## Rotman

November 5, 2014

Dear Recruiting Committee,

I am writing to recommend Michael Kummer for a position in your department. I know Michael through his writing and presentations I have seen him give at conferences (specifically, economics of IT conferences in Mannheim and Paris, and the NBER Summer Institute). I have no official position on his committee. Instead, I have become excited about Michael's research agenda on the economics of digitization. As a consequence of my enthusiasm for his research agenda, I invited him to visit the University of Toronto for a few weeks last summer. During his stay, we discussed research ideas and I learned more about his research interests. After that stay, he asked if I would write him a letter. I was happy to do so.

Michael's job market paper brings much-needed data to the question of how Wikipedia works. He explores the network structure of Wikipedia and asks how attention to one page affects editing of other pages. Using a natural experiment on attention, he convincingly documents that pages that are linked to pages that get attention end up receiving more edits (and become higher quality). This demonstrates the role of viewership and network centrality in the production of articles on Wikipedia. I think this paper makes an important contribution because the production function on Wikipedia (and other open, user-generated content websites) is poorly understood. What gets produced? What motivates people to edit Wikipedia pages with no monetary return? How does the structure of Wikipedia affect the quality of the articles? As I see it, his paper provides new insights into the third question: The quality of Wikipedia is directly affected by attention, which can be influenced by the structure of the links. The network structure therefore becomes a key part of the production function. This paper demonstrates Michael's skill in developing convincing identification strategies to understand questions related to the economics of digitization.

The paper "99 Cent: Price Points in E-Commerce" in *Information Economics and Policy* shows that price quotes with 99 cent endings persist, even online. Many of the more rational explanations for the 99 cent ending should disappear once search and menu costs fall substantially. This paper fits well in the growing stream of literature that identifies which frictions continue to operate in online markets and which do not. It is a useful contribution to the general question of "under what circumstances does the internet eliminate economic frictions?"

Another example of Michael's skill at applying careful identification strategies to questions in the economics of digitization is the *European Economic Review* paper "Market

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Structure and Market Performance in E-Commerce". This paper uses a novel instrumental variables approach to document the importance of price dynamics over the product cycle. This paper assesses the role of another economic friction in online markets: search costs. It demonstrates the key role of search in understanding competition between online retailers.

His list of future projects is very promising. In particular, the work on knowledge-based peer production uses a clear identification strategy to explore the potential impact of Wikipedia on real-world outcomes: The impact of better Wikipedia (German language) pages for Spanish tourist towns on German tourism to those towns. The preliminary analysis looks promising, and if it holds up, this paper promises to be a hit. Michael's paper on privacy in mobile phone markets addresses an exciting topic with new data and has the potential to improve our (currently limited) understanding of the economics of privacy.

Michael is also a good communicator. He speaks clearly and writes well. I expect him to be a capable performer in the classroom. He is also curious and insightful. It was a pleasure to have him visit here in the summer. I enjoyed our conversations and learned a lot from him.

Overall, I strongly recommend Michael for a position in all departments outside the top 5. His research brings careful identification strategies to important questions in the economics of digitization in particular and industrial organization more generally.

Sincerely,

Avi Goldfarb

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