALTER ISAACSON: *The answer is yes. I mean it empowers and enables people. That makes democracy. It's not neutral. It doesn't empower authoritarian regimes.*
BIZ STONE: Well, you could probably use it to do that. But it wouldn't be as effective, I don't think. But the thing we're facing now is that, you know, like the State Department is suddenly very cozy with Twitter because they were like, "Oh, wow, we were trying to get this done with AK-47s and you guys kind of did it with tweets. Can we be friends?" But I maintain that it has to be a neutral technology because there are different forms of democracy. And you don't want your company, you don't want your technology, you don't want Twitter to look like it's simply a tool to spread the United States' version of democracy around the world. You know, you want it to help for good, but you don't want it to look like you're in the pocket of the U.S. government. And so we try to do that as much as we can, just to try to speak out and say that they have no access to our decision-making capabilities.
EVAN WILLIAMS: One thing that's changed a lot is the global nature of the Internet. And now if you create a consumer web service, most of your users are going to be outside the United States. It doesn't matter if you're in the heart of Silicon Valley and launch only in English. Most of your users are outside the U.S. because most of the people are outside the U.S. and that changes how you think about things from kind of the get-go and it comes up in all kinds of policy decisions as you get big. And then the State Department starts calling and all kinds of other weird things happen when you're a company of, like, forty people and why is this happening. But I think an interesting factor in designing anything these days is that if you can make something truly global, that it's more global than it was even five or ten years ago with digital networks. I want to create and launch Twitter in Korean in January. And Twitter and maybe Facebook now are the first two services to grow substantially in Korea that are not from Korea. And even though they're very advanced, they have high-speed Internet connections, they have lots of home-grown Internet services, there is something culturally that kept most of the users on the home-grown sites. But people want

to be connected to the global network . So you can't separate the stuff anymore. It has to be part of one massive system. Which also leads to other interesting things like the Internet becoming more closed and less decentralized. But that's another topic.

WALTER ISAACSON: *Is there a problem with the future of the Internet that you think it might become more closed?*
EVAN WILLIAMS: Absolutely. I think there are a lot of trends that push it toward being a more closed environment, and specifically, the economics of the centralized systems and the user-experience benefits of centralized systems are very powerful.

WALTER ISAACSON: *Are you talking about Apple, for example?*
EVAN WILLIAMS: Apple is a good example, as is Facebook, as is YouTube even. Let's take YouTube as a less talked-about example. YouTube isn't closed but it is very centralized. And if ten years ago, if you would have talked to anyone, any technologist, they would have said obviously, video is coming to the Internet as bandwidth increases and storage costs decrease. But at the time, no one I know would have said, yes, and 80 percent of the video views are going to be run through one service. That would have been a strange thought at the time because the Internet model was decentralization. Every website, every newspaper, everyone has their own island on the Internet. So why wouldn't video work the same way? And now we're looking at a world where if you want to publish a video, you'd probably publish it on YouTube whether you're a major media outlet—[you] may be published on your own site, but lots of organizations publish on YouTube partly at first, it's because it was a lot easier. But now it's because that's where the viewers are. And so it has big network effects and those network effects will keep it, make it more and more powerful, and the same thing with Facebook and the same thing with Apple now. If you want to write a mobile phone app, then you're going to publish through Apple's store because that's the only way to get it on the phone and because that's great for users. And it's the same thing over and over again… that the user experience is superior if it's centralized and then the reach is better and the economics are better. So what we're getting is a platform where there's a few major players that are getting bigger and bigger and there's opportunities for little guys to be on these major players' platforms, but I think it's going to be more dependent on these platforms than they were before.

WALTER ISAACSON: *Well, couldn't you put Twitter on that list?*
EVAN WILLIAMS: Yes, hopefully.
BIZ STONE: It's almost like there's a bunch of different Internets and you just pick the one you want to work with.

WALTER ISAACSON: *So we have moved. I mean by Internet, most of us have grown up thinking [of] the Internet, which it has been for twenty years, as basically HTTP web-based Internet. So we've had twenty years of a web-based Internet. Now you're saying we're moving towards a social network-based Internet, but there will be certain platforms like Facebook or whatever, YouTube, and that will be more centrally controlled perhaps?*

BIZ STONE: You could go on your iPod Touch and just not have Safari and still get almost everything you need. You get maps. You can get Wikipedia. I mean everything's on there.

EVAN WILLIAMS: But I think the distinction that's important isn't whether it's HTTP. Most of the apps use HTTP in the background. And so that confuses the story a little bit. I think what's important is the paradigm has shifted from a completely decentralized Internet to a more and more centralized Internet. So you have to go through the apps store to get an app on your phone. That's very, very different than anyone can put up a website. And if a site uses Facebook Connect or Twitter accounts to log into their website because people are automatically having accounts and even tapping their social graph, that's very, very different than the days when you created everything from scratch. And I liken it to in the early days everybody had sort of an island and they tried to live on that island, they tried to attract visitors. They tried to attract tourists to the island. Tourists would show up and they'd issue them a passport and feed them whatever goods, you know, whatever coconuts they grew on that island. And then over time, a lot of islands were like, well, we can't be completely self-sustainable. So we're going to import things and so some of the first things they imported were advertising networks. We're going to import monetization and we're going to import search. And it kind of stopped there but, you know, you could import your CMS [Content Management System]. So that's what Blogger did really. It had a centralized CMS and published out to lots of different places. And now you can import your identity, now people are saying, screw, we don't even need to own our land. We're just going to rent in this mall basically, and all these services will be provided for us, and we're just going to exist at a much higher level, which makes a lot of sense from an entrepreneurial standpoint. It can be a lot more effective, but that means you're very dependent on that landowner.

WALTER ISAACSON: *And what's the downside?*
EVAN WILLIAMS: Maybe the landowners get too much control.

WALTER ISAACSON: *Until Facebook changes or Apple changes their terms of service, yeah?*

BIZ STONE: This is a little bit different, but when we started Odeo, it was a podcasting service that let you record into your browser, and send that recording out to anyone who had an iPhone, and they would sync it with their iPhone. And then Apple said we are podcasting in iTunes. And we said that's probably a good place for it. That's probably better than our website. And so once they made that decision, we had to pivot.

WALTER ISAACSON: *And another big difference, if you're doing it apps-based as opposed to just purely web-based, it's not searchable and linkable as much, right?*
BIZ STONE: Right. It's not part of the Internet, the greater Internet really.
EVAN WILLIAMS: I think in many ways, apps are a step backwards from the web because they're not connectable.

WALTER ISAACSON: *What else are you worried about in the future of the Internet?*
BIZ STONE: You should ask Goldman about what we're worried about because he's the more cynical one. We're both, as Ev says, hallucinogenically optimistic. And Jason's always like, "But here are the ten ways we can get screwed."
EVAN WILLIAMS: I'm definitely an optimist. But one thing we've talked about is quality of content. For the last fifteen years, we've worked on lowering the barrier to content creation. And that's had all these positive effects. But it seems that no one has been working on how do we improve the quality of content on the Internet. I think this is highly possible, but if you look at what reading an article on the web looks like today, it's basically the same as if you read in a magazine or if you printed it out, you have the same experience. And once it's published… the collective intelligence that's available in the world doesn't really collaborate to improve it and the process of creation isn't very much different than traditional media. It's just the distribution is the only thing that's changed. I think all those things could potentially change, the consumption experience, the evolution of information after it gets out there, the production process could be way more efficient and open. So that's a really interesting opportunity in a way that things could actually improve that haven't, really. I mean the publishing industry in general is—there was a lot of turmoil and despair, it seems, because like well, the Internet screwed our business model, which is true. But I'm optimistic there are more fundamental things than how distribution happens to change about publishing.

WALTER ISAACSON: *And where does collaborativeness come in beyond the "Wiki" phenomenon?*
EVAN WILLIAMS: Well, I think there hasn't been nearly enough experimentation between user-generated content and professional content. And there are pretty much

different worlds on the Internet today, and the best you get is an article and then a bunch of comments underneath the article completely separated and those comments can be from anybody. So no one ever reads them because they're—you know.

WALTER ISAACSON: *Talk about it.*

EVAN WILLIAMS: Like, I want to read my *New York Times* after Walter has read it and highlighted and written in the margins. Not everybody in the world, but you know, depending on what the article is, someone who's expert, I don't know exactly what that looks like. There's all kinds of ideas. Just like Wikipedia, there's a collective intelligence that collaborates to make more accurate information most of the time. Why doesn't that exist outside Wikipedia?

BIZ STONE: Right. And just to your point about collaboration and I think there's much more ways of thinking about collaboration on the web than, you know, group-ware or specific apps created to collaborate. You know, just apps like Twitter that are just wide open where you can follow any interest that you like. Whether you tweet or not is up to you, but you can follow your interests on Twitter. You can follow your mom. You can follow CNN. You can follow, you know, whatever it is, anything, Nike. I think there's a lot of potential for collaboration, because people meet others that they would never have met if they were just on a social network, because you connect with people you already know there. You're just reaffirming your relationship, but when you're on a fundamentally different system where you're following people you wish you knew instead of people you used to know, then you're kind of—it's more of like an aspirational thing. And we've seen it over and over again. People are holding these tweets up where they say, look, we've all started following each other on Twitter and why don't we get together and meet each other in real life? And it has all these wonderful repercussions. First of all, one of the earlier tweetups was, let's get together and raise money for charity: water. I'm going to say in my town, let's all meet together at this pub and buy a $20 ticket, and that $20 would go to charity: water to build wells for people who don't have clean water in developing nations. And then what happened was that grew to two hundred and fifty cities around the world and they raised a quarter of a million dollars on one Tuesday night.

WALTER ISAACSON: *You know, that's a good example, but there aren't that many of them of how you make the virtual world connect to the physical world. In other words, people have their virtual friends and virtual followers or whatever and there's been a disjuncture. So is the future of the Internet somehow or another, better integrating the real world than your virtual worlds?*

BIZ STONE: Yes, it is.

WALTER ISAACSON: *How?*

EVAN WILLIAMS: [Holding up a mobile phone] Well, this does a lot to do that.

BIZ STONE: Mobile, yeah.

EVAN WILLIAMS: You no longer have to be sitting at your desk to experience the Internet, and it's more interspersed in our daily lives, and then new applications are available with this. So this simple idea of, like, I now call a taxi from this is kind of integrating the Internet to real life.

BIZ STONE: You don't have to actually tell the taxi where you are. You just press the button. He shows up at your house.

EVAN WILLIAMS: What I'm excited about is more examples. Have you heard of Carrotmob? So Carrotmob's so named because it's the opposite of a boycott, anti-boycott. The idea is people should vote with their dollars. But the only organized way to do that, say, we're going to boycott this business. And that's kind of negative and also it doesn't seem like there's necessarily an effect most of the time. So this guy got the idea we should use the carrot instead of the stick and we should go to a business and say, we want you to do this, and if you do, we'll all spend our money. And so for example, this guy from San Francisco went to all these liquor stores in the Mission and got them to bid for how much they would contribute to improving efficiency in their store out of all the people who organized and bought stuff, and the highest bid was 22 percent. And so they rallied the troops and they got all these people to show up at their store. They got like two hundred people to show up. And they bought everything in the store. The guy normally makes one thousand bucks a day. He made ten thousand bucks that day. And he put $2,200 into replacing the lights . . . It wasn't a group-on, just to get people in here. They presumably bought things they would anyway and then they were further invested in the store, both emotionally and actually financially. I love that.

BIZ STONE: It was a fun thing. The pictures he showed us of the first event were like all these people in line, talking and chatting, meeting each other, and since then, there's been lots of them in Germany and all around the world. And it's just sort of taken on a life of its own.

WALTER ISAACSON: *Would the future of the Internet be better if there were less anonymity or at least the option to be involved in Internet where people weren't anonymous, if you could be secure on who they were?*

EVAN WILLIAMS: I think so. And there's a lot of benefits in anonymity, but not most of the everyday use cases.

WALTER ISAACSON: *I mean leave aside the Arab Spring type politics of it.*

BIZ STONE: I think sometimes in more dangerous situations, you need to be able to protect your anonymity and then in other times when you want to open up and get ahead in life because you want a better job or whatever, you want to use your real name and you want to open up and show your interests and what you can do and that sort of thing. But if you're more of like a whistleblower in a dangerous area or something, you want to be able to protect your privacy.

WALTER ISAACSON: *Well, the reason I ask is you keep talking about the collaborative web. It seems to me that only works if I actually can trust that I know who I'm collaborating with.*
EVAN WILLIAMS: I think that's true. I think reputation is incredibly important in society in general. So we need to replicate that to some degree online and most large systems do have a concept of reputation, Twitter, Facebook. I'm sure behind the scenes at least, most large systems do because it's a way to combat abuse . . . You don't necessarily have to use your real name. You can participate under a pseudonym or something, but there needs to be longevity to and a history of your actions. So there has to be cost to throwing away an identity and creating a new one. Because if there's not, then there's no consequences for our acting badly as there is in society.

WALTER ISAACSON: *Google today launched Google+ or at least unveiled it, which is trying to be a competitor to Facebook and trying to do it by guaranteeing you more privacy. Do you see the possibility that Facebook could be displaced, the way Myspace was, as the foundation for social networking?*
BIZ STONE: Could Facebook be displaced like MySpace? You know, the general answer for that is when you get displaced, it's because you displaced yourself. Like MySpace shot itself in the foot.

WALTER ISAACSON: *Is Facebook doing that?*
BIZ STONE: So the key is execute, keep your eye on the user, do what they need you to do. And MySpace tripped up there. Facebook seems to have a really firm grasp of its users, but they also seem to have a "we're going to do it whether you like it or not" kind of attitude, "because we're really smart, and we know what the right answer is even if you don't think you do."

WALTER ISAACSON: *Suppose you were building a new service or product that needed to be based somehow on the platform of a social network with the identity and whatever. Would you feel comfortable basing it on Facebook, Ev?*
EVAN WILLIAMS: I would probably use Facebook if it were useful, but I wouldn't

depend on it. I think Facebook can [be] really useful, both for users and for sites to bring in people, you know. So I don't think Facebook will be displaced. I mean, what they do is too fundamental, connecting with people you know, their core use case, sharing photos and messaging with people you know is very fundamental to obviously most of the world it seemed. But I think what's going to be really hard for them is the same thing that's really hard for every big company, which is extending that to everything. And so what I hear from people who use Facebook a lot is it gets to a point where it's too big for certain things or they're just—because you form a network on Facebook based on what you do on Facebook. And so Google's, you know, been pretty public about their theory is that you don't want to share all the same stuff with everybody. And so if they can successfully get people to create these different circles, whatever they're calling them, of people, then they said that would more naturally map to what people want to do. That could be successful. And people will still probably keep using Facebook for the stuff they use Facebook for today, because that will be very, very hard to displace. But something else could come along to be better for some specific other use—which I think is what happened with Twitter. And to be fair, Facebook has all the functionality that the new Google Circles does. But people aren't used to using it that way. And I think that's a lesson we've seen in creating these services over the years: the norms of the culture of the system define what people do with it as much or more than the actual functionality possible in the system, if that makes sense.

WALTER ISAACSON: *Tom Friedman started this week by saying he's never used Twitter, never used Facebook, and never seen any reason why he would ever do it. Do you have a response to that?*
BIZ STONE: Well, I would challenge him on whether or not he's actually used Twitter, because I would ask him have you ever watched CNN or read any other newspaper? Have you ever read the *New York Times*? There are tweets in the *New York Times*. There are tweets all the time on CNN. The chances are he's read a tweet, he's a Twitter user.

WALTER ISAACSON: *But are there people [who] can get by without social networking? Is social networking going to be a fundamental part of our lives from here on out? On the Internet.*
EVAN WILLIAMS: Yes.

WALTER ISAACSON: *Okay.*
BIZ STONE: Probably.

AUDIENCE QUESTION: *The other side of the Internet is connecting to massive computing power that has a lot of knowledge. It seems to me that maybe we should be thinking about those kinds of uses where, say, a physician wants to get best practices, or something like that. You're not going to get it out on Facebook where you get a whole bunch of ideas from wacky people. You're going to want to get it from something that has distilled all of this knowledge and really gives you something to go. So there's going to be a place for that side of computing too, I'd like to suggest.*

EVAN WILLIAMS: I totally agree. I think that's a great example of when it comes to the collaboration we're talking about, it doesn't mean with everybody in the world. Most of the systems developed haven't allowed for—it's kind of like, user-generated content versus professional. It's one or the other, it's everybody in the world including nut jobs and haters who just want to attack everybody else, or it's this closed system. I think there has to be nuance in between that, to allow people to earn credibility or to be able to connect with only those who have a certain amount of trust.

BIZ STONE: One of the things we were always excited about with Twitter was that maybe one day down the line—since Twitter was designed to work on all five billion mobile phones, because they all have SMS or mobile texting and it's 140 characters and their limit is 160, so it fits within it—we always thought like, wow, we might be able to have an impact in rural areas where a farmer could ask a question—"can I get a better price for this grain"—or a pregnant woman who has to travel fifty miles to the doctor could ask her question—"are these symptoms worth the trip"—and get an answer back from a doctor, yes, or no. And in fact, tests have already been done in Uganda and other places where the SMS, just simple SMS, where, you know, lives have been saved because they've been able to report medical diagnoses just over SMS. And even some guys in Berkeley invented a microscope you can slip over an iPhone and you can take a microscopic picture of the virus and then send that picture in an e-mail, from, you know, a ramshackle kind of clinic to a fancy clinic and get back within a minute a diagnosis of that virus.

AUDIENCE QUESTION: *You started off talking about the separation of the Internet with companies, but there's also the issue of separation of the global common medium with countries. And I'm wondering if you have any concern about that, Iran or China or what happened in Egypt in terms of the global common medium of the Internet, and if you have any interest in pushing for a single global digital market?*

BIZ STONE: Our philosophy has always been that the open exchange of information can have a positive impact on the world. We often get blocked by countries that don't agree with that philosophy. We're blocked in China now. We're probably blocked in some other places. The funny thing is people find ways to continue twittering. We've

found that in order to completely shut down people from twittering you have to shut down the entire telecommunication service and the Internet. And when you do that you cripple your entire state. So it's really not worth it. Like, even now that we're blocked in China we still see in our logs traffic coming from China. So people are figuring out ways around the block to continue to collaborate, to tweet, to share information.

EVAN WILLIAMS: What I worry about is the separate worlds within the U.S. and people only paying attention to people who agree with them. That's one of the ironic things about what all these technologies have created, is more separation in some ways rather than more connection. And there's less of a common market place of ideas to some degree because people are just filtering out everything that is from a different viewpoint. And the technologies encourage you to filter these things out.

BIZ STONE: Some of the Twitter stuff we're doing is starting to get tweets from others that they're not following. So, I mean, one of the dreams of ours has always been to say, like, okay, we know you live in Berkeley and you drive over the Bay Bridge everyday. Maybe you don't follow the Bay Bridge on Twitter, but we just thought that you might like to know that the Bay Bridge fell down. And you'd be like, okay, yes, I do like to know that, thank you. And you wouldn't be like, screw you, why are you tweeting me? You'd be, like, this is good information. There's a billion tweets every six days. There's definitely information in there for everybody that's relevant. The Twitter team has to work really hard on delivering those relevant tweets to the people who need them right now wherever they are on their mobile device so that their lives can be made smarter, richer, better for it. When Twitter first broke out it was because we went to a conference called South by Southwest in Austin, Texas. We went to the nerd portion and it was early on in Twitter's history where basically it was just nerds on Twitter and nerds at the conference and it was a huge overlap. And a few things happened, but I'll just relate one. And that was, there was a guy at a pub. He wanted to talk more freely and openly with his colleagues at the pub, but it was really loud in that pub. So he used Twitter to send in a tweet that says, hey, it's too loud here, how about we walk over to this other pub on Sixth Street? He named the pub. In the eight minutes that took him to walk to that pub it was completely filled to capacity, there was line around the block. His plan totally backfired but what had happened was in eight minutes eight hundred people had converged on one spot from one tweet because he sent it to his followers, his followers thought it was a good idea and sent it out, and so on. And the metaphor that came to my mind was that of a flock of birds moving around an object in flight like a tree or a telephone pole and when you look at it, it looks like its incredibly choreographed, it looks incredibly complicated and difficult and yet it's not. The mechanics of flocking are totally rudimentary. It's just simple communication among individuals in real time that allow the many to behave

as if they're one, almost as if they're one organism. And this for the first time ever we were seeing people behaving almost as if they were one organism like this. We'd never heard of a tool or never seen anything like this before. And that sent chills down our spine because we thought, sure, this is a party, but what if it had been something more serious, a disaster, you know, a political situation. We actually went back, I think it was two days later, and formed Twitter Incorporated because that was the first big realization that we're onto a new form of communication among humans that could potentially, you know, change the world.

AUDIENCE QUESTION: *One thing that we always read about is there are a lot of people like me on Twitter. We use it all the time but we're actually a minority of the user base. And a lot of people know what Twitter is but not many of them are active users every day. So I guess I'm wondering how you guys are tackling that issue in what you're doing.*

BIZ STONE: Well, it also depends on how you describe an active user. We like to say that [to] get value out of the Internet, you don't have to create a web page. You don't have to necessarily tweet to get value out of Twitter. You know, one billion tweets every six days, there's a lot of info, and there's 1.65 billion searches a day, there's a lot in there to find.

EVAN WILLIAMS: Yeah, I mean, I think there's two answers there. One is that most of the reports that have come out about what the percentage of active users are in Twitter are only looking at tweet creation and we see that's a little bit of a misunderstanding that people have when we talk to people all the time. It's like, yeah, I don't use Twitter, I just don't know what to tweet, I have nothing to say to the world, and then it turns out they've either actually read tweets all the time or we start interviewing and say, well, what are you interested in and turns out we can create them a Twitter stream that they love and go back to all the time. It turns out I think two out of three Twitter sessions result in no tweets being created but people are using [it] as a source of information. So most of the measures do not look at that, so Twitter as a company cares about the people who are getting information from it just as much [as] the people creating the information. And that percentage is increasing over time because a lot of times the early adopters were more likely to create. So there actually are a lot of active users they may not know about. And two is, because of that sort of misunderstanding that we've been trying to correct for a long time and people are getting more and more of an understanding. I think the Osama bin Laden thing [when a man live-tweeted the U.S. raid on the Al-Qaeda leader in Abbottabad, Pakistan, in May] was for Twitter a great milestone for a lot of people who saw it. Oh, this information came out on Twitter. Oh, Twitter is a news source. Oh, I get it now. It's not

about the cliché, "Here's what I had for lunch today." It's about getting information I care about that's happening in the world. And I may not even have to have a Twitter account but this stuff is here and it's real time and it's relevant to me no matter what I do or where I am.

BIZ STONE: I probably check Twitter like twenty-two times a day and tweet once a day. I think you can define engagement in two different ways and I think for a long time a lot of Internet companies have been defining engagement the wrong way. I think if you define engagement as hours spent staring at a computer screen, like, yes, on average our users spent eight hours staring at our site, like, we are awesome at engagement. I think that's a very unhealthy way to measure engagement. I think that if your users are checking your service twenty, thirty times a day for ten seconds at a time to make a quick decision or figure out what they want to do next or what have you, that's a way better type of engagement. That's a healthy engagement that shows that our service is helping them make choices everyday, efficiently and smarter and saving time et cetera.

AUDIENCE QUESTION: *What has really surprised you about what Twitter has become? I'm assuming the scale of it and the magnitude and the diversity of it is a little bit beyond what you might have anticipated. But what has really been a surprise to you as Twitter has become a kind of an emergent phenomenon and changed over time? And what do you think it might become in the future?*

BIZ STONE: There is an element of, "Holy crap, we didn't know it was going to be this big of a deal." But we had worked on Blogger for so long and we knew that giving a voice to the voiceless and allowing them to create a webpage for free that spoke about injustice, or was in many ways the only way they could get their information out, was important. And we supported that and we designed our, you know, rules and fought against our parent company to keep it free and open and err on the side of freedom of speech and all those other stuff because we knew that it was important in the world. And so we had a feeling when we were working on Twitter, even though it was fun in the beginning, that there was the potential of it also having that same kind of impact in the world. What wasn't expected was we lowered the bar so much more down. With Blogger, you had to have an Internet connection and at first you had to know how even to FTP [File Transfer Protocol] and stuff like that. With Twitter you just needed to know how to do a text message, which the world was getting to know very quickly. What really surprised me anyways was the speed that Twitter grew out and the speed at which all the stuff was adopted and the way that it sped up democracy and sped up business and sped up all these other things.

WALTER ISAACSON: W*as it a holy sh— moment, when all of a sudden some-body says [during the 2009 protests in Iran], "Hi, I'm Jared or Alec from the State Department, and would you please not do maintenance this weekend because we're having a revolution somewhere?"*

EVAN WILLIAMS: That was a big week.

BIZ STONE: There was some energy in the office when we did that, yeah. But again my primary thing on that was, oh boy, I don't want people to think we're doing this because they asked us to. So I wrote a blog post that day that said, look, we got hundreds of e-mails, we had hundreds of tweets and we had lots of phone calls and one of those phone calls in the middle of all this stuff was from the State Department. And we decided to change the maintenance window because all these users thought it was a good idea, and frankly we really should be up anyways. But we're not doing this because the State Department asked us, and they don't have access to our decision-making capabilities. We wanted to have that global neutral vibe to us, but yeah, there was a lot of energy that day.

AUDIENCE QUESTION: *On places like Twitter and Facebook, how do small businesses get more recognition, get followed, aside from being bigger?*

BIZ STONE: The beauty of small businesses in Twitter has not escaped us from the very beginning, because you don't have to have a lot of followers. Early on I was in New York City and I walked by a bakery that was, like, mostly did cookies. And they had part of a cardboard box with a magic marker that said "Follow us on Twitter. When the cookies come out of the oven warm we'll tweet." And I was like that's genius because even if only ninety eight people in the neighborhood follow that account [and] everyone just gets out of the office runs down there, they just sold all their cookies. And all they needed for their entire marketing department was a Sharpie and a piece of a box. You know what I mean? And then you take that idea and you extend it out to developing nations and people who sell grains on a blanket at a market. And they could say, "Hey, follow me on Twitter and I'll tell you if I get a special grain next week," or something like that. There's a whole huge group of small businesses that aren't going to build a website and advertise, but they can for free get a Twitter account and a chalkboard and go for it.

AUDIENCE QUESTION: *There's a lot of talk right now about the tech bubble. Is it going to burst?*

EVAN WILLIAMS: I'm not a speculator about the stock market but I think there's a lot of excitement right now because a lot of the stuff is getting real. And that was always what people foresaw with the Internet from the first dot-com boom. It is becoming

central to people's lives and now the user base that you can reach a billion people on a service and you can actually make a lot of money is very clear to people. So as usual, maybe investor excitement is outpacing the development of the businesses. Long-term I don't think it's a problem. I'm holding my Twitter stock long-term. So I think if there is a correction it's, you know, these things always go in cycles. So that will be fine. But there are fundamental businesses that are here for the long term.

The Cairo Review *is grateful to Walter Isaacson and the Aspen Institute for permission to publish the text of the Aspen Ideas Festival 2011 discussion with Mr. Stone and Mr. Williams.*