U.S. HOUSE OF REPRESENTATIVES

ENERGY & COMMERCE COMMITTEE SUBCOMMITTEE ON DIGITAL COMMERCE & CONSUMER PROTECTION

"DISRUPTING DELIVERY: AUTOMATION & ON-DEMAND PLATFORMS"

WRITTEN TESTIMONY OF POSTMATES CO-FOUNDER & CEO, BASTIAN LEHMANN

Chairman Latta, Ranking Member Schakowsky, And distinguished Members of the Subcommittee of Digital Commerce and Consumer Protection

As the Co-Founder and CEO of Postmates, it is a pleasure to join you and my distinguished co-panelists this morning for a discussion on how the landscape of traditional logistics and delivery networks are being transformed by cutting edge technologies and innovation.

While advances made by on-demand platforms have certainly "disrupted" traditional delivery models of how products and goods move across the country—it is important to start our discussion with an overview of how the nation's premiere on-demand logistics provider—Postmates—is disrupting the rate and pace at which commerce is flowing in your own backyards and districts.

I. BACKGROUND & SCENE SETTING OF THE COMPANY

When Postmates is described as a leader in on-demand delivery – we quite literally mean that through the tap of a button on your phone – the platform enables anyone to get anything from their neighborhoods, delivered to their doorsteps within minutes.

While some logistics companies try to build a warehouse outside of a city and funnel goods into it – we believe in a simple philosophy our cities and our communities are our warehouses. They are home to the unique talents and creative expertise that craft and curate high-quality products and foods.

We aim to understand the inventory available in each given town, index each of its product offerings, and connect you directly to that local experience by having a fleet of couriers—which we refer to as *Postmates*—deliver this inventory.

Postmates allows you to find and order from *any* restaurant or store in the city. That means in addition to delivering prepared food – the platform is also empowering everyone from public school teachers ordering supplies to their classrooms, to helping families of the elderly ensure groceries or medicines are delivered to their doorstep.

And with more than **65,000** active Postmates, across **44** major metropolitan markets covering **300** U.S. cities, our platform facilitates more than **2 million** deliveries per month. This year alone

we are on track to facilitate approximately \$1 billion dollars worth of total goods sold on the Postmates platform.

And since we first started the platform, our *Postmates* have earned over \$300 million in income. But that is just the beginning.

The total sales of food and groceries last year alone in the United States was nearly \$1.4 trillion dollars. But less than 1.5% of that was sold online. That includes ourselves, our competitors, even big pizza delivery companies. That means the opportunities to power local, ondemand logistics focused on fast deliveries from any type of merchant at scale are tremendous.

And with over **10,000 merchant partners** throughout the country – from major brands like Chipotle, Apple & Starbucks; to local pharmacies & corner bakeries – Postmates can strike both local and national partnerships that continue to power sales throughout local economies.

That's the power of Postmates and the on-demand economy. With each delivery we generate critical sales for merchants in the towns each of you represent; we put more time back in the ever-busy lives of our customers; and we build new bridges across vast metropolitan geographies by connecting the offerings of one neighborhood with another.

But that story of economic empowerment is also told through the lens of the flexibility we offer our fleet of Postmates making each delivery. Currently an independent contractor based model, provides on-demand platforms like Postmates and the couriers themselves optimal flexibility. These flexibilities not only improve economic outcomes for individuals and towns, but as a company, we ensure that they have the tools, resources, service support they need to get the job done efficiently. By offering supplemental insurance protections for incidents; to the ability to deduct a higher number of work related expenses on one's taxes while also working a separate full time job—Postmates is committed to investing in the success and growth of this network by retaining clear flexibilities for the Postmates on our platform.

Our Postmates can work how they want, when they want, which makes it possible to match supply & demand during the extremely busy peak times in our business. Through this model we enable students to supplement their income between classes, aspiring entrepreneurs to save capital for new business opportunities, or parents to earn a little extra by completing deliveries after dropping their kids at school or soccer practice.

All told, these sales and earnings are broadening the tax base which are being reinvested right back into our communities.

II. THE CASE FOR ROBOTICS IN THE POSTMATES SUPPLY CHAIN

So we started asking ourselves a key question. How can we expand this base of earnings, to continue revving our engines of economic impact in your districts? How can we do right by our couriers, in helping them reach even higher wages? All the while, how can we ensure merchants can keep expanding the base of sales? And how can we manage the demand logistics in particularly dense urban & suburban populations?

One such way lead us to a grand experiment – with what we like to refer to as "sidewalk class" robotics. As pointed out in a recent piece in the Harvard Business Review, executives have to cut through a lot of hype around automation.

Leaders need a clear-eyed way to think about how these technologies will specifically affect their organizations. The right question isn't which jobs are going to be replaced, but rather, what work will be redefined, and how?

And this not need be a terrifying exercise that evokes imagery of the Terminator or a world in which an entire labor force gets displaced. So we started looking at the trend lines, to start with a clear-eyed assessment of our landscape. We have people who use cars, bikes, scooters, motorcycles or walk to complete a delivery. And each has a different strength and suitability for different deliveries.

But we also noticed that in particularly dense or crowded clusters of downtown neighborhoods – the distance between popular delivery zones and popular restaurants or stores could often be quite short. Often less than a mile or two between busy downtown office-parks, and a popular lunch stop, for example.

While the Postmates platform is ready and equipped to make that delivery, sometimes those short-distance stretches aren't as financially advantageous to a member of our Postmates fleet, when compared to longer distance deliveries—since tips and charges are often based off the distance traveled.

One way to ensure the continuity of short-distance deliveries, while reserving our hard working Postmates for longer-distance deliveries – has been through experimenting with robots.

Through partnerships with robotics companies on both the east and west coast – we have started to be able to measure qualitative and quantitative data, around how robots may be able to achieve delivery times when compared to current numbers.

Most importantly we can focus our fleet of Postmates to complete deliveries that are likely to connect them to incomes at a **much higher rate**. This also means that businesses -- located in those downtown clusters, are still able to push goods. And aren't discriminated against simply because them happen to be within those short-mile radiuses.

Our thesis then, is that since both human hands, and robotic operators now on the ground, commerce across a given town is able to move at even higher rates, with more functional ways to make deliveries in a given city. In the long term, this could ultimately help drive down the overall cost of delivery, as the supply of couriers increases.

We at Postmates do not see a world in which robotics would be the ultimately delivery mechanism – instead taking these incremental and responsible steps to test automation provides us with 3 tangible gains: First, a quantitative assessment of whether robotics are able to achieve optimal delivery times. Second, a qualitative understanding of comfort levels and the overall

Congressional Testimony of Bastian Lehmann, Co-Founder & CEO of Postmates

psychology our customers & business partners interacting with these robotics -- and whether that impacts the overall psychology of the experience in any way. And third, a firm set of data -- which for the sake of better understanding the impact of automation -- will be an important bedrock of insights as we weigh scaling robotics efforts within the company, or as a society.

Ultimately, such efforts help society and technology companies explore automated integrations – while deconstructing and then reconfiguring the components which could reveal the sweet spot of human-automation combinations that are more efficient, effective, and impactful.

And while concerns may persist around the use and integration of robotics each of our partner companies take steps to prioritize the safety of their key components. From perceptive, next-generation LiDar camera technologies to ultrasonic sensors to see everything from pets to people around them – the robots travel at a safe speed of approximately 4 miles per hour on busy sidewalks, and can haul just over 40 pounds within a two-mile radius in real world scenarios. Moreover, sidewalk class robots don't fly overhead, minimizing the risk of collisions or payload damage.

A smartphone app unlocks the shiny black lid to access the hollow, insulated holding area, and then automatically locks back into place. And the bot's cameras recognize a lot — including walk signals and traffic lights, crosswalks and stop signs, getting smarter the more they drive, learning more about the sidewalks and traffic patterns of busy streets with every trip they take.

III. THOUGHT LEADERSHIP: AUTOMATION'S IMPACT ON THE SOCIAL FABRIC

Automation is an idea that has inspired science fiction writers and futurists for more than a century. Today we all know that it is no longer fiction, as companies increasingly use robots on production lines or algorithms to optimize their logistics, manage inventory, and carry out other core business functions. The process of automating tasks done by humans has been under way for centuries.

What has perhaps changed is the pace and scope of what can be automated. Even 130 years ago, streets were not yet divided into lanes for traffic, parked cars, pedestrians and bikes, and that the introduction of robots to the streetscape might require a reimagining of the available space, possibly with a designated lane for robots.

It is a prospect that raises more questions than it answers. How will automation transform the workplace? What will be the implications for employment? These are the questions that this Committee and this country are aiming to better understand each day. But I come here from Silicon Valley to deliver a simple message: The only way to determine whether there is a responsible, measured, and incremental way in which automated robotics can be leveraged—to both boost productivity, and enable a workforce to earn even more — is to experiment.

In pursuit of more data, we can build a nuanced body of knowledge around how a particular technology could be complementary to a human function.

And that helps zero-in on whether it's possible to deconstruct the "future of work" into discrete & separate elements. And as we stand up to fight the challenges of the 21st century...and seek to bolster U.S. competitiveness when nations around the world are also competing to win the future we have a duty to experiment.

The right level of detail at which to analyze the potential impact of automation is that of individual activities rather than entire occupations. According to a 2017 McKinsey report, citing currently demonstrated technologies, "very few occupations—less than 5 percent—are candidates for full automation. However, almost every occupation has partial automation potential, as a proportion of its activities could be automated. The activities most susceptible to automation are physical ones in highly structured and predictable environments, as well as data collection and processing. But it's not just low-skill, low-wage work that could be automated; middle-skill and high-paying, high-skill occupations, too, have a degree of automation potential. As processes are transformed by the automation of individual activities, people will perform activities that complement the work that machines do, and vice versa."

IV. INVESTING IN STEM TO WIN THE FUTURE

But as we experiment with these transformation, our focus as leaders in both the public and private sector must be on how to invest in the training and STEM education needed to provide workers with the skills they need to keep up with the jobs of tomorrow.

We look forward to a national dialogue around a smart and balanced way to regulate automation. And we applaud states that have been swift to pass legislation enabling us and our peers to operate and test within their hometowns. We even look forward to spirited dialogues around calls for potential tax-structures that could build a pool of capital to invest in worker retraining efforts.

But all that aside one simple creed must be reflected in the nation, and the budgetary considerations of Congress, moving forward:

To win the future, we must create an all-hands-on-deck approach to science, technology, engineering, and math. We need to make this a priority to train an army of new teachers in these subject areas, and to make sure that all of us as a country are lifting these subjects for the respect that they deserve. And Congress, and the Administration, must work to advance a budget which prioritizes improving STEM teaching and supporting active learning; expanding access to rigorous STEM courses; addressing bias and expanding opportunities for underrepresented students in STEM.

Because as automation and technology tools disrupt logistics or other sectors, we are going to need to deepen the bench of talent that can guide there. To address the complex challenges confronting the world today we must engage all the available brainpower, creativity, and talent in the STEM enterprise. We cannot afford to squander the opportunity.

That's how we ensure this disruption can keep us grounded.