

Internet Startups Need a Non-Discriminatory Internet

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Fandor

This is a tough age for independent filmmaking. Outlets for independent film makers are shrinking. Art Houses are closing. Distribution has flattened out and could be shrinking with DVD and BlueRay media. Filmmakers are earning less and less and having a harder time getting distribution for their projects. Fandor is pushing to support the independent filmmaking community, making sure innovative cinema doesn't disappear completely.

Founded in 2009, Fandor is an online community of film lovers and makers. USA Today recently published that Fandor is a “magnet for movie lovers”. We offer a collection of over 5,000 titles, where audiences connect with films, across genres and decades, offering a diverse library of independent and international cinema specially hand-picked, to make discovering new and classic favorites easy and accessible. “In terms of the breadth and depth of the cinematic experience, it would be hard to beat Fandor” stated Techive recently. Fandor’s member-based service allows audiences to watch unlimited movies wherever they are: on TVs, desktops, tablets and mobile devices. Fandor supports the world’s best filmmakers by returning half of its revenue to them.

Fandor was founded in 2009 and seed funded by one of the founders. In the last 10 to 20 years open-source and cloud infrastructure significantly reduced the barrier to entry in having a presence on the Internet. Open source movement has created important development and publishing tools, all with little or no cost to new individuals and organizations. Cloud infrastructures like Amazon’s Web Services means little or no capital expense needs to be paid for as costs are all usage based. Anyone with a good idea can for very little up-front expense start a business on the Internet. Garage companies like Google and Yahoo, etc. would have had to spend millions more to even get to the point of sending their first byte on the net. In many cases raising this investment would have prevented many companies from being able to try out their idea as investors would see a much higher risk.

Fandor would likely not be here if it wasn’t for the level playing field of the Internet. Internet Access Providers are looking for additional revenue from content providers and their own customers. We need a regulatory framework to insure that we have a network where everyone has the same voice.

Comments of Fandor, Protecting and Promoting an Open Internet, GN Docket No 14-28, September 16, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7522734489>, pages 1, 6.

Dwolla

Dwolla is an Iowa-based payments company that launched nationally four years ago aiming to provide the nation’s first payment network since Discover in the 1980s. We have driven several inefficiencies out of traditional payments processing, so Dwolla members enjoy real-time, extremely low-cost and secure online and mobile payment options within the network.

The concept behind Dwolla was born out of my frustrations with credit card transaction fees. As a business owner running a successful online shop, I realized I was spending upwards of \$50,000 a year on credit card fees, or “interchange,” alone. I painfully internalized this expense, money that could have gone to hiring, new equipment or an expansion. The inefficient, expensive and entrenched nature of the payments system at that time inspired Dwolla's creation.

Since 2010, we've developed an Internet-based solution that enables anyone or anything to send and receive payments for only 25 cents or free for transactions \$10 or less. The new platform uses Internet connected devices, like computers or smartphones, to bypass existing card networks while operating within the existing regulations and purview of the U.S. financial system and its stakeholders. As a result, we have developed improved settlement times and lower-cost transactions than those of plastic cards or checks. We've made the network open, allowing members to leverage Dwolla's breakthroughs inside of their applications and software for free. This has empowered an app developer to build a hyperlocal mobile payments wallet to help communities bypass expensive interchange fees at mom and pop shops; a SaaS company with 600,000 small businesses to create a check replacement solution inside their existing bookkeeping software; and one of the world's largest operating systems to offer a 30 percent increase in additional revenue to digital publishers that build on its platform.

This simple, but powerful value proposition fueled our success, putting over ten million dollars worth of savings back to work in the economy. By 2012, we developed a payments network of 500,000 users and proudly

Dwolla supports an open Internet and we rely on it for the success of our business. Without an open Internet, companies, such as ours, would not be able to achieve the level of innovation made possible today. Technical discrimination and pay-to-play deals may directly harm Dwolla. We are working hard to develop our networks and scale our breakthroughs to the masses. Dwolla does not believe we can sustain our low-cost value proposition should a pay-for-priority come to fruition. We believe that there are legitimate concerns around the payments incumbents' ability to outbid newer companies, such as ourselves, with existing cash on hand. Should we be negatively affected, Dwolla could be forced to increase transaction rates to our users, which conflicts directly with our low-cost business model. Additionally, Dwolla's real-time payments service is dependent on the speed and reliability of payments. This impacts both us and our users. First, conducting business outside of the fast-lane would mean slower transactions and an impairment of one of our major competitive advantages; second, our users would not be able to transact amongst themselves with the same ease and assurances.

Comments of Dwolla, Protecting and Promoting an Open Internet, GN Docket No 14-28, June 24, 2014, available at <http://apps.fcc.gov/ecfs/comment/view?id=6017852869>, pages 1-3.

OpenCurriculum

OpenCurriculum is a nonprofit education technology startup which allows K-12 teachers around the country to create and circulate the best teaching materials amongst themselves for improving the learning of our children, rather than simply relying on extremely expensive textbooks sold by education

incumbents. It's our mission to bring openness and innovation to K-12 education, starting with the United States, and expanding to the rest of the world. We were founded in 2012 in Pittsburgh, PA, to help educators make more sense of vast amounts of curriculum. Our work is distributed amongst volunteers around the world. We are funded by Y Combinator (the country's top startup accelerator) and Points of Light Foundation (the world's largest service organization). We are also supported by the International Telecommunications Union (ITU), the primary information-technology body of the United Nations. We have repeatedly received recognition in international press channels about the innovative nature of our work.

Educational publishing is a \$91 billion industry around the world, with an increasing share of it moving from print available in brick-and-mortar stores to digital content. Massive textbook retailers like Borders have gone out of business and are shutting operations, while entertainment, such as Disney and Sesame Street, is now playing a bigger and bigger role in what goes into schools in the US and around the world. Thus, the rules of who dominates and will dominate the socially fundamental industry of learning will increasingly be biased towards and dominated by those who can provide richer digital content experiences, and not the incumbents who got our hearts pumping through text and printed graphics as we grew up.

OpenCurriculum's key opportunity lies in the very dynamic, changing nature of the industry in the next decade. We hope to capture about 20% of all teacher publishing materials in the next decade by becoming the primary publishing channel for all the influx of digital-first and print-to-digital content. Our low fee on all content sold through us—20%, which is almost absurdly low in our market—is meant to protect the nonprofit dream that we have invested in, in the past two years. But we might have made some very big assumptions about the nature of the medium our service is going to run on, and are hopeful we can protect our dream and improve access to low-cost, high-quality educational materials for all teachers and students. The FCC's net-discrimination proposal threatens that dream.

I am the sole founder of the company, and I come from a developing country called Oman in the Middle East. Much like many other countries in the Arab region, it is 10 years behind the current technology curve in the US. I started my first Internet company when I was 12 on dial-up Internet. So if anyone knows the value of the mere idea of high-speed, affordable Internet, it's me. I was just absolutely amazed at a very young age at the powerful democratic nature of the medium called the Internet—without all of which I wouldn't be half as excited to innovate on this medium.

When I started the company two years ago, I had less than \$500 in my bank account—and did not know if I could afford my rent in a shared sublet in the coming month, let alone the cost of any computing infrastructure. But I was in luck—the Internet is such a powerfully democratizing force that my lack of any money did not stop me from building a company that has now had an international impact. Here is the best way to explain it: the operational cost of the entire company's technologies for the first 6 months of its existence was less than \$20. To my good fortune, I did not have to do a thing to ensure customers used my product over any competitive ones apart from winning in a meritocratic game by building a more and more superior product—beyond hard work and creativity, doing so did not cost me a thing.

Would I have been able to afford to pay Verizon, Comcast, or any other ISP for fast lanes to reach the thousands of customers back then? Absolutely not. There are and were far larger media houses in education or education companies with media presences who could have crushed our increasing popularity any day given a preference or advantage on the only medium for us to reach and serve our customers—the Internet

Comments of OpenCurriculum, Protecting and Promoting an Open Internet, GN Docket No 14-28, June 25, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521706628>, pages 2-4.

MobileWorks

A trio of graduate students at the University of California, Berkeley founded MobileWorks in 2011. We are based in Berkeley, CA, and employ 13 people full-time in our offices. We plan to hire 15 more people in the year ahead. Additionally, we work with thousands of people in over 70 countries as virtual staffers; the largest population of our workers resides in the United States. We've raised several million dollars in funding from some of the most respected investors in the world, including Andreessen Horowitz, Recruit Strategic Partners, Bee Partners, FirstLight Ventures, Hub Ventures, Y Combinator, and SV Angel. Our business customers include eBay, LinkedIn, Xerox, and others.

MobileWorks provides virtual staffing services to businesses worldwide. Using the open Internet, our company is reinventing traditional outsourcing. MobileWorks provides businesses with an accurate and socially responsible way to get work done by combining innovative software with a community of thousands of vetted, on-demand staffers from all over the world. Our main product is called LeadGenius, which focuses on sales and lead generation. It serves businesses who are starting to build out a sales team, and also serves business complementing an existing sales force. Currently, dozens of high-growth technology companies use our service to accelerate their sales development operations. We also offer other products including Premier, which is focused on virtual staffing of top-notch business assistants for busy executives, individuals and companies.

Central to our mission is ensuring fairly paid virtual work for underemployed people worldwide. MobileWorks's virtual work enables individuals to develop essential skills, to support their families, to enjoy flexible work schedules, and to reach educational goals. Our worker community receives a fair wage and the opportunity to gain valuable skills while working with leading companies. We strive to alleviate poverty by creating meaningful access to digital work at fair wages for women, young people, and unemployed populations worldwide. Ninety percent of LeadGenius workers were underemployed or unemployed before joining, and three out of four of them use their income to support their families. While we can provide many examples, consider one: a young man named Imran from Kenya who has found work through MobileWorks is saving money to pursue a Master's degree, which he says he otherwise could not afford without MobileWorks.

In only three years, we have made a significant impact on people's lives by providing employment and the opportunity for self-sufficiency in an unfriendly economy. We plan to continue our efforts to

partner with businesses, development organizations, nonprofits, and researchers to discover ways that MobileWorks can improve even more lives and match even more people to fairly paid work.

The idea for MobileWorks began as a graduate school project at the University of California, Berkeley. The graduate student co-founders, Anand Kulkarni, Prayag Narula, and David Rolnitzky, wanted to create jobs for people who don't have access to a traditional job market. After winning a class contest, the founders were accepted into Y Combinator, which is widely considered the most successful and important startup accelerator in the world. Following Y Combinator, we raised additional rounds of investment.

We couldn't have founded the company if we had needed to pay ISPs for a fast lane to compete with the incumbents in our space. Our competitors included traditional temp agencies and big outsourcing firms (such as Adecco and Manpower, which control a \$9 billion industry). They also included other online marketplaces; Amazon had launched Mechanical Turk, an online marketplace to hire labor to complete basic tasks. We planned to differentiate ourselves by offering better incentives for workers by providing quality work, and create a motivated, fairly paid and conscientious virtual workforce.

A fast lane would have made it extraordinarily difficult for underfunded graduate students to have a shot in this market. Our competitors, including multi-billion dollar companies like Amazon, could easily have afforded to put themselves in a fast lane on the networks of multiple broadband providers. It was only because of the use of free tools and a neutral internet that we could launch a competitive commercial service with a small initial investment from outside investors. We have since relied on raising subsequent rounds of investment. Investors would have been unlikely to fund us if our product could be unfairly discriminated against by ISP's through actions measured under a vague "commercially reasonable" standard. Indeed, under the Chairman's proposal, our competitors could have struck "exclusive" partnerships with ISPs merely to protect their existing market shares and margins. We would have suffered, as would the businesses and individuals who rely on us directly or who have benefited from the competition we have injected in the market.

Comments of MobileWorks, Protecting and Promoting an Open Internet, GN Docket No 14-28, August 5, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750457>, page 2-5.

PadMapper

We're a very small company (two full time employees, one until recently), but thanks to the power of the free/open internet, we're able to help around a million people every month find a home to rent. We calculate that we save multiple human lifetimes worth of time every month, which would have otherwise been spent on a grueling, unrewarding process that helps no one. We've won awards, have made some money, and all of that, but I think that our impact is best measured by how much time we've saved people.

In order to get to this point, we've depended on fast, responsive connections. We try to deliver a native-app-like experience in a website. In order to do that, we have to send a lot of data to our users,

and we need to do that quickly. In fact, we've been hampered by the slowness of many people's connections—we'd be able to reach many more people if everyone had access to fast broadband, and we'd be able to do more interesting things if we could assume that almost everyone could download a lot of data quickly. We could produce visualizations of the qualities of different regions, for example, and data-heavy comparisons.

If we had to pay for a fast connection to people's homes, we wouldn't be able to offer our service for free to our millions of users. We also wouldn't have been able to grow to nearly this size. We would have had to charge people, which would have significantly limited our reach. The conversion rate from visitor to user is much, much higher when you don't put a demand for payment in the way. Millions of people would have stuck with the slower, less efficient methods; and in aggregate, millions of man-hours would have been wasted every month. And all of this would essentially be because ISPs want to open up new, hidden avenues of wealth transfer from their customers to themselves.

If I had known that I could be extorted at any time by ISPs in order to get a functionally fast connection to my users, I'm not sure I would have bothered with making a webapp. One of the main reasons to write a webapp is that you can interface directly with people without going through an app store, or having to set up distribution deals, and no one rules you. Whenever I think about how Comcast, Time Warner, et al. have treated me as a paying customer throughout my adult life, I absolutely shudder to think what they'd do with that power over the Internet.

Comments of PadMapper, Protecting and Promoting an Open Internet, GN Docket No 14-28, August 12, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521758181>, page 2-3.

SideCar

Sidecar provides ride-share services through a convenient smartphone app. The Sidecar app allows someone who needs a ride to connect with people who use their own cars for shared rides. Since our founding three years ago, we have facilitated more than a million rides. We recently updated our app to allow people to further customize their ride experience by letting them choose the vehicle, the driver and the best price. We also help people with spare seats in their cars to earn extra money on their own schedules. We do this while taking steps to ensure safety. Pursuant to regulation by the California PUC, all Sidecar drivers are pre-vetted for safety and Sidecar's safety system includes driver background checks, driver and rider rating systems, GPS tracking features, vehicle inspections, and the ability to share details of one's trip in realtime. Our vision is to build the largest social transportation network in the world.

Sidecar was founded in San Francisco in 2012 and currently operates in ten cities including San Francisco, San Jose, Los Angeles, Long Beach, San Diego, Seattle, Chicago, Boston, Charlotte, and Washington, D.C. We currently have just under 50 employees, with plans to hire more employees. We have received \$22 million in funding from numerous investors including Lightspeed Venture Partners, Union Square Ventures, Avalon Ventures, Lerer Ventures, Huron River Ventures, and Google Ventures, among others.

Startups such as Sidecar, which offer app-based ride-share services, are a relatively recent innovation, energized by the Internet's capacity to create social networks. Other startups with similar services include Uber and Lyft, founded in 2009 and 2012, respectively. Sidecar's model is unique because we require destinations to be put by our riders, and our drivers now have the ability to set their own prices. This allows drivers to compete for a rider's business by lowering their rates and offering riders some of the cheapest rides in town. In recent months we began testing the option of increased savings for riders who share rides with other riders, a kind of next-generation carpooling. We developed the technology necessary to match passengers with others going the same way. We plan to continue to improve our model and app features to offer people the most convenient and affordable transportation options.

I became an entrepreneur to tackle problems by coming up with responsible and sustainable solutions that benefit lots of people. When I founded Sidecar with Jahan Khanna in the fall of 2011, I was interested in "Cleanweb," or using information technology to address constrained resources and optimize resource use. Transportation is a great example of resource inefficiency. In the U.S., we buy almost two cars per adult and then leave them idle for about 90 percent of the time. Through Sidecar, we have been able to leverage the capabilities of the Internet, social media, and mobile technologies to address the knotty problems of transportation, congestion and pollution. Ultimately, we hope that within ten years, car ownership can be cut in half and that the next "car" for millions of people will be accessible only via their cell phone.

We may have never founded Sidecar under the FCC's proposal. The FCC's proposal has no rules against discrimination based on content on mobile devices. We are a mobile-based innovation, and we were among the first to explore smartphone-powered, peer-to-peer transportation. If our mobile content had been subject to discrimination, discriminatory access or prioritization fees, our entire model would have been jeopardized.

In the first place, I could not have afforded to put Sidecar in a fast lane myself. I would have had two choices: either secure the investment necessary to pay excessive fees to ISPs, or muddle along in the slow lane, saddled with yet another disadvantage compared to incumbent taxi cabs or our deep pocketed ride-share competitors.

As great as Sidecar is, we would have had difficulty attracting investments if the FCC's Proposal had been law at the time of our founding. Speaking from my experience as an investor in clean tech companies, I know that the FCC's proposal would have discouraged investment in web and mobile-based startups. Potential investors in Sidecar would have had to accept additional risk, regardless of whether they invested enough money for us to pay for access to the fast lane. If they didn't invest enough money, they would have been exposed to the risk that users would become frustrated with Sidecar's slower service. If they did invest enough money, they would have taken on a greater financial commitment—a greater risk of loss if Sidecar did not get off the ground.

Comments of SideCar, Protecting and Promoting an Open Internet, GN Docket No 14-28, August 12, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521760441>, page 2-4.

Embedly

Embedly provides a platform and suite of tools to make embedding and previewing links simple. Embedly uses a simple API to allow its users to embed rich media from over 250 providers, and surface popular content with analytics such as Attention Metrics (plays, hovers, time watched). Image optimization allows for faster load times while the ability to add rich media to a user's website makes for an improved web experience.

Art Gibson and Sean Creeley founded Embedly in 2010 with a mission to provide tools to embed rich media to users' sites, enabling the distribution of ideas, news and media across the web. The former Open Source Software consultants now serve as CEO and Main Support of Embedly. The Embedly team is a mosaic of talent which includes Engineers, Marketers, Designers, and Account Executives—all based out of the Boston area and working to further develop the three products that fall under the Embedly umbrella: The Bookmarklet, Card Generator, and Embed Button.

With Embedly's Card Generator, Cards make posts more engaging and interactive by including rich media in posts as well as the ability to share and repost. There are six unique card designs chosen to best fit the content: article, image, video, rich media, product, and event. Cards are responsive and adapt to automatically fit the sites they are placed in.

The Bookmarklet feature allows users to create a Card for any URL, right from their browsers. This is a faster workflow perfect for bloggers and power users of Cards. To use, visit any URL and click the bookmarklet to generate the Card for that URL.

With the Embed Button, HTML code is provided which easily embeds an Embed Button into users' websites, making their own content easily shareable.

Our first big milestone was having Reddit use our API to embed content for their millions of users. It was then that we realized that many big social networks with millions of users on the internet needed a similar service. Currently, Embedly users include high-traffic websites such as The New York Times, AOL, The Guardian, MSNBC, NPR, and Aljazeera among others.

Sean Creeley and Art Gibson became entrepreneurs because they had the technical skills to build applications and sites. They were also accepted into YCombinator, which allowed them to quit their jobs to build out a company based solely on the web with a low amount of capital needed, thanks to the open internet.

Embedly, was founded on a small investment from Y Combinator. In our early days it took seven months to build up enough to raise more capital. If we had had to pay fast lane and server costs to keep our API up we would have undoubtedly failed. Take a leap forward to today, we would have never employed nine individuals or brought our web startup back to Boston. We would not be able to offer the lower pricing that we provide for existing startups who need our service to fill a critical part of their applications.

Fast and slow lanes would have prohibited our business from doing well and even from taking off in the first place. Much of the work we provide to our clients is valuable because of the speed of the service. We are able to turn around requests from our API at an acceptable rate. Being forced to use the slow lane would have prohibited the quality of service we are able to provide and likely have turned many of our clients to other services. Our clients span across multiple industries and countries, so keeping up-to-date with the best technology is essential for our survival.

Comments of Embedly, Protecting and Promoting an Open Internet, GN Docket No 14-28, Sept 16, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7522755262>, page 2-4.

Heyzap

Heyzap uses complex algorithms and machine learning to predict what users will want, and to recommend apps on the basis of those predictions. Heyzap has raised over \$10 million from investors including Y Combinator, Union Square Ventures, Ashton Kutcher, Naval Ravikant, and Qualcomm. In the first year of the launch of our mobile app we were able to produce in \$2.2 million in revenue. Currently we are on a revenue run rate of \$16 million. Growth is expanding so fast that we are targeting a run rate of \$50 million or more.

In 2009, Jude Gomila and Immad Akhund built Heyzap out of a mutual love of video games established in their childhood. Gomila and Akhund soon realized the mobile gaming trend was not a passing fad and redirected their efforts towards helping users find games and apps that they will enjoy. In 2011, Heyzap turned off its Flash-based gaming platform and set its sights on mobile platforms. Since the redirection, Heyzap has constantly sought to create a better product and user experience.

Our mission is to pair awesome design and intelligent targeting to create the biggest ecosystem for apps. Proudly based out of San Francisco, our mission is supported by 23 dedicated employees. Currently, with our rate of growth we are seeking to hire for five to six new positions. Heyzap's 23 employees support over 3000 distinct developers, touching millions of users on iPhone and Android smartphones.

Our business model is based on Cost-Per-Install (CPI) advertising. Developers hire us to get users to install their apps. Our recommendation engine curates Apple's App Store and Google Play for our users and only shows users apps they are likely to want. By looking into usage habits, Heyzap is able to suggest which apps and games the user may want to try from over 200,000 apps on the app stores.

We use machine learning and sophisticated algorithms to predict what users want. The app shows users image-based or video interstitial ads for other apps that the user might like. Every time Heyzap recommends an app to a user, we ping back to our machine learning engine to work out what to show. We take into account a multitude of contextual data, including how the impact of the filesize of an app relates to the probability of installation given a particular mobile connection speed that the user is on. Through the billions of recommendations and data points we are collecting, we build correlations in a giant data set, and our algorithm learns over time what it should recommend.

McKinsey and Co. estimates that the global digital advertising market will be \$212 billion by 2017. This estimate is bolstered by an estimated 6.8 billion worldwide mobile phone subscriptions. Governments and major companies alike have joined the mobile gaming/apps market, producing games and apps ranging from some based on developing cross-cultural understanding to others based on popular movies. With this abundance of choices, Heyzap plays an important role as an intermediary to consumers. Heyzap helps consumer find apps not just based on the advertising dollars spent by the developer but rather on the preferences of the user.

We could not have become the company we are today under the rules proposed by the FCC. We provide real-time recommendations of apps based on data gathered from users. This requires gathering a lot of data, bringing it to our computers, processing it, and sending recommendations and ads back to our users—all in fractions of a second. We need to process a lot of data, quickly. Any limitations in speed or consistency of our service would be noticeable to our users.

Meanwhile, under the Chairman’s proposed rules, broadband providers have strong incentives to make the differences between their standard and premium access options noticeable. If there were no noticeable differences, then no edge provider would feel the need to pay for premium access.

Furthermore, even small difference in loading times—mere milliseconds—have been shown to frustrate and turn away Internet users. Our incumbent competitors, who have sizeable amounts of money at their disposal, could have afforded to put themselves in a “fast lane.” Thus, if they paid for premium access and we did not, we would have entered the market at a significant disadvantage.

When we founded Heyzap, we had negative bank balances. We could not have afforded to pay to put ourselves in a fast lane. To get premium access to the Internet, our only other option would have been to rely upon our investors. But attracting investors is hard for start-ups to do in the best of circumstances; it would have been even harder if they realized that they would have had to sink enough money into Heyzap to pay for a fast lane, or else risk putting us at a significant competitive disadvantage.

Comments of Heyzap, Protecting and Promoting an Open Internet, GN Docket No 14-28, July 10, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521678756>, page 2-4.

CodeAcademy

Codecademy is an education company that offers free online classes in computer programming. The company was founded in 2011 by two college students, Zach Sims and Ryan Bubinski. Since then, we have raised 12.5 million dollars in funding from investors. Our investors include Kleiner Perkins and Index Ventures, British mogul Richard Branson, Union Square Ventures, SV Angel, CrunchFund, Thrive Capital, Yuri Milner, O’Reilly AlphaTech Ventures, and others. Based in New York, we currently have twenty three employees. We plan to hire more people; we have ten positions posted on our website.

Codecademy helps to connect individuals with the practical skills needed to succeed in today's workplace. Codecademy's project-based training platform aims to help individuals gain coding skills in a hands-on way, with real projects, and constant feedback. We offer courses in six popular programming languages including HTML & CSS, JavaScript, jQuery, PHP, Python, and Ruby, through interactive games and lessons. Anyone with an internet connection can use Codecademy's platform to learn to code and better his or her life. Currently, Codecademy has over 24 million users who have completed over 100 million exercises. These users include former New York City Mayor Bloomberg, who signed up for our "Code Year" challenge in 2012, as well as students, people who have been laid off from work or otherwise are getting into new careers, and anyone who wants to learn to code. We also partner with employers to help get their workers more code-literate.

Codecademy also introduces young students to coding. Our products are used in tens of thousands of after-school programs around the United States. We are proud to be a curriculum provider for the Hour of Code, a nationwide initiative by CSEdWeek and Code.org., whose goals are to introduce computer programming to 10 million K-12 students and to encourage them to learn programming. In addition to helping people learn how to code, Codecademy also helps people learn how to teach code. Built specifically for teachers, we offer lesson slides, quizzes and practice sets, as well as enabling teachers to craft their own materials and then share them with the rest of the learning community. Last year, we launched our mobile app, "Hour of Code," to help people to learn how to code, conveniently, from anyplace and anytime. We built an entirely new Codecademy experience for mobile that includes the same things that make the browser-based version of Codecademy great: interactivity, "snack-sized" content, and fun lessons.

We have made tremendous progress in a short time, making programming skills and greater employability attainable for millions of people, and not only in the U.S. but globally. We teach coding in several languages including Spanish, French, and Portuguese. This May, we opened our first international office in London, from which we lead our partnership with educators and with hundreds of schools in the United Kingdom. We also will launch a program to bring Codecademy to schools in Estonia, which has already added coding education to its national curriculum. We are launching in the city of Buenos Aires, Argentina, which will use Codecademy in many schools this year. We plan to continue to expand our impact on the world-wide community of aspiring programmers and creators.

Codecademy has put quality education within the reach of millions of individuals worldwide by offering free courses in coding. The ever-rising costs of higher education and heavy student loan debt has become a national problem. Codecademy is an innovative solution for schools and students to save money.

Our company also has an important impact on job creation. We're building the basic steps of competency to help people start their own companies, websites, apps, and products and get entry level jobs right now. The next big thing, or an innovative solution to a social problem, could be developed by someone who learned how to code using Codecademy.

But none of that may happen if the FCC adopts its fast-lanes proposal and abandons an open Internet.

Our co-founders, Zach Sims and Ryan Bubinski, had the idea for Codecademy while they were students at Columbia University in New York. Bubinski was teaching people how to write code, and Sims was learning how to code. The two thought that there should be an online resource for learning specific programming languages and techniques. They built the product for Codecademy while at Y Combinator, the well-known start-up accelerator.

They could not have founded Codecademy if the Chairman's proposed rules were in effect three years ago. First, the Chairman's proposed rules would have made it hard, if not impossible, to get the funds necessary for getting Codecademy off the ground. Since Codecademy was founded by two college students, who did not have enough personal funds to finance such an ambitious project, our founders relied upon funds from outside investors. We developed our product only a few weeks before demonstrating it in front of potential investors at Y Combinator. We would not have been able to afford access fees or priority at that early stage and could have turned off investors if the demo was slow, or video or other high-bandwidth content had trouble loading.

Even if our demo went smoothly, however, potential investors would have realized that our competitors would have a leg up on us, and they might have been deterred from investing in us. Our competitors include traditional providers of online education, who charge high tuition fees. That means they can, first, afford to pay for premium access. Investors might not have chosen to invest in Codecademy if they were faced with a stark choice: either invest more money and enable Codecademy to compete, or invest less and leave Codecademy at a permanent technical disadvantage. Our large competitors are in a better position to strike deals with ISPs—including, under the FCC's proposal, exclusive deals—to block upstart competitors like us. If our competitors did strike deals and our content loaded more slowly and less reliably than competitors, we would have been done for. Even the threat of such a deal, however, would have injected enough uncertainty to deter the investors we needed.

Comments of CodeAcademy, Protecting and Promoting an Open Internet, GN Docket No 14-28, June 23, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521678740>, page 2-6.

Contextly

Contextly helps online publishers of all sizes build a loyal audience in the age of drive-by readers. Our vision is to help media organizations more effectively transition to the digital and online environment and help readers find the most relevant news and commentary to inform their lives. We provide content recommendations and other engagement tools to online publishers. We help readers dive deeply into stories and also get recommendations of other interesting content from a publisher's site that may not be relevant to the story they are reading. The idea is to treat every story as the new homepage, by giving readers ways to learn more about a given story or to explore more broadly.

To be more concrete, let me tell you about our competitors' products. You have probably read an article and scrolled to the bottom and seen advertisements for articles on other sites with outrageous headlines. Here are a few at random from a well-known business magazine I would rather not name,

but you are familiar with such links: “Photos: 20 Hottest Democratic Politicians,” or “25 Celebrities Who Showed a Little Too Much on the Red Carpet,” or “15 GoodLooking Celebrities Who Destroyed Themselves With ,” or “Hot Photos of Fitness Enthusiast Jen Selter.”

That is opposite of what we do at Contextly. Instead of sending people away from publishers’ websites, and sending them to tacky sites that may reflect poorly on their brands, we recommend articles from their own sites that readers should find interesting if they are interested in the article they just read. If a reader scrolls to the bottom of an article they love on Make magazine, they will see recommendations for other articles on Make, thanks to Contextly. There is a reason people love our product—and we believe it can lead to a stronger, more independent press in a digital age and a more informed, engaged citizenry.

Contextly was incorporated two years ago, while I was a writer and editor at Wired. After being on the frontlines of the digital publishing revolution for ten years, I was frustrated at the tools publications had to guide readers to previous coverage of a topic. I founded Contextly relying on my own savings and built out a barebones version of the product. After getting some early customers, I left my job as an editor at Wired in November 2012 to pursue the vision - without any funding.

Over the next year after leaving Wired, Contextly grew in customers, revenue, and employees. I found an amazing co-founder and we were accepted into an accelerator called Matter.VC, which is dedicated to helping companies trying to change media for good. We've since gotten funding from Turner/Warner Brothers and created awesome technology that's superior to that of our two largest competitors who have raised over \$100 million collectively. We give free service to help high-school and college newspapers, non-profits, and public broadcasting news organizations like PBS and KQED. We're in talks with some of the nation's biggest news brands and we will be hiring and growing rapidly in the next 12 months.

None of this would have happened under the rules proposed by the FCC. I would have never left my job or tried to start a company when everyone around me thought I was just a journalist with a crazy idea that high quality recommendations can help good journalism and storytelling thrive.

Like many other startups, if there were a fast lane, we would have needed to be in it on day one. We provide content recommendations at the bottom of news stories. That means that every time a news story on one of our publishers is read, a request is made to our servers to get the right recommendations and we return them along with thumbnail images—anywhere from 4 to 16 images per page. While these are individually not large, the bandwidth quickly adds up when you are serving hundreds of millions of images a month, and need to do so quickly to readers around the country and the world. It would not matter if the “slow lane” was “pretty fast.” What would matter was whether we could serve our clients as effectively as our competitors. Being unequal alone would put us at a disadvantage.

We are able to manage these costs because the cost of technology and bandwidth has dropped massively, due to technology and competition. This has made it possible for a bootstrapped

Contextly—founded with the modest savings of a former journalist—to compete with companies that have tens of millions of dollars in capital.

Startups face many challenges - finding great employees; seeking out clients willing to take a risk; dealing with legal issues; finding funding; scaling technology; figuring out payroll systems; paying federal, state and local taxes; getting insurance; finding office space; etc.

But those are manageable, and technology startups are flourishing for one simple reason: It's cheap to start a startup now. Paul Graham, the co-founder of the country's preeminent startup accelerator (Y Combinator, which was the first investor in Dropbox, AirBnB, Reddit, among many others), wrote this in 2005, when this wave of startups began: "You need three things to create a successful startup: to start with good people, to make something customers actually want, and to spend as little money as possible." He followed that up in 2007, writing, "It's so cheap to start web startups that orders of magnitudes more will be started."

Graham was right and orders of magnitude more web startups have since been built. Servers got cheap; software got cheap; millions more people joined the internet; and the networks were open. No one needed permission or had to pay tolls to network operators to create an innovative service.

The FCC should not make it even harder to create a company by adopting its proposal to authorize “commercially reasonable” discrimination rather than to forbid “unreasonable discrimination.” AT&T and Verizon have made it very clear they would like to extract tolls from online services such as Contextly. That's despite the fact that it's their customers who are requesting news stories from our publisher clients. Both Contextly and our publisher clients pay for our outgoing and incoming bandwidth to our hosting providers - but now the FCC proposes to let consumer Internet Service Providers extract fees on both sides of their networks.

If this were the case before I started Contextly using my savings (which were not substantial), I would have never started the company. There's no way I could have afforded to pay Verizon and AT&T and Comcast and Cox and Sprint and Time Warner Cable and AOL and T-Mobile to get Contextly images showing up quickly. Our competitors—the ones who post ads to diet pills and “hot” photos of fitness enthusiasts—could have buried us just by paying for the fast lane—without even needed exclusivity, which they could have negotiated under the Commission’s proposal.

Hiring lawyers and negotiating complicated contracts is expensive. I incorporated Contextly myself to avoid significant legal fees and operated on handshake agreements with early customers. Negotiating performance agreements with ISPs would have required resources and skills I didn't possess (and still likely don't have). ISPs could have also asked for equity at a time where I'd have had no choice but to accept their terms—since they control the pipes that get my clients' news and information to American citizens. My equity would not have been worth much at the time, so I would have had to give up much of my company, if not a majority, to get it off the ground.

Additionally, online publishing is, for many, a low margin business. If our publishing clients themselves have to pay tolls, they would have less money to try services such as Contextly. Finally, adding fast and slow lanes to the last/first mile networks adds technical burdens to startups. Companies will not only have to make sure their servers are working well, but will also have to figure out how well they perform on dozens, if not hundreds, of individual networks that they have no access to in order to measure.

Today, we help National Magazine Award-winning sites build their audience and business; we help individuals have their voices heard and we help companies grow their business by blogging, including everything from biotech firms to pet-sitters. We were able to do this under the FCC's policies going back to 2004 "to ensure that providers of telecommunications for Internet access or Internet Protocol-enabled (IP-enabled) services are operated in a neutral manner."

If the Chairman's proposal--permitting "commercially reasonable" discrimination-- had been in effect two years ago, we never would have started.

Comments of Contextly, In the Matter of Open Internet Remand, GN Docket Docket No 14-28, June 3, 2014, available at: <http://apps.fcc.gov/ecfs/document/view?id=7521195149>, pages 1-5.

Distinc.tt

Distinc.tt is a social lifestyle network for the LGBT community. Distinc.tt helps LGBT people find relevant information on what's going on around them, what places are safe for them to be out, and how they can connect with other people in the community. At Distinc.tt we are dedicated to creating technology that improves the lives of LGBT people. We provide content recommendations and other engagement tools to our users.

Instead of focusing on sexual or romantic connections, we provide tools and content that our users can use to find relevant events, places, and friends. For instance, we have a recommendation engine that ranks places based on their measured popularity amongst our users at a given location and time, regardless of if the place is "mainstream" or gay-specific. This is increasingly important in order to maintain a sense of community as LGBT people become more accepted and integrated into mainstream society. Beyond the challenges faced by increased integration, technological advancements by other companies in the LGBT space have had unforeseen consequences. Moreover, "mainstream" social networks don't meet all of the needs of the LGBT community.

To be more concrete, consider the mainstream options. You have probably used a social network to connect with friends, family, or professional contacts. Though social networks do help people connect, there are significant limitations when addressing gay people's' specific needs. As an invisible minority in an increasingly integrated society, LGBT people need a way to find gay specific information, like what places are popular with community members, who else around them is gay, and what organizations they can comfortably engage with. Gay people rely on this type of information in order to

maintain a sense of community. A lot of the information that is relevant to the LGBT community is hidden, and this content is hard to acquire. We help organize and uncover the world's gay information.

To understand our business one must understand the changing environment of the LGBT community. Population researchers currently believe that the gay community is in decline, despite the gay population being stable or growing in most cities. Traditionally, gay bars and businesses served as a center of cultural, social, and political life. These venues, along with all gay physical infrastructure, have been decreasing in number. Civic engagement in LGBT organizations has also decreased. As physical venues have declined, the virtual community has increased in importance in the LGBT community. Researchers at the University of Minnesota, as well as journalists from the BBC, the New Yorker, and many others, believe that these structural changes are the result of the technology that has been available to gay people, compounded by assimilation into mainstream society.² Members of the community largely see other mobile apps as “hook-up” apps. Every other gay social app shows its user a grid of mostly headless torsos. We believe technology needs to provide the gay community with ways to connect with each other beyond sexual relationships, especially as the virtual community continues to grow. This has been our immediate goal, and I'm happy to say that we've been able to create virtual tools that help people connect with content and each other in the real world. Indeed, the Wall Street Journal recently called us “The Gay App You Can Bring Home to Mom.” Technology like ours needs to exist in order to maintain our community and address the new issues that are arising in this changing environment.

Distinc.tt was incorporated in 2010, when my cofounder, Michael Belkin, started at Harvard Business School. I joined shortly thereafter, believing that technology was the best solution to many of the new issues I noticed in the LGBT community. We both believe that our lives are materially changed by the innovative products and services we use. They help us connect with people, stay organized, maintain a profession, learn new things, and the list goes on. We wanted to do the same for others. With simply an idea and the will to implement it, we can have a positive effect on people's lives and make them, at least marginally, happier.

Over the next two years, Michael learned how to code, taking courses at Harvard College because he believed as strongly as I that something like Distinc.tt needed to exist and was willing to put aside everything to make it happen. We got our first seed investment in the fall of 2012 from Peter Thiel, after showing our ability to effectively acquire users for our test product. If we would have entered a market where established companies had already negotiated priority access to consumers, we would have had to spend money that we did not have up-front and would not exist today. We've since received funding from renowned investors like Keith Rabois, and top entrepreneurs and product managers like Josh Haftel. In the short time that we've been working on Distinc.tt, we've been able to create world-class technology that's superior to our competitors in both stability and design. We give free services to nonprofits, and we are assisting some of the world's largest organizations dedicated to ending poverty and promoting human rights.

None of this would have happened under the rules proposed by the FCC. My co-founder and I would have never given up lucrative job offers to take on such a risky and bold initiative as Distinc.tt.

Like all of the startups I've talked with, if there were a fast lane, our survival would have depended on us being in it from the beginning. As I noted earlier, this would not have been possible. Even if the "slow lane" were "pretty fast," it wouldn't matter because we would still need to be as effective at serving our users as our competitors. Users turn away from websites which are even 250 milliseconds slower than their competitors.³ As a former political scientist, I'm reminded of Plato who said that "democracy is a charming form of government, full of variety and disorder; and dispensing a sort of equality to equals and unequals alike." This is what the FCC protecting net neutrality and an open Internet does—it provides equal access to engage in the market for startups and entrenched competitors alike. The very existence of a "fast lane" creates inequality that would significantly disadvantage us and the majority of other startups.

The challenges that startups face are vast—finding great team members; obtaining funding; acquiring and engaging users; designing and scaling technology; figuring out federal, state and local taxes and laws; developing cybersecurity; dealing with legal issues; and finding strategic partners; etcetera. However, these challenges are surmountable, and our tech sector is vibrant for one reason: It's currently cheap to start a startup. As Sam Altman, President of one of the world's top tech accelerators, Y Combinator, put it: "The Internet has been the great bright spot in US innovation in the last decade. It's mostly been a free and open platform, where anyone can get something started. When the great companies start, they often look like very fragile projects. Any additional barriers, however small, could easily have stopped Google or Facebook from getting going."

Comments of Distinc.tt, Protecting and Promoting an Open Internet, GN Docket No 14-28, August 5, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750451>, pages 4-7.

LendUp

LendUp is a direct lender that uses technology to fix what's broken about payday lending. We have created an online lending platform that changes the dynamics of a payday loan from what can be the first step into a debt trap to an opportunity to build credit and learn the benefits of responsible financial behavior. Our values center on transparency, dignity and access

LendUp began ten years ago when I read Dr. Muhammad Yunus' book *Banker to the Poor* about his work providing safe access to credit in order to help people improve their lives. Dr. Yunus founded the Grameen Bank, which pioneered the concept of lending small amounts of money to poor people in the rural areas in order to help them start small businesses. By structuring products that worked for those banks deemed too high-risk, he made loans a relationship, not just a transaction. Inspired by Yunus's work, I moved to Honduras to work with the Grameen Foundation and what started as a six-month, volunteer internship turned into a career committed to expanding financial services to new segments and markets, with the ultimate goal of improving lives.

This left me with a strong desire to use these lessons to provide a market alternative for the one in eight working Americans who take out a payday loan every year, and a belief that technology could empower us to do so in a sustainable way. For the forty-five percent of the population living paycheck to paycheck even the smallest unplanned expense can mean financial catastrophe. Last year 14 million people borrowed \$45 billion in payday loans. Most frequently, these loans are the result of an emergency or uneven cash flow, such as a utility bill due two days before a paycheck. My co-founder and stepbrother Jacob Rosenberg and I knew there had to be a better alternative for this underserved section of the market. So with my background in financial services and his expertise building some of the largest websites in Silicon Valley, we created LendUp.

Technology underpins the aspects of LendUp that make it a better product for consumers, and a viable competitor within a fierce marketplace. First, consumers needed choice, so we created an online tool that allows them to build the loan that works for them. For example, in California this means choosing a loan amount between \$100 and \$250 for between 7 and 30 days. Customers can use our dynamic platform to build the exact loan that means their needs.

Next, our customers demanded speed and accuracy. Again, using technology, we have streamlined the application process and created a dynamic risk model that offers an instant decision. Our model specializes in evaluating those with poor and no credit histories, moving beyond FICO scores to recognize and approve the right customers. New or returning customers can take a loan any time of the day, any day of the week because the entire process is automated and online.

Finally, our borrowers deserve access to a broader array of services. We built the LendUp Ladder to give customers the chance to use their repayment history and engagement on the site to get access to more money, at lower rates, for longer periods of time. Actions like paying a loan early or on-time or taking one of our free credit education classes earn customers points. Points translate into new status levels – from Silver to Gold to Platinum to Prime. Our top two levels report payments to major credit bureaus, giving customers the chance to improve their credit score and get access to even more products. With the LendUp Ladder, Annual Percentage Rates (APRs) start at about half of market in key states and get drastically cheaper over time. This type of benefit – where a customer can know their status and what they can do to improve it at any time – can only be available through an online service.

We can reach our customers online through any desktop or mobile device 24 hours a day, 7 days a week. Since our inception in 2012 as a California-based direct lender, LendUp has expanded its services to eleven states, including Missouri, Louisiana, Mississippi, Oklahoma, Tennessee, Oregon, Illinois, Oklahoma, Wyoming, New Mexico and Texas. We aim to launch in a new state every few weeks for the duration of this year. As a result, we project that LendUp will process upwards of 300,000 loans in 2014.

As with most startups, the early success of LendUp depended on a belief that an innovative idea and exceptionally hard work would allow us to take on and succeed within an incredibly competitive industry. Jacob and I were the first to take the jump, leaving our jobs as a SVP at Citigroup and CTO of Platform at Zynga in 2012. Since we could not have afforded to build LendUp with our own money, we

needed investors to also believe in our vision. Through our hard work and good fortune, we received funding from some of the most prestigious incubators and venture capital firms in Silicon Valley, such as Y Combinator, Google Ventures, Kleiner Perkins, Andreessen Horowitz and many more. It was in part the encouraging environment of the FCC's current open Internet rules that allowed all of us to take this risk, a calculation that would have been much harder under the Chairman's proposal.

Competition within this industry is fierce and, if we were founded under the rules laid down in the Chairman's proposal, our initial cost projections could have proven prohibitive. We would have needed to pay a substantial premium in order to ensure customers could find and access us within a crowded marketplace. We compete not only against established brick-and-mortar and licensed online lenders, but also growing ranks of unlicensed lenders who operate online from outside of Federal and/or state jurisdiction. These unlicensed lenders can circumvent state usury laws, are free from other state compliance and regulatory burdens, and have no incentive to provide the consumer protections and disclosures customers deserve. With lower regulatory and compliance costs and higher revenue potential, these unlicensed lenders can price out compliant lenders, leaving the industry less competitive and more dangerous. Free of usury caps, this cost can easily get passed on through higher fees for low income, working class Americans.

Beyond competition, core aspects of our business depend on Internet speed and efficiency. From underwriting to transaction processing, we rely on large amounts of data flowing quickly to meet customer needs and ensure accuracy and security. Speed also enables our value proposition as no customer is going to sit through a credit education video that takes too long to load. Again, with competition so intense and the alternative lenders so lacking our benefits, the consequences of a borrower abandoning us for a less compliant lender that could pay more for bandwidth are high. Furthermore, as investors evaluated the potential of our business, if these would-be risks had been a reality, I am confident conversations would have been different.

Assuming investors were willing to take on these risks, an even graver one may still have given them pause. The Chairman's proposal permits ISPs to strike exclusive deals with edge providers, carrying their traffic but not that of their competitors with priority. These deals would certainly come at a high price – a price we could not afford even with the most generous investment, but which our competitors might have purchased to exclude us.

Comments of LendUp, Protecting and Promoting an Open Internet, GN Docket No 14-28, August 5, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750453>, pages 2-6.

Badger Maps

Badger is a virtual Swiss Army Knife for salespeople in the field: we put every tool a salesperson needs in one sleek package. We unlock the data already collected by a company's Customer Resource Management (CRM) software, process it, and display it in a format that appeals to salespeople on the move: an interactive map. Badger includes features for planning schedules, optimizing routes, and

generating leads. With Badger, workers can make faster, better decisions about where they should go and how they should spend their time.

The Badger Map has had a real impact on the business community. Though CRMs contain large quantities of important information, they often fail to reach salespeople. Because Badger presents customer data on a salesperson's mobile device, in such an appealing way, companies have measured a 30% rise in CRM usage with Badger. Reps using The Badger Map get 25% more meetings with customers and spend 20% less time driving.

In 2013, Badger was nominated as one of the "Top 20 G-Startups" at Silicon Valley's largest mobile expo with other 10,000 developers, executives, startups and investors from over 60 countries. We completed Stanford's StartX Accelerator program, and also the Alchemist Accelerator program.

With each day, we strive to continue to grow and provide mobile sales teams with the best data available. As the number of mobile workers continuous to grow, our company continues to grow. We currently have 10 dedicated employees supporting our 130 customers with 570 individual users.

When we were founded in 2012 our three founders—Steven Benson, Aaron Tolson and Gady Pitaru—pulled together financing from our own pockets. We hired engineers and started to build a product. Our first customers would not have been interested in our product if it were slower. And we couldn't have paid extra to an ISP for a fast lane. So in this particular case, not making ISP's a regulated utility would have stifled innovation.

There are a lot of costs to starting a business, and investors and venture capitalists are only interested in funding certain types of businesses. An entrepreneur needs to pay peoples salaries, pay for servers, buy software, pay for space to house workers, buy Ramen and peanut butter, etc. So by adding another cost—paying off Internet service providers, to keep them from putting a gun to companies' heads—you will get less innovation in the American economy.

Comments of Badger Maps, Inc., Protecting and Promoting the Open Internet, GN Docket No 14-28, August 5, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750452>, page 2-3.

Linear Air

Linear Air is building a digital marketplace to enable the growth of the air-taxi travel segment, a one-half billion dollar market today in the U.S. that we believe we can grow to over \$17 billion in the next decade. Naturally, with that growth our success will stimulate tremendous job creation, and contribute to the dominance of leading U.S. aircraft manufacturers by creating demand for their most innovative new products.

Our mission statement says: Linear Air brings a personal travel alternative to those who've dismissed extravagant private jets and grown tired of disappointing airline service.

Since January, 2013, we have rescued hundreds of passengers from the airlines, providing them with a flight experience they love and rave about, and have enabled our partner aircraft operators to buy more airplanes and hire more pilots. We expect to do over \$3 million in business this year, and are on track to raise \$10 million in venture capital to enable us to grow by almost a factor of 10x next year. You can search for air-taxi trips online at LinearAir.com, Hipmunk.com and Kayak.com.

Simply put, we are using the power of the Internet to revolutionize air travel. Traditional private charter is extravagantly expensive—the average trip price is over \$18,000. In contrast, we are developing an air-taxi model with an average trip price of less than one-seventh of that cost, making us price-competitive with the airlines on their expensive routes, but with a service level that is incomparably better, AND enabling us to serve routes and towns that the airlines have abandoned.

Charter companies can afford to hire salespeople to handle the transactions manually. At our prices, a manual sales model cannot be made profitable, and that is why we are developing a highly-automated, online channel to customers, with a sophisticated software platform at the center that will link their demand to the capacity represented by the over 800 operators of air-taxi aircraft in the U.S.

Our business, the innovation in air travel it promises, and all the good jobs that it will create, critically depend on the Internet continuing to be an effective conduit for our customers. If we get squeezed into the slow lane, all of that could be lost.

Our company was founded after our CEO, Bill Herp, spent a particularly torturous day being subjected to the agonies of modern airline travel. A trip that would have taken him just two and a half hours via air-taxi—and which was promised by the airlines to take just four hours—ended up consuming almost thirteen hours, many of which were spent sitting in broken airliners. Given his track record as a successful Internet entrepreneur, he realized that the combination of the Internet, the latest sophisticated air-taxi aircraft, and a proprietary software platform would enable us to bring consumers a truly viable third alternative in air travel.

We have made huge progress down that path. But it hasn't been easy. We've had to overcome numerous obstacles. One obstacle is our access to advertising in order to reach our target customers. There are a small number of key travel websites, and of key travel search terms, that we would like to be able to advertise on and with. The only problem is, all the good "inventory" (keywords and ad spaces and times) are bought up more than a year in advance, at prices we can't hope to afford. Who buys these? The entrenched big air travel players, of course. American, Delta, NetJets, Blue Star, etc. They are battling each other in their legacy markets, and have locked us out of reaching our customers through those channels.

This example is particularly relevant to our objection to the FCC's proposed rules on net neutrality. It is an example of how the incumbent players have several advantages already, against which we fight an uphill battle. The FCC proposes to give them another advantage. Fortunately, there are other channels we can use to market and advertise to our customers. But, there is only one Internet. If the FCC

endorses the creation of paid-for “fast lanes,” big players will battle each other, bid up the prices, and startups like us will be locked out of fair access to our customers.

In fact, if the FCC’s proposal were in place when we were founded, it could have prevented Linear Air from getting off the ground altogether. In order to be competitive, we need to have Internet service which is just as good as our incumbent competition. Our competitive advantage is convenience; if visiting our site is inconvenient, our customers will be deterred. But at the time of our founding, we could not have afforded to put ourselves in the fast lane. We didn’t have much cash on hand; and what cash we did have, we used to finance the capital intensive parts of our business.

We went on to raise funds in several rounds of investment. Those investments, though, would have been jeopardized by the Chairman’s proposal. Our investors would have realized that they would need to finance putting Linear Air in a fast lane, in order to keep us competitive. That would have substantially increased the riskiness of their investments. They would have been less willing to invest, and it is quite likely we would have failed to raise the capital we needed to get this far, and would have been forced out of business.

Comments of Linear Air, Protecting and Promoting the Open Internet, GN Docket No 14-28, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750455>, page 3-5.

Poll Everywhere

Poll Everywhere enables presenters to embed polls within their talks. Members of the audience deliver their responses via text messages or tweets, and the results are integrated into the presentation live. Our platform is easy to use, cheap, and flexible. Though our users range from consultants to pastors, our product appeals especially to educators: in total, over 100,000 teachers use Poll Everywhere to make their lectures more effective.

We received funding from Y Combinator, Silicon Valley’s most premiere startup accelerator. We have 20 employees in our San Francisco office. We have been profiled in the New York Times and the Chronicle of Higher Education. TopTenReviews said that Poll Everywhere is “a SMS polling service that can’t be beat, and is a high-quality example of the future of web-based mobile advertising.”

We compete directly with other text message-based polling services and the analog incumbents of our field: companies which manufacture “clickers.” Clickers are like simplified versions of your TV’s remote control, which allow audience members to record their answer to multiple choice questions. The demand for polling is great and growing: one of the largest companies in the space, Turing Technologies, sold 1.5 million units in 2011 alone.

We offer several advantages over our incumbent competitors. First, it’s easier for customers to get started with Poll Everywhere than it is to set up a system of clickers. To set up Poll Everywhere, all you have to do is download our app to a device you already have: your computer. Members of your

audience need only to use devices which they already have— phones or computers—in ways to which they are already accustomed. You don't have to buy a clicker base; your audience doesn't have to buy clickers. This makes it possible to set up polls spontaneously, and easier to set up polls long in the making. Second, even in settings already accustomed to clickers, Poll Everywhere is often cheaper. Clickers tend to sell for \$30 to \$40 apiece, and the base system which generates graphs from responses costs \$250. Poll Everywhere is free for the audience, and often is much cheaper for the presenter. This lower price point has made audience response technology more accessible to price sensitive customers, like K-12 and University instructors. Third, Poll Everywhere is flexible; it can process a wide range of responses. Though our users most often ask multiple-choice questions, they can also ask their audiences to submit unrestricted responses. That flexibility is impossible with analog clickers, which must have all of their possible responses built-in on the assembly line.

We've all been there. A PowerPoint presentation, or maybe a lecture, rolls on endlessly past a huge field of facts. You stopped paying attention 30 minutes ago. Before founding Poll Everywhere, our co-founders, Jeff Vyduna and Brad Gessler were on the other side, tasked with giving several internal presentations at a large consulting firm. We often tried to think of ways to keep their audiences engaged. One day, we decided to solicit text message responses to the presentation. We rewarded participation by giving an iPod, randomly, to one respondent. The success of this experiment led us to found Poll Everywhere.

Being accepted into Y Combinator was our big break. When we founded Poll Everywhere, in 2007, we were all either working day jobs or attending business school. Before we were accepted to Y Combinator, we thought Poll Everywhere had serious promise, but we weren't comfortable investing all of our time and much of our money in such a risky proposition.

If the FCC's Proposal had been law when we were founded, we might not have received funding from Y Combinator—or from anyone else. The partners at Y Combinator would have realized that, in order for us to be competitive, we would have had to be in a fast lane. One of our more dazzling features is live updating: the slide in your presentation will change as votes come in. In order to pull off this feature, we have to shuttle data quickly and consistently. If we were in a slow lane at the time of our founding, our demo at Y Combinator might have loaded slowly or choppily, or our product would have been slow and choppy when we launched. It would have been harder to persuade people to switch from clickers to Poll Everywhere. The partners at Y Combinator would have realized this, and would have been less willing to fund us.

But even if Y Combinator did accept us, we would have also faced the more total threat of exclusive deals signed between the manufacturers of clickers and ISPs, offering them and only them priority access. We certainly could not have afforded to negotiate such a deal, and such a deal would have set us back tremendously. If we were able to overcome those obstacles, our product would be much more expensive and not as accessible by our price sensitive education customers.

Comments of Poll Everywhere, Protecting and Promoting the Open Internet, GN Docket No 14-28, August 5, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750459>, page 3-5.

Publitas.com

Publitas gives retailers access to all the possibilities of e-commerce. We do more than simply digitize a catalog already in print. We optimize the catalog for search engines, enable the catalog to be easily shared on social media, embed videos and other interactive elements, and enable viewers to shop directly from the catalog.

I co-founded Publitas in 2007 in Amsterdam, and we have expanded to 10 employees since then. Over 300 retailers use Publitas, and our catalogs are seen by 14 million monthly users, 60,000 of which are in the US.

In 2007, the Netherlands offered very little support to startups, so I started Publitas with my own savings. I had \$15,000 savings, and that was enough to get Publitas off the ground.

Our big break came when we secured two big clients which led to more new clients and generated approximately \$1 million in revenue by the end of our first year.

But this amazing growth would have been jeopardized if the FCC's proposal had been in effect in 2007. In the first place, the FCC's proposal could have affected us despite the fact that our initial clients were based in the Netherlands, as America's tech policy is very influential abroad. If the FCC had enacted policies which infringed upon net neutrality, the Netherlands might have enacted similar ones. Second, as a co-founder of this company, I clearly could not have afforded to put us in a fast lane. We would have been exposed to slow and patchy service, and we might not have been able to secure the big initial clients that allowed us to survive.

Comments by Publitas.com, Protecting and Promoting the Open Internet, GN Docket No 14-28, August 5, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750462>, Page 2-3.

RebelMouse

RebelMouse is a technology platform that takes your best content and makes it last longer and reach farther. We aim to serve content creators of all kinds—from individual bloggers and artists to the world's largest brand marketers and publishers—with one mission in mind: to “let your content roar.”

Our clients include General Electric (GE), United Airlines, and Viacom. Time named us one of their Top 50 Websites in 2013. PBS said that we were “one of the best social media tools for journalists.” Business Insider listed us as one of their “17 startups to bet your career on.”

Our company was founded two years ago by Paul Berry, the former CTO of the Huffington Post, and we are backed by some of the pre-eminent investors and individuals in the technology and media

industries. While a significant percentage of our staff is based in New York, we take great pride in our globally distributed team, ranging in places from California and Chicago to Buenos Aires and Ukraine.

RebelMouse performs two main services. The first, the one we were founded upon, is to break down barriers to sharing content on the web. The second is to engage viewers of content. We have developed tools to aid consumption across devices and formats, to track performance across networks, to and seamlessly turn site visitors into community contributors.

In essence, we want to build you a viral content rocket ship and hand you the keys. An enterprising media mind can take a seed of an idea, leverage our platform for publishing and sharing, and potentially start competing with some of the best-known media companies in the world.

As RebelMouse matures into a full-fledged publishing platform, we have seen just how explosive the viral effects of our tools can be. One of the collaborations we're extremely proud of is with the nascent animal activism website, The Dodo. The headline of this Fast Company article really captures the essence of the service we offer.¹ It reads, "How The Dodo Hit One Million Page Views In One Month—Without Hiring A Single Developer." After working with us, The Dodo has roughly eight million page views per month, and still operates a full editorial team without any technical experience on staff. We power their entire technology stack from end to end, freeing their team up to do what they do best: research, strategize, write, and share.

RebelMouse was a direct extension of Paul's previous experiences at the Huffington Post, the most viral publishing network ever created. While he was there, people began to ask him for tips, tricks, and advice about how they might also improve their visibility. After leaving the Huffington Post, it didn't take long for Paul to realize that the technology that powered the Huffington Post could be modified to power any type of content system.

He founded RebelMouse in 2012. If there had been a fast lane then, RebelMouse would have needed to be in it. Since our servers handle lots of data and lots of traffic, any pageloading delays would have been noticeable. And our clients would not have taken kindly to these delays. First, they might have turned away from our site: it's well-documented that users tend not to visit sites that load even 250 milliseconds more slowly than they expect.² Second, they might have feared that their data, as it gets sent from our servers, would load slowly or choppily too. We couldn't have been a credible booster for our clients' content if we gummed it up.

Paul would not have been able to afford to pay for prioritization on his own. In the real world, within a year of our founding, we were able to secure investments from a variety of sources. If the FCC's proposal had been in effect, though, we might not have gotten a dime.

First, our investors would have realized that they would need to fund priority Internet access for us in order to keep us competitive. That would have exposed them to increased risk, which they might not have been willing to stomach. Second, given the effects of the FCC's proposal on the digital ecosystem, RebelMouse would have been a much less attractive investment. We pride ourselves on appealing to

startups and small players, people who have interesting ideas but don't have a soapbox. We level the playing field for them. Within a two-tier Internet, fewer of them would exist. We would have had fewer potential clients and less potential revenue. We would have had a much less attractive pitch, and we would be a much smaller company today— if we existed at all.

Comments by RebelMouse, Protecting and Promoting the Open Internet, GN Docket No 14-28, August 5, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750463>, Page 2-4.

Meetup

Meetup is the world's largest network of local community groups. Meetup makes it easy for anyone to organize a local group or find one of the thousands of groups already meeting up face-to-face. We have nearly 18 million members, and more than 160,000 Meetup groups, all organized around the things that matter the most in people's lives. Meetup currently employs 126 people, the majority in our headquarters in downtown New York City. We're actively hiring with 17 open roles posted on our website.

Meetup believes that meeting up is the best path to a better version of ourselves – to an important relationship, to a new skill, and to the joy that comes when you find a group where you really belong. Finding the others can help us grow, learn, and change. Our biggest categories are parents and family, outdoors and adventure, and career and business, and technology Meetups are the fastest growing segment. Regardless of the idea or activity that brings people together, when we connect with the right people around shared interests, it changes the way we approach the world, the future, and each other.

There are too many Meetup stories to possibly share, not surprising given the fact that each day 15,000 Meetup groups get together. From dads in Ohio, to moms in Texas, Meetup gives families a place to find much needed parenting support and community. Health support Meetups also abound – Breast Cancer survivors meet up in cities across the country – Detroit, Atlanta and Chicago to name a few. People in cities across the country get together every day to get fit and stay healthy: they run marathons in Nebraska and go hiking in Kansas. They discover new hobbies and interests from knitting in Florida, to motorcycle riding in Virginia, to fishing in North Carolina and go on to make life-long friends. Many people even get married to people that they meet at a Meetup event . People meet up to grow their careers in California, and grow their 1 businesses in Colorado. They teach each other new languages in Maryland, turn each other into computer programmers in Utah and they make their communities stronger with volunteer work in Boston. Many Meetups also go on to become profitable businesses for the organizers.

After 12 years, 18 million people from all around the world have signed up – growing organically through word-of-mouth. In the next two to five years, we expect to see continued and accelerated growth in the number of Meetup members, organizers, groups, activity, and revenue from organizer dues and other diversified revenue streams.

We're confident in our ability to grow because Meetup's model works best when the network of Meetup groups and members in a given area is dense. As the network grows more dense, the Meetup groups in a given area grow more varied and more interesting, members and organizers have a better Meetup experience, and in turn, the network grows stronger.

We're now at a stage in the company's history where we can see Meetup communities operating at scale – mature, developed Meetup ecosystems. In New York City, our hometown, we're about to cross a threshold of 1 million members on the platform, or one in eight New Yorkers. This makes our city a lot less lonely, and a lot more alive, and now we can't imagine it any other way. But Meetup is not strictly a big city phenomenon. In towns and cities all around the world, moms are providing each other vital support, hikers are conquering new peaks together, technologists are learning new skills – and every other activity you can imagine.

A year ago, Meetup's strategy team led a project to assess Meetup's overall economic impact, to see how much Meetup members are spending on Meetup related activities (like coffee shop tabs, event space rental, park fees, etc). Their research findings showed that Meetup's economic impact is \$100-\$150 million per year.

Even more significantly, we've seen the impact Meetup has had on our culture and the beginning of a revitalization of strong civil society and community engagement. We will continue to grow spark because of the power of the free and open internet, and we will affect people's lives on an even greater scale.

Meetup was founded in 2002 by Scott Heiferman, Brendan McGovern, Peter Kamali, and Matt Meeker and Greg Whalin. When Meetup CEO Scott Heiferman wrote to the Meetup community on the 10th anniversary of September 11th, he wrote, "many people don't know that Meetup is a 9/11 baby." Heiferman was living in New York City at the time, and in the days and weeks after the attack, he was struck by a shift he noticed in his neighborhood. In the elevator of his apartment building, and on the surrounding blocks, "People were looking after each other, helping each other, and meeting up with each other..." While eyes around the world turned to New York, New Yorkers turned to each other.

As Heiferman wrote to the Meetup community, "A lot of people were thinking that maybe 9/11 could bring people together in a lasting way. So the idea for Meetup was born: Could we use the internet to get off the internet — and grow local communities?" Nine months later, on June 14, 2002, Meetup was founded. When Meetup was started, the founders did it with their own money and credit lines. It was enough to rent a tiny office space, and pay a couple of interns, and one or two full time salaried employees. Budgeting and paying for priority internet access would have been a huge impediment. It would have prevented Meetup from competing with the leading community services at that time, Evite and Yahoo groups. These were all established companies with much larger budgets.

Today Meetup has surpassed all those in terms of our impact on culture and community, but if we weren't on a level playing field at our founding, it's possible that we wouldn't have made it out of our infancy. Before Meetup could raise any money from investors, we had to launch a successful product and demonstrate it could gain traction. Over time, we raised a total of \$18.6 million from investors, primarily from venture capital investors including Draper Fisher Jurvetson, Omidyar Network, Union

Square Ventures. We are now a profitable business. We strongly believe that the current rules being proposed by the FCC would have presented a stumbling block to our growth and success if they had been in place at the time. Meetup had its first big break in 2003, when Howard Dean kicked off his campaign for the 2004 democratic presidential nomination.

Up until then, the most popular groups on the Meetup site were more narrow in focus and appeal. When a staffer on the Howard Dean campaign with a limited budget discovered Meetup, it was a natural fit. At the time, Meetup was a free service, and it made it easy for groups to self organize just by creating a topic. When the Dean campaign asked Meetup to create the Howard Dean topic, Howard Dean Meetups popped up all over the country, and suddenly our CEO was on 60 Minutes. For the first time, people were hearing about Meetup in the mainstream press, and we scaled very quickly. We saw huge increases in activity, a lot of inbound media inquiries, and traffic from all over the world. Meetups were forming in obscure places where we'd previously had no real presence. It was exciting and scary and a big, big break for us. If we'd had to pay at the time for faster internet access, we wouldn't have had the money to do it.

We achieved our success because of a free and open internet, and we think every company should have that opportunity to succeed. A two-tiered internet, where we have to pay a fee to each cable and phone company to get the same treatment as our competitors, would force us to divert scarce capital away from hiring new employees and other opportunities that will help us grow our business. Meetup would be at a disadvantage in the slow lane because pageload time has a major impact on user experience. Ultimately, the FCC's proposal threatens Meetup organizers and members most of all. While Meetup is a single corporate entity, we're also a collection of community organizers who are focusing on creating opportunity for themselves and their group members. A free and open internet, where Meetup continues to compete on a level playing field, is key to our continued success – and the continued success of 160,000+ Meetup organizers. In addition to the reasons above that make clear why Meetup would not have been able to start and grow under the FCC's current proposal, there is one other stark reality – we would likely not have been able to raise any outside financing under the FCC's current proposal. Investors would have been uneasy – or perhaps even unwilling – to fund a company that would have to compete with larger companies that could afford to negotiate priority or exclusive deals with internet companies. Under such a system, the winner in the marketplace is not simply the company with the better product or service, but rather the winner is the company with the bigger wallet that can negotiate a better deal with internet access providers. Investors are keenly aware of critical factors for the success of a new business, and if the success of Meetup depended on us negotiating deals against larger competitors or with large internet access providers as opposed to simply developing a better product, then it is likely that our company would have never found any investors at all.”

Comments of Meetup, Inc. Protecting and Promoting an Open Internet, GN Docket No 14-28, July 14, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521382127>, page 2-7.

TerreAvion

Our company, TerrAvion, is a 12-person startup, co-founded by a Carnegie Mellon roboticist and a U.S. Army veteran, to increase agricultural productivity by making aerial imagery accessible. Aerial imaging is a well-established art that is known to produce great insights for farmers. However, there

has been a big problem to date. Getting imagery has taken too long and it has been too expensive to use frequently. We've built a technological solution to this problem and have had amazing results: Bottom line productivity improvements on the order of 10% in the first year for our customers and 30%+ monthly growth for our company. We are a company that takes American innovation, industry, and the hard lessons of the recent wars and applies them to feed the world.

The problem we face is that we collect enormous amounts of data and need to distribute this data to our customers. Thus, if we were in a slow lane, even if that lane were “pretty fast,” the delays in loading our maps would be noticeable. Customers don’t take kindly to these delays. They turn away even from websites with page-loading delays as small as 250 milliseconds.¹ We would have needed to be in a fast lane to be competitive. At the time of our founding, though, we simply could not have afforded to pay to put ourselves in a fast lane. My co-founder and I did not have the personal funds to afford that. Earlier this year, we were fortunate to receive funding from ImagineH2O and Y Combinator, Silicon Valley’s premier startup accelerator. We might not have received funding from either if the FCC’s proposal had been in effect. Both ImagineH2O and Y Combinator would have realized that they had a stark choice: either invest extra money so that we could pay off ISPs, or risk putting us at a competitive disadvantage. Facing that choice, they might have simply walked away. However great our product is, any startup is a risky investment. They might have decided that the risk was not worth the reward.

Comments of TerreAvion, Protecting and Promoting an Open Internet, GN Docket No 14-28, September 3, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521827328>, pages 2-3.

ShapeWays

Shapeways is the world’s leading 3D printing marketplace and community, empowering designers to bring amazing products to life. By giving anyone the ability to quickly and affordably turn ideas from digital designs into real products, Shapeways is fundamentally changing how products are made and by whom.

Through Shapeways, designers gain access to our two 3D printing factories which house the best industrial 3D printing technology, capable of manufacturing products with complex designs in a wide range of high-quality materials. 3D printing turns raw materials into original products, from wedding rings to rocket ships, model trains to iPhone cases, and prototypes to industrial engineering parts. The Shapeways community can sell their products on our platform, share ideas, and get feedback from creative consumers and other designers around the world.

Headquartered in New York, Shapeways has factories and offices in Eindhoven, Queens, and Seattle with 140 employees spread between the locations. Shapeways is a spin-out of the lifestyle incubator of Royal Philips Electronics, and our investors include Union Square Ventures, Index Ventures, Lux Capital, and Andreessen Horowitz.

While Shapeways enables anyone to bring their products to life, we also empower entrepreneurs: the 18,000 Shapeways shops are each a small business – that’s one for every yellow cab in NYC. Shapeways shop owners earned over \$500,000 in profit in 2012 with customers in 113 countries, and that number continues to grow exponentially. Shop owners are truly diverse ranging from teenage hobbyists to engineers with 25+ years experience. With over 40 materials to choose from, innovation sparks unlimited creation, which is reflected by the 100,000 new products uploaded and the 1000 new shops that open each month.

Opening a shop is free, designers set their own profit margins, and we charge only a 3.5% processing fee on sales. Our manufacturing margins remain razor thin to ensure we can keep delivering on our promise to enable access to the highest quality technology at the lowest prices. Our growing community of makers, shop owners, and buyers is currently at 400,000, and allows us to constantly lower costs while improving quality. In 2008 when we started, a custom 3D printed iPhone case was \$70. Today it is \$20.

With 3D printing, niche is the new normal – we are truly a long tail business, with every passion being served. Beyond realizing individual needs and energizing fashion design,¹ 3D printing technology is also shaping countless industries from electronics and healthcare to construction and aerospace.

Shapeways’ advocacy on this issue is focused on maintaining a platform that supports our shop owners now, and in the future. Shapeways and Shapeways shop owners are successful because there is a single, open Internet. Every shop owner relies on visitors to their store to sell products and flourish. If our site loaded slower, each of those businesses would suffer. Shapeways and our shop owners would suffer under any rule that would allow big companies to pay for better broadband access to customers. We urge the FCC to reclassify broadband as a telecommunications service and regulate it like the utility it is

Shapeways was the first company to build a bridge connecting high quality 3D printing to the public. The industrial 3D printing machines Shapeways uses were never built to serve the purpose we employ them for and it is only through the vision of our co-founders that we exist.

Shapeways was founded in 2007 by Peter Weijmarshausen, Marleen Vogelaar, and Robert Schouwenburg in the lifestyle incubator of Royal Philips Electronics in Eindhoven, the Netherlands. At the time, 3D printing was prohibitively expensive and used primarily for rapid prototyping, not for creating real, finished products. Many people were using 3D software but were not able to hold their designs in their hands—they even thought it was impossible.

Shapeways.com launched in 2008 with the “crazy idea” to make the impossible possible, and started to 3D print real products, not just prototypes. In 2010, Shapeways spun out of Philips and moved headquarters to New York.

The open Internet helped turn this “crazy idea” into a vibrant, growing company. Shapeways did not have to explain to ISPs why the company was worth starting, why ISP subscribers might like to

connect to Shapeways.com, or even what 3D printing was. Instead, Shapeways grew organically as people discovered the site and decided to join the community. It relied on its relationship with creators and 3D printer manufacturers—not Internet service providers—to succeed. Ultimately, Shapeways’ success should be built upon its ability to provide a first class service to its community, not on cutting deals with Internet service providers.

Comments by Shapeways, Protecting and Promoting the Open Internet, GN Docket No 14-28, August 28, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521750466>, pages 2-6.

Tumblr

“The development and growth of the Tumblr platform was made possible by the availability of a free and open internet. In 2007, Tumblr had two employees, but was already hosting over 150,000 blogs; by the end of 2012, with a modest headcount of 136 employees, Tumblr was a top 10 internet destination hosting nearly 90 million blogs. Tumblr was able to quickly scale its platform because it could host and deliver media content across a massive worldwide network without worrying about competing for preferred internet access with companies of vastly greater resources. The level playing field of the open internet allowed Tumblr to focus its limited resources on improving the platform and growing its audience organically with a superior product.

Tumblr strongly supports a free and open internet, and believes that it would have been exceedingly difficult for Tumblr in 2007 to develop, compete, and thrive if broadband providers were permitted to (1) discriminate against content and services through paid prioritization schemes, (2) congest interconnection layers at the edges of their networks, (3) impose discriminatory data cap exemptions, (4) discriminate based on application, and apply priority to preferred applications or media (including their own), or (5) block sites based on content. A multi-tiered system catered to the economic interests of broadband providers with termination monopolies to end consumers will undoubtedly harm innovation and competition in industries reliant on the internet (a set of industries that now extends far beyond the usual “tech” sector) and stifle free expression for millions of users of Tumblr and other platforms for free expression. In such a world, aspiring entrepreneurs in the United States will be prevented from innovating not because they lack great ideas or the ability to execute against them, but because they lack the financial resources to pay for reasonable internet access to compete with established players who have paid for priority access to end consumers.

Tumblr’s mission is to empower the world’s creators to make their best work and put that work in front of the audience they deserve. Tumblr users can create, share, and consume media content of all kinds. Tumblr the product was first released in February, 2007 by then 21-year old David Karp, who created Tumblr as a specialized publishing platform to meet his need for frictionless and limitless self-expression on the web. David, and his first employee Marco Arment, established Tumblr, Inc. in September, 2007 when David raised a round of seed capital from Union Square Ventures and Spark Capital. Over the next seven years, Tumblr evolved from a tiny startup into an immensely popular global platform localized in thirteen languages, and hosting over 200 million blogs and 90 billion posts.

While Tumblr now has almost 300 employees in offices across the United States, it remains headquartered in New York City and is immensely proud to be Made in New York. In 2013, Tumblr was acquired by Yahoo! Inc. for \$1.1 billion, which was the largest exit to date for a New York City-based, venture-backed private company. Tumblr continues to operate independently as a subsidiary of Yahoo! Inc. with David Karp at the helm as CEO, and Tumblr generates revenue through a combination of advertising and premium services.

Tumblr's relentless focus is, and always has been, on providing the best experience for its users and upholding the highest standards of communication and trust with those users. Creators on the Tumblr platform include people and organizations from around the world in every discipline imaginable; notable examples include The White House, the NSA, actors Mark Ruffalo and Jared Leto, musicians Taylor Swift and Shakira, Los Angeles Mayor Eric Garcetti and ex-U.S. Treasury Secretary Robert Reich, as well as countless other influential artists, photographers, journalists, political figures, brands, and charities.

In addition to serving as a home for more-established fixtures, Tumblr has helped launch the careers of countless artists and entrepreneurs in a number of industries. For example:

- **Photo-journalism:** After losing his job as a bond trader in July 2010, Brandon Stanton bought his first semi-professional camera and embarked upon a tour of American cities during which he began taking candid street portraits and pairing them with interviews. New York City was mid-way on his itinerary but it proved such an ideal setting for his style that Stanton never left; "Humans of New York" (HONY) launched on Tumblr soon after. HONY sparked a true movement on the platform which, among other things, raised nearly a half million dollars for Hurricane Sandy victims (in partnership with Tumblr) and culminated in the publication of Stanton's New York Times #1 bestselling book in late 2013. Stanton is currently traveling across the Middle East with the United Nations, covering the region's crises in his uniquely human-centered style. Note that our inclusion of these examples of success stories on Tumblr, of which we are incredibly proud to have been a small part, do not imply any knowledge, endorsement, or support of Tumblr's comments herein (though we suspect many, if not all, would support the substance).
- **Broadcasting:** In connection with his 2010 Ph.D. dissertation, Austin-based biologist and science writer Joe Hanson started blogging about science on Tumblr. His human approach to the sciences truly resonated with the Tumblr audience, and he amassed a huge following of seasoned science lovers as well as new enthusiasts. By 2012, his Tumblr "It's Okay To Be Smart" caught the attention of PBS producers, and Joe now serves as the creator, host, and writer of PBS Digital Studios' It's Okay To Be Smart.
- **Media:** Mr Gif collaborators Jimmy McCain and Mark Portillo launched their Tumblr blog in 2011 with a simple premise: to create animated GIFs with their analogue cameras and to have fun while doing it. Soon they were capturing portraits of everyone from Kanye West to Maria Sharapova, earning work with countless brands in the process, from American Apparel to Evian to Axe to Disney. In 2014 McCain and Portillo left their jobs at Complex and MTV to launch their own agency on Tumblr; now Mr Gif is a thriving, full-time pursuit.

- **R&B Music:** On July 11, 2012, R&B sensation Frank Ocean surprised his fans by making his album, *Channel Orange*, available on his Tumblr one week before its official launch. He posted a full-album stream on Tumblr, and presented it the way he wanted his fans to first hear it—in one fluid track. Fans could click through to buy the album on iTunes, the only place from which fans could download it, and his Tumblr promotion contributed to nearly 30% of his first week sales in just twenty-four hours. In fact, from the start of his career, Ocean has used Tumblr to express himself and his art in groundbreaking ways. So when it came time to release his debut album, he had a community and platform through which he could propel himself to #1 on iTunes and #2 on the Billboard charts.

- **Digital Art:** The Jogging, a global arts collective that started on Tumblr, now hosts a robust community of cutting edge artists exploring the aesthetics of internet culture and the way it affects how we see the world today. Featured in numerous major art publications, the collective now pays contributors for Tumblr posts submitted through their site.

- **Fashion:** In 2009, Jamie Beck started a fashion blog on Tumblr in collaboration with her now-husband Kevin Burg. Inspired by animated GIFs (a digital image format popular on the Tumblr platform), the couple invented a completely new visual form: subtle moving image photos called cinemagraphs, which became a sensation on Tumblr and quickly gained attention beyond. Beck and Burg used Tumblr to become a different kind of fashion blogger, known primarily for innovative visual storytelling. In the last five years, the duo has worked with major brands and publishers like Tiffany & Co, Saks Fifth Avenue, Chopard, DKNY, Ralph Lauren, Lincoln Cars (and many more), and has photographed editorials on virtually every continent.

- **Print Art:** 9-Eyes.com, a series of imagery from Google Street View that started as a documentation project on Tumblr, has been picked up by major London gallery Seventeen Gallery, selling large aluminum prints of the works at competitive market prices at the world's most prestigious art fairs.

- **Literature/Publishing:** Tumblr has helped launch over 100 book-publishing deals. For example, writer Katie Coyle was scrolling through her Tumblr dashboard one day when she saw that author Neil Gaiman had posted about Hot Key Books' search for debut authors. She wrote a chapter, entered Gaiman's competition - and won. Her novel *Vivian Versus the Apocalypse* was published this year and the sequel will be out soon. Katie is now a full-time author. Similarly, Kate Gavino turned her love of author events and magic markers into a career: her Tumblr blog *Last Night's Reading* started as a quirky hobby and quickly amassed a dedicated following. As a result, she is regularly invited to major industry events like the National Book Awards as official artist, was tapped as Artist-in-Residence for the Ace Hotel, has a book deal of her own, and is in talks to license her work on mugs and tote bags. In another publishing success story, Greg Pembroke was an average dad frustrated by the silly things that seemed to send his kids into tantrums. He started his Tumblr blog, *Reasons My Son Is Crying*, to vent and bond with other parents. Now he's a published author in several countries and he has appeared on TV and radio programs around the world, including *The Today Show*.

- **Design:** Matthias Brown was a student at SCAD experimenting with animated GIFs on his Tumblr blog, traceloops.tumblr.com, mixing digital and analog technologies. In 2013, he caught the eye of Converse, and created content for the footwear company that received record engagement levels for

them on Tumblr. Brown is now routinely sought after to develop creative advertising content for brands, including Disney and Converse, and is a self-sustaining artist.

- **Hip-Hop Music:** Since their first post in February of 2010, the hip-hop collective Odd Future established its musical identity, and built an entire culture, through the Tumblr platform. They are the first major artists whose core fans discovered them through Tumblr, and they continue to use Tumblr as their public relations platform. Odd Future’s music ushered in the age of “Tumblr Rap,” coined by journalists to refer to hip hop music and lyrics inspired by modern contexts such as suburban skate culture. Music artists Frank Ocean, Tyler, the Creator, and Earl Sweatshirt all come from Odd Future.

These creative breakthroughs, and the countless other Tumblr success stories, would not have been possible without a free and open internet, and the platforms, like Tumblr, it has enabled. Such platforms are places where creators can quickly produce and distribute their work for free (in spite of sometimes meaningful bandwidth demands for distribution), gain fast recognition, and build lasting and meaningful careers focused on creation. The availability of free platforms like Tumblr has made creation, and particularly financially self-sustaining creation, more diverse, available, and democratic than ever before in human history. Without an open internet, which enabled the founding and growth platforms upon which this activity occurs, we would be robbed of this wealth and diversity of creation and economic development.

When David Karp launched the Tumblr product in early 2007, he was an ambitious, self-taught (high-school dropout), 21-year old programmer with one software engineer employee, Marco Arment. By the end of 2007, David and Marco made Tumblr the home for over 150,908 blogs. The following year, Tumblr doubled its employee count to four, and nearly quadrupled its blog count to 599,991. By the end of 2012, Tumblr had only 136 employees, but was a top 10 internet destination hosting 87,500,258 blogs, representing a blog-to-employee ratio of 643,384 to 1. Today, Tumblr has just over 275 employees, and is host to one of the largest blog networks in the world, with nearly 200 million blogs and 90 billion blog posts.

De facto net neutrality has been a fundamental pillar of the innovation and economic growth spurred by and because of the internet, and Tumblr’s existence would not have been possible without it. In fact, Tumblr was able to thrive under the de facto net neutral regime, where business and technological limitations prohibited, inter alia, paid prioritization, interconnection congestion, data cap exemptions, application-specific discrimination, and blocking.

The absence of access fees and paid prioritization schemes was critical to Tumblr’s early success. Tumblr is a media rich platform that relies on its ability to rapidly deliver high-quality media content to its desktop and mobile users. Because buffering and bottlenecks discourage users from uploading or streaming content to and from Tumblr, Tumblr worked diligently to improve the quality of its servers and network, and to use the services of content delivery networks and first-mile broadband providers to optimize its traffic. Such costs would have increased dramatically had Tumblr been forced to pay premiums for priority access over the last mile to end consumers, either in the form of actual monetary costs for a “fast lane” (access fees) or user growth and retention costs when operating in the “slow lane” (the inability to grow and retain its user base because of poor delivery of media content to end users).

In its early years, Tumblr was not generating significant revenue; rather, the Tumblr team's efforts focused almost exclusively on improving the creation, sharing, and communication tools on the platform, and thereby attracting users to the platform, primarily using venture capital to finance this development. Had Tumblr been required to pay different broadband providers merely to make sure it could stay competitive from an internet access perspective, and perhaps been forced to hire a lawyer among its first few employees to negotiate with broadband providers for "fast lane" transit to consumers, Tumblr may not have survived, and thrived, in its first few years. Similarly, had different broadband providers been permitted to impose discriminatory traffic rates on Tumblr, it would have been forced to deal with a materially significant cost variable that may have prevented the critical venture capital investment it received to fund development of the platform. Payments to avoid interconnection congestion also would have threatened Tumblr at an early stage in its development."

Comments of Tumblr, Protecting and Promoting the Open Internet, GN Docket No 14-28, September 9, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521847801>, pages 2, 4-6.

Etsy

Etsy is an online marketplace where you can buy handmade and vintage goods directly from artists, designers, and collectors around the world. We were founded in 2005 by Rob Kalin, a furniture maker who was frustrated by the lack of opportunities to sell his goods online. Along with his cofounders, Rob built Etsy in the course of just a few months out of his Brooklyn apartment.

Today, there are more than one million active sellers on Etsy, who together grossed over \$1.35 billion in sales in 2013. There are over 25 million items listed for sale on Etsy, and the site hosts over 40 million members worldwide, with buyers and sellers in almost every country and offices in Brooklyn, Hudson, San Francisco, Berlin, London, Dublin, and Toronto. We have been profitable since 2009, and have raised over \$91 million in venture capital from several sources including some of the top investors in the world — Accel Partners, Hubert Burda, Index Ventures, and Union Square Ventures.

Etsy's impact extends far beyond the company itself. Our sellers — 88% of whom are women — depend on their Etsy income to pay their bills and support themselves and their families. Most Etsy sellers are sole-proprietors working out of their homes, with average household income of \$44,900, 10% below the national average. Roughly one quarter earn under \$25,000 per year.

Etsy provides our sellers access to a dynamic market, educational resources and online tools to help them succeed. By reducing barriers to entry, Etsy creates new entrepreneurs who may not have brought their products to market previously — 42% of sellers sold their goods for the first time on Etsy. These internet-enabled entrepreneurs are building businesses on their own terms, prioritizing flexibility and independence over rapid growth, and using Etsy income to build resilience in the face of declining job security.

Just this year, Etsy was honored to be listed as #3 on CNBC's Disruptor 50 list. According to CNBC, "All of these companies entered traditional sectors and turned them upside down. It's not about one product or delivery method. It's the power of a company to displace the established incumbents in its own industry, prompting a ripple effect throughout its economic ecosystem. A true disruptor's power is seen in its effects on multiple industries—and its ability to disrupt the public giants."

A free and open Internet is the necessary foundation for the innovation that CNBC describes. By creating a low-cost product and demonstrating early success in the open market, our founders were able to build market share and attract the initial investment that helped them succeed. Etsy achieved such incredible success because of a free and open Internet. We think every company should have that same opportunity. If the FCC moves forward with the current proposal, it's hard to imagine the next Etsy getting enough of a toehold to take on established incumbents.

Etsy's business model would not have worked under the Chairman's proposal, which would have allowed more established e-commerce companies to negotiate individualized, differentiated arrangements and pay for priority access to consumers. Though our low fees would have helped us build an initial group of sellers, our low margins would have prevented us from paying for access to buyers, disrupting the virtuous cycle of growth that underpins Etsy's success. If Etsy were forced to pay for priority access to consumers in our early years, we would have likely set our initial fees much higher or limited our outreach to fewer markets. In either case, it is unlikely that we could have reached the critical mass necessary to succeed.

Additionally, Etsy would not have been able to attract the early capital investment that allowed us to scale our operations. Our founding team built a product and demonstrated its viability in the open marketplace, which gave investors the confidence to invest in its growth and development. Had we entered a marketplace where entrenched companies negotiated priority access to consumers, we might have had to spend much more money up front, just to prove ourselves. This is because, as an early Amazon executive noted, milliseconds matter. "In A/B tests, we tried delaying the page in increments of 100 milliseconds and found that even very small delays would result in substantial and costly drops in revenue."

Etsy's early investors also had confidence that we could build market share because the rules prohibited discrimination or paid prioritization. In the absence of that guarantee, they would likely have made very different decisions."

Comments of Etsy, Inc., Open Internet Remand, GN Docket 14-28, July 8, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521372050>, pages 2-5.