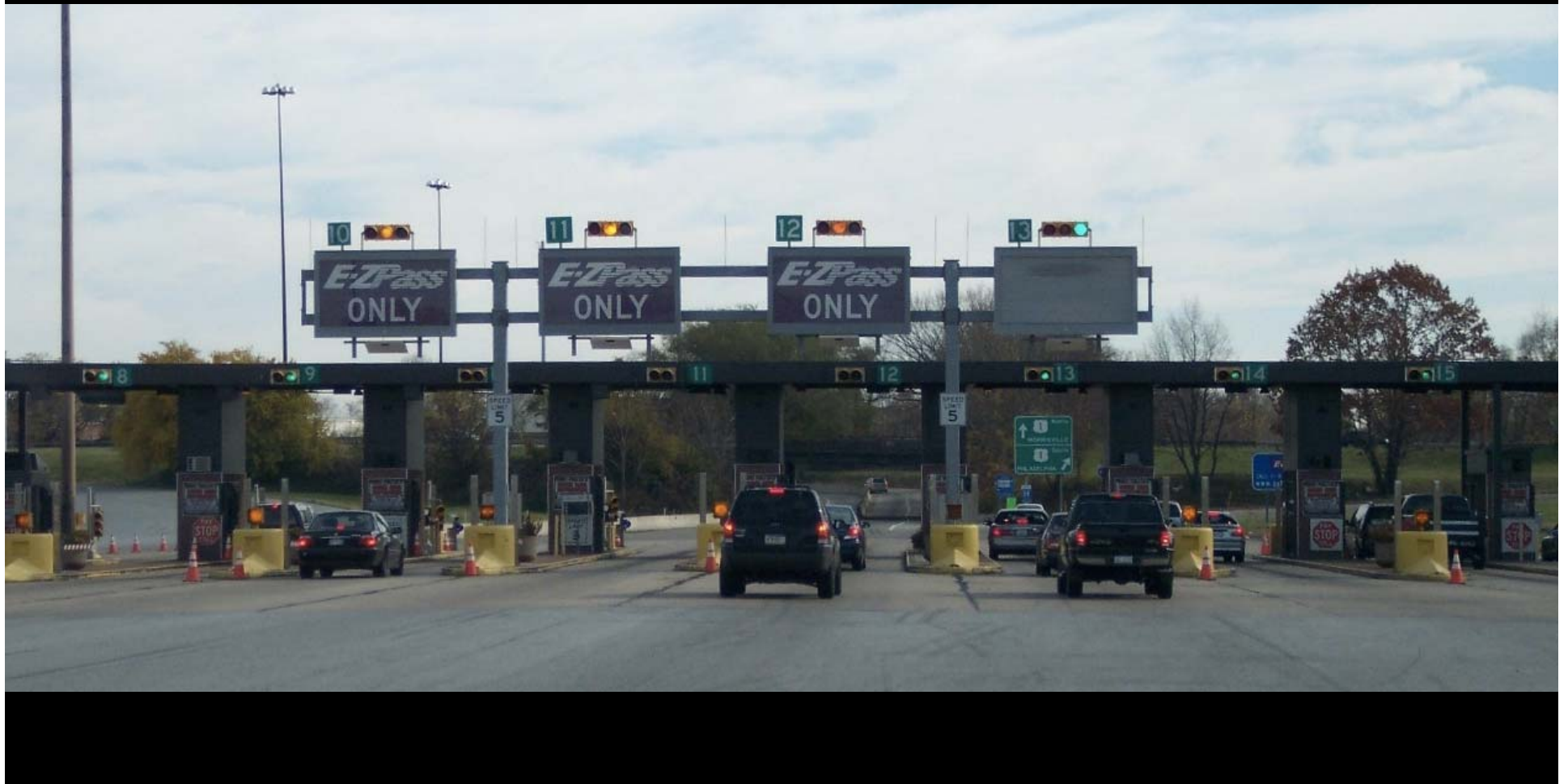


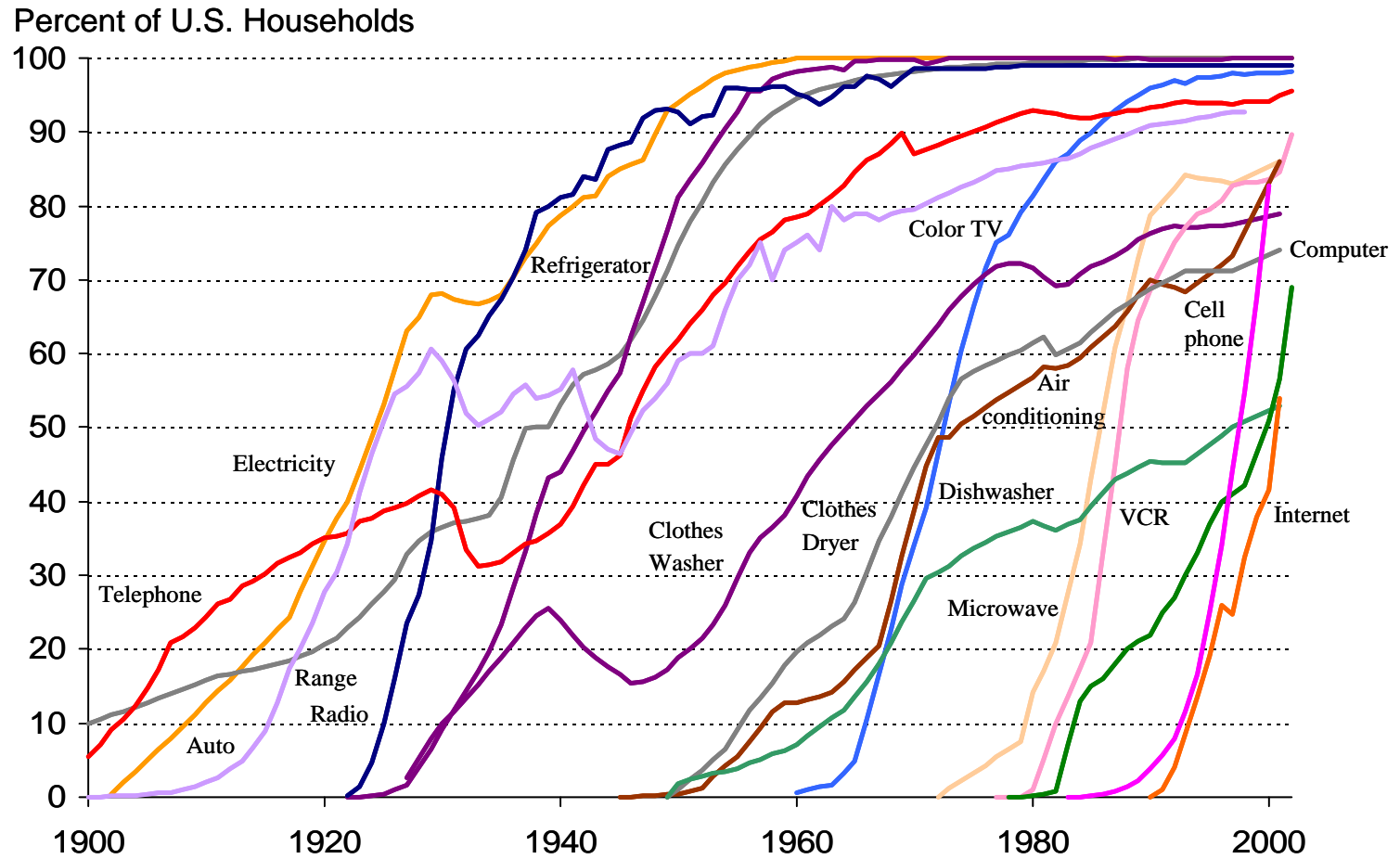
DIFFUSION AND ADOPTION

Professor Karl T. Ulrich



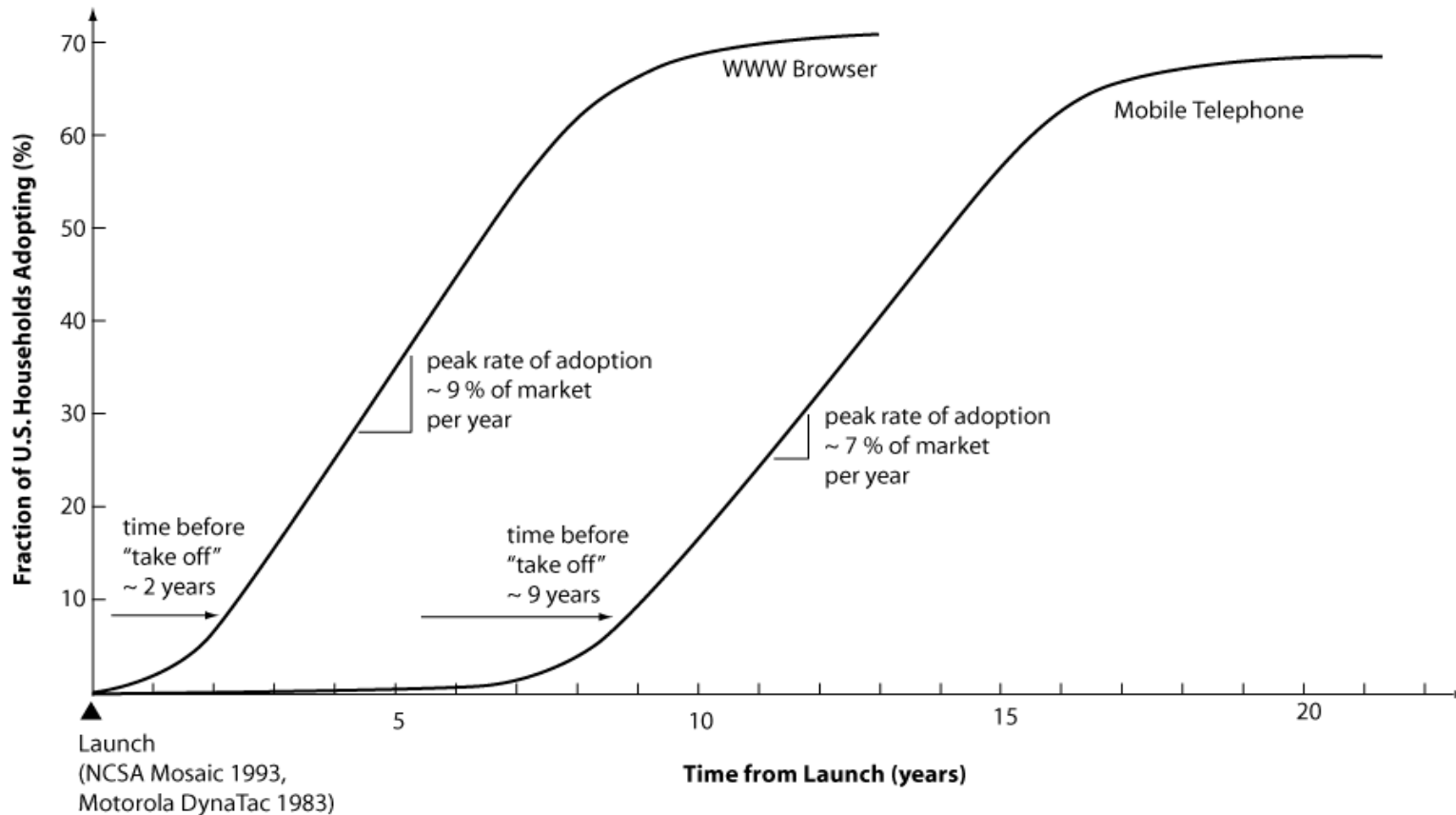


Diffusion Rate of New-Category Products



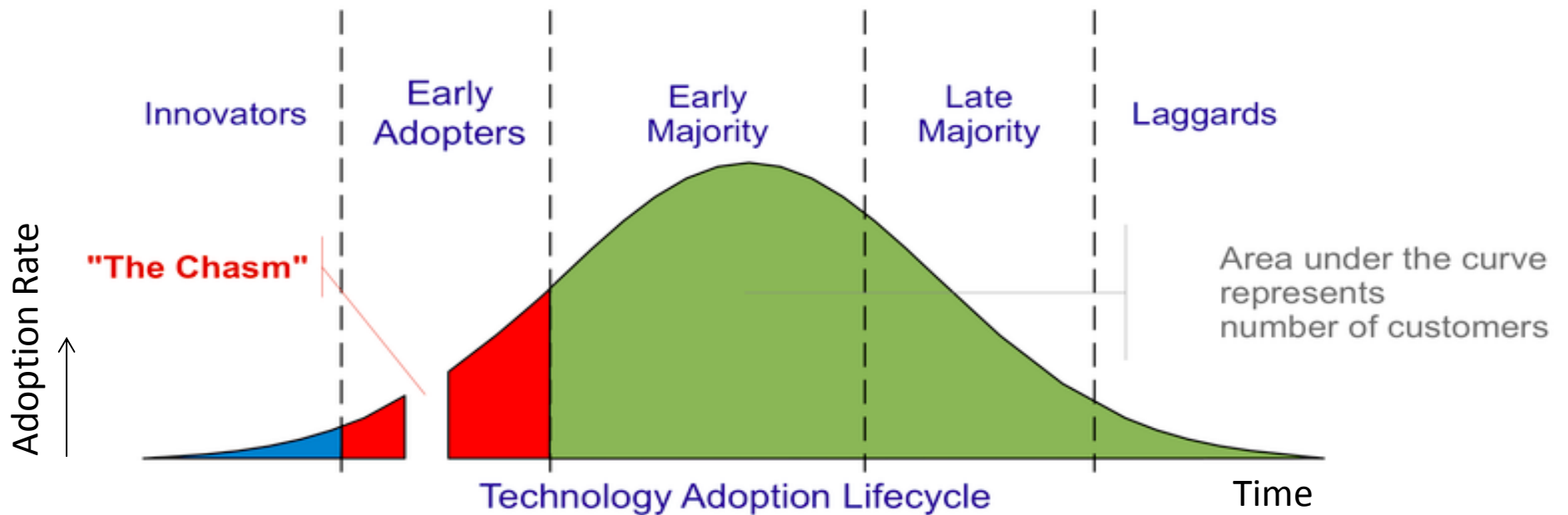
Source: W. Michael Cox, Federal Reserve Bank of Dallas

Adoption Dynamics: Diffusion



Source: Terwiesch and Ulrich, Innovation Tournaments, Chapter 8.

Rogers and Moore Adopter Categories

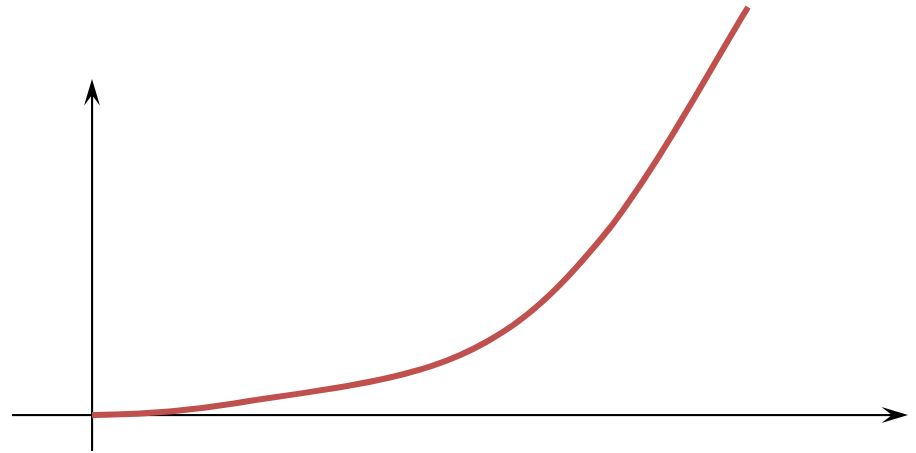


Source: Image from Wikipedia, based on categories of Everett Rogers, with addition of "chasm" by Geoffrey Moore.

Explaining Diffusion Rates

Rogers' Five Factors (Intrinsic Attributes of Innovation)

1. Relative advantage
2. Visibility
3. Trialability
4. Simplicity
5. Compatibility



Everett M. Rogers, *Diffusion of Innovations*, Fourth Edition, Free Press, New York, 1995.

	EZ Pass Auto Toll System	Web Browser	Mobile Phone	Segway Personal Transporter
Relative Advantage	• • • • • no waiting at toll booths	• • • • • free, instant information	• • • • • wireless calling, but initially expensive	• better than walking?
Visibility	• • • • • obvious to all users	• not very visible	• • • • • visible in public	• • • • • highly visible
Trialability	• • must enroll to try	• • • • • free download	• • contract required	• \$10k commitment
Simplicity	• • • How does payment work? Who installs?	• • • • • click and view	• • “send” button? reception, coverage?	• • How does that thing work? What powers it?
Compatibility	• • • • • all vehicles	• • • • • all PCs	• • • • • fits in pocket or bag	• • Storage? Locking? Where to ride? Charging?
Predicted Relative Rate	Fast	very fast	moderate	very slow
Years to “Take Off”	~3	~2	~9	15 and counting...

Source: Terwiesch and Ulrich, *Innovation Tournaments*, Chapter 8.

Key Insights

- Time to “take off” much longer than you expect for new category products.
- Intrinsic attributes of the innovation strongly influence diffusion rates.
- You can modify some of those attributes (e.g., trialability) through design choices.
- Be realistic in assessing time to take off.
- Some innovations will never take off.