NBER Economics of Digitization Application

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My name is Oren Reshef and I am a fifth year PhD candidate at the Business and Public Policy group (BPP) in Haas School of business, UC Berkeley. The Economics of Digitization meeting and tutorial were recommended to me by my advisors as well as colleagues who have participated in previous years. I am extremely excited about the opportunity to participate and believe that it will be a great fit to my research agenda and research projects.

My course work consists the core courses in Berkeley's economics department, including microeconomics theory and econometrics. In addition, the BPP program, which is Haas's business-economics group, has its own core sequence which includes the economics of institutions, reputation, contracts, and organization of the firm. Finally, I took the industrial organization, applied microeconomics, and behavioral sequences in the Economics department (some informally).

I am particularly interested in the interactions between firms and prospective consumers. Specifically, studying how consumers process available information, how they make decisions, and, most importantly, how does this process shape firms' incentives and behavior. The co-chairs of my dissertation committee are professors John Morgan and Steve Tadelis at UC Berkeley, both are well acquainted with online markets and platforms from an academic and the industry's perspectives.

I advanced to candidacy at the end of my third year. For my orals project, I studied how information simplification and standardization impact consumers' decision, and firms' strategic incentives to manipulate prices and product design. I focus on a nationwide, mandatory informational policy, advocated by the Israeli Ministry of Health, to promote healthy nutrition, which obligates all food products to carry front-of-package labels designating products as either healthy or unhealthy. I

collaborate with Israel's second largest online grocery retailer and study individual changes in search behavior and purchases. Moreover, I conduct a series of online randomized control trials, in which I randomly change the digital appearance and salience of the simplified signal, in order to study the mechanism shaping consumers decision making process.

In addition, since the beginning of the year I have been working as an Economics Research Intern at Yelp. I am currently working on several research projects there in collaboration with Prof. Mike Luca. I am mainly focusing on Yelp Transaction Platform, Yelp's online market for food delivery, orders, and pickup. The first project on Yelp studies online feedback mechanisms which had become an integral part of online markets. In particular, I ask what do consumers rate in online reviews? The most common answer is quality (of the food, delivery etc.). I argue, however, that consumers rate their utility or net value, i.e. quality net of price. This model of rating behavior has several testable implications, mainly that rating will respond negatively to price changes. Though this may seem like a subtle distinction, it apparently has several important implications for the way consumer interpret and should interpret ratings, firms' long-run pricing behavior, and most importantly, platform design.

The second project studies how entrance of new suppliers affects incumbents' firms in online platforms. I identify two countervailing forces: On the one hand, new entrants increase competitive pressure and erode incumbent firms' profits. On the other hand, in two-sided markets there are positive network effects across competing firms, i.e. the platform becomes more appealing to consumers, affectively increasing demand of incumbents' product. Thus, the effect on incumbents' profitability is ambiguous as market size increases and market share decreases, which effect dominates is an empirical question. To study this question, we take advantage of the recent integration of Yelp's delivery service with Grubhub. The integration, which happened in the beginning of 2018, increased the number of available restaurants on Yelp Transactions Platform by 50%. The increase, however, was not uniform across markets as some cities were more affected than others. This setting is compatible with a difference-in-differences analysis.

The final project studies the importance of inertia in consumers' decision making. This issue is likely to be exacerbated in online markets as those facilitate repeated decisions through 'favorites' products, 'previous order' options, and even scheduling repeated purchases over time. Our goal is to quantify the importance of inertia in online markets and study the impact on firm strategy and consumer welfare. Empirically, this is a challenging task as omitted variable, such as

unobserved individual presences, hinder us from simply regressing the probability of order form a specific restaurant on past choices. To control for unobserved factors, we use past Yelp rating as an instrumental variable for past behavior (conditional on current rating). Preliminary results suggest that, even when accounting for preferences, inertia still has a significant effect (though lower than the 'naïve' regression) on consumer's decisions.