The Coming Age of a Transportation-Light Future

Saif Benjaafar
Distinguished McKnight University Professor
Director of the Initiative on the Sharing Economy
University of Minnesota

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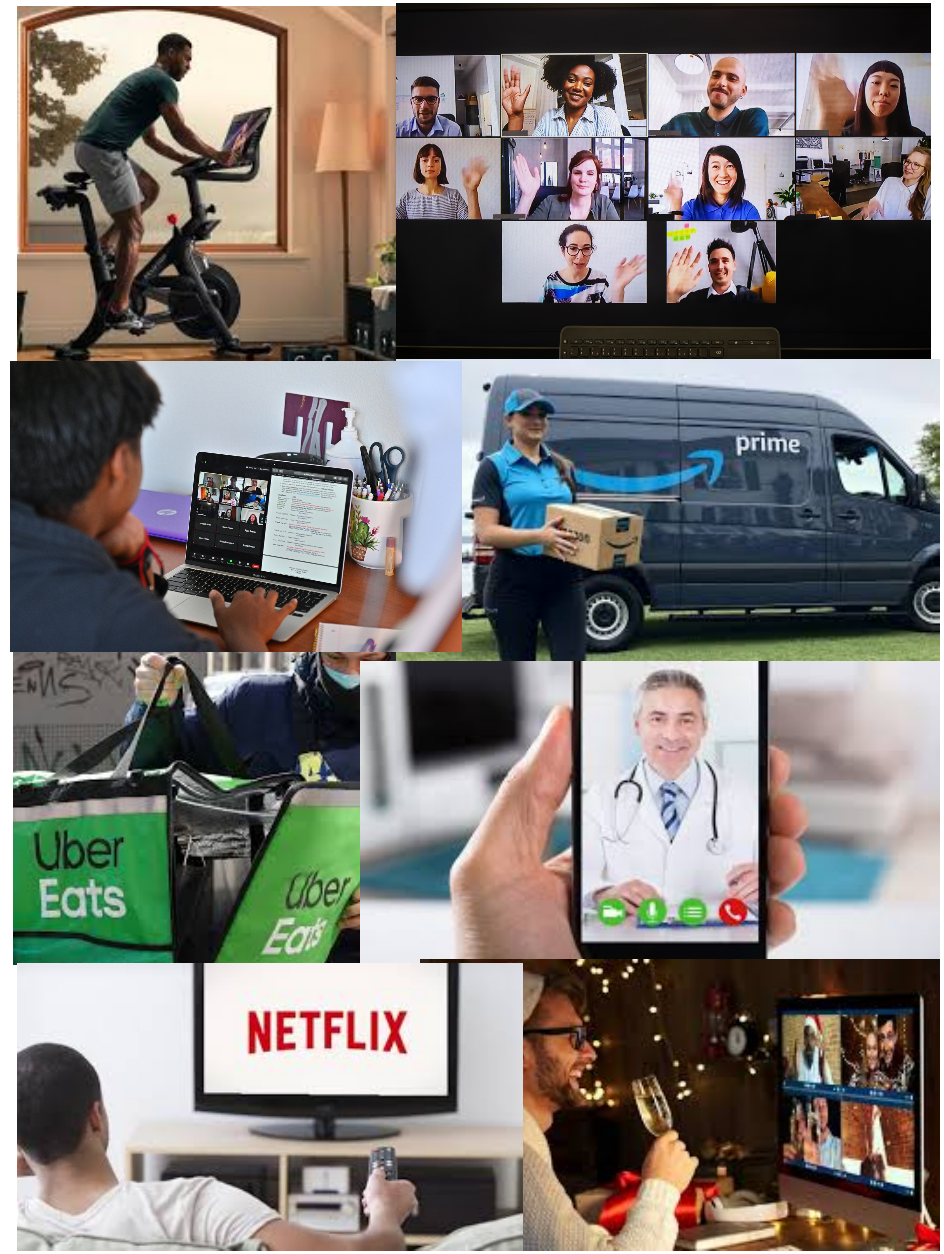
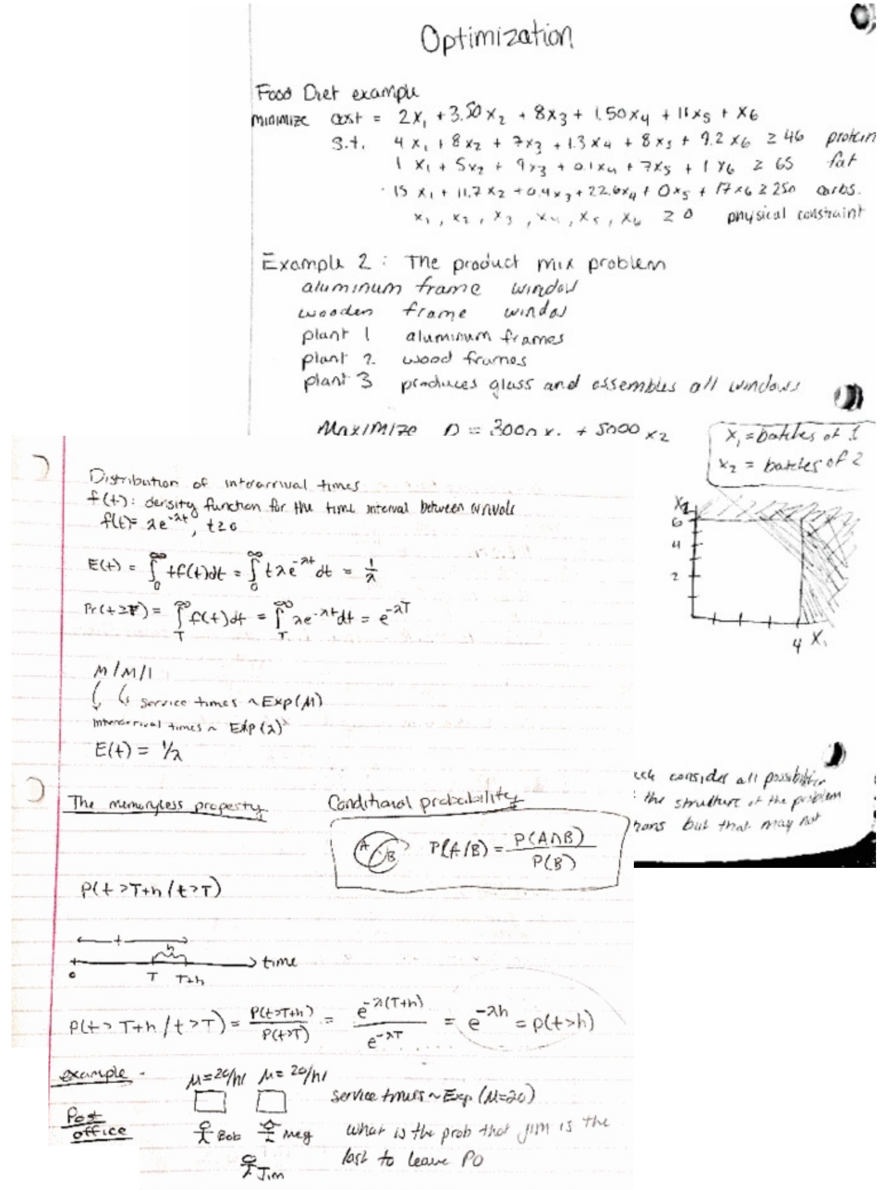
A day in the pandemic years of 2020-2021



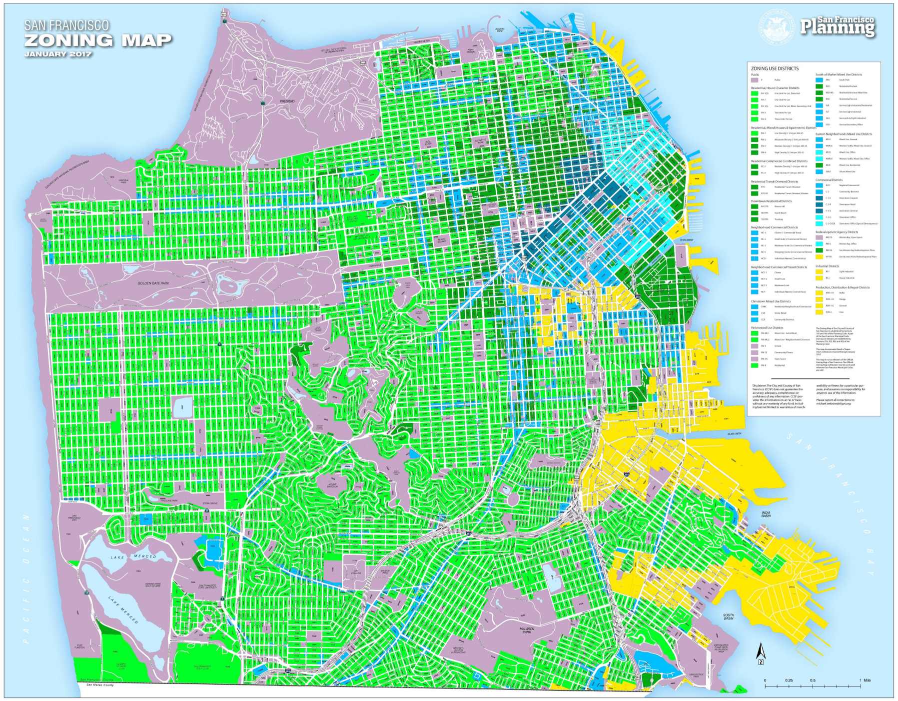
Analytics (models, algorithms, analysis) and **technology** to enable **digital products services** and **innovative business models**



Four emerging **forces** that will shape the transportation landscape

- The digitization of products, services, and work
- The emergence of transportation-enabled services
- The de-scaling of the economy and its impact on cities
- The growth of products and services on demand

Transportation is a solution to the **spatial mismatch** between where people are and where the products and services they seek are

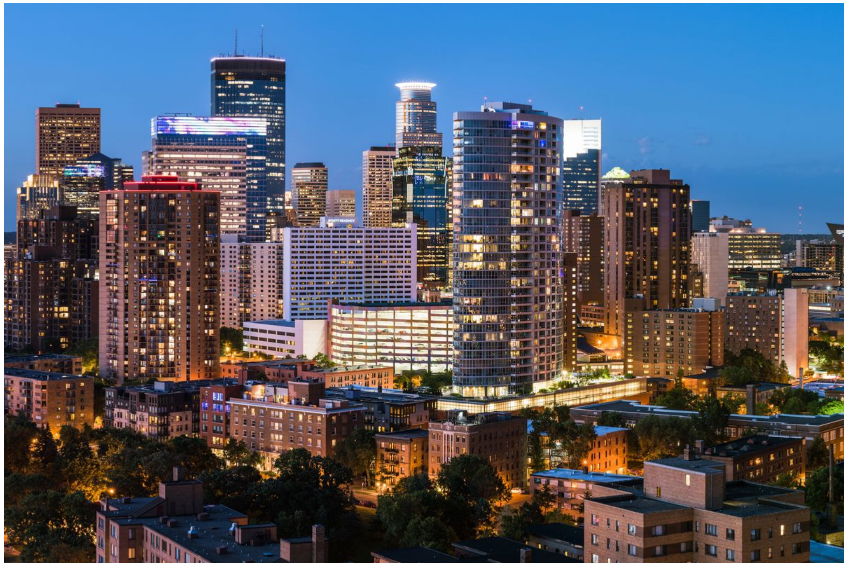


This friction is increasingly being addressed by

- The digitization of products, services and work (or the tele-economy: tele-work, tele-health, tele-fitness, online learning)
- Transportation-enabled services – the shift from the transporting of people to the transporting of products and services (online shopping, home deliveries, mobile clinics, mobile grocery stores)

Although the transport of “things” is likely to significantly increase, the reduction in the transport of people is likely to more than offset it

Cities are attractive because of the proximity to work, schools, hospitals, retail, and entertainment and the efficiency with which they can deliver the associated products and services

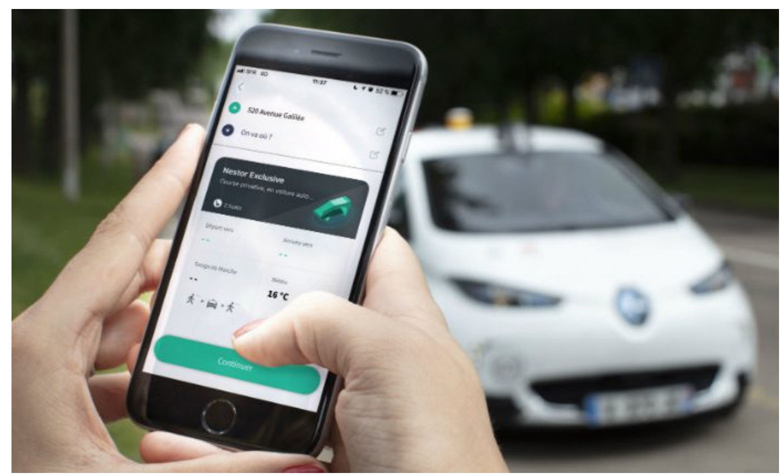


- Because of forces 1 and 2, both **geographic proximity** and **density** would increasingly matter less
- Over time, the net effect may be diminished importance of cities as hubs for the delivery of products and services, resulting in **new patterns of land use** and of **travel**

The emergence of business models that provide on-demand access to products and services as needed (**when**, **where needed** and in the **amount needed)** is obviating the need for ownership

Mobility on-demand

(which, while reducing the number of vehicles owned, may or may or not reduce total miles traveled)



Automated vehicles could accelerate the shift to mobility on-demand and further reduce the need for car ownership

Automated vehicles could also amplify the magnitude of the other forces at play (particularly enabling more transportation-enabled services and the diminished role of cities as hubs for the efficient delivery of products and services)

The pandemic has given us a glimpse of a perhaps a not too-distant future of a **transportation-ligh**t economy, that will be increasingly technology-driven, on-demand, and automated

Over the next decade, this may call for a rethinking of government spending on transportation **infrastructure**, **public transit,** and how transportation is **regulated**

Thank you!

Questions, Comments, Suggestions?

saif@umn.edu

https://cse.umn.edu/isye/saif-benjaafar

https://benjaafar.com/