

# Modeling Distributed Solar Adoption

Douglas J. Gotham  
Director, SUFG

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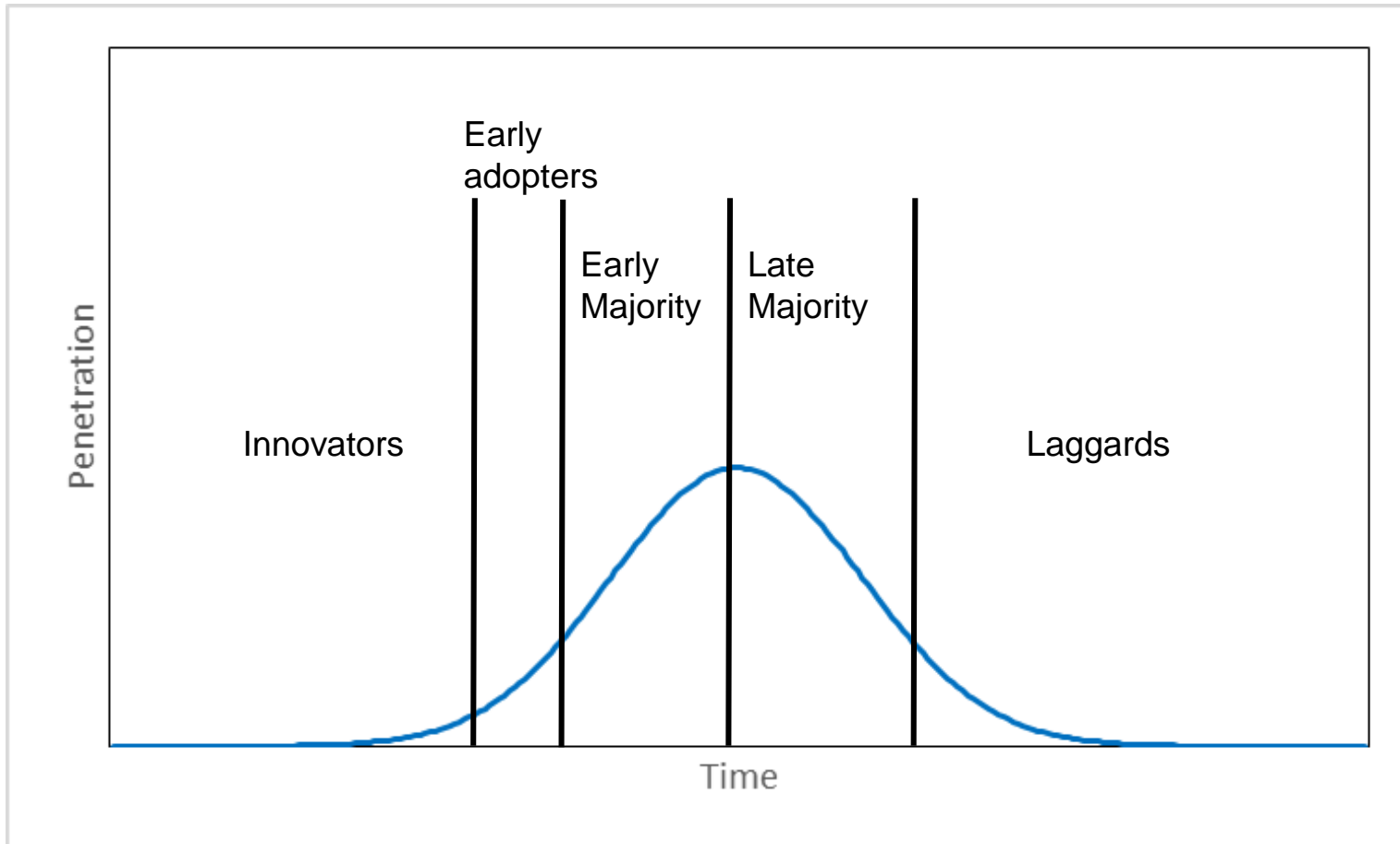
# Disclaimer

- SUG does not have a model that can forecast the future adoption of distributed solar with a high degree of accuracy
- Our IN-MARKAL model (a model of the state's overall energy system) has the capability to model customer-owned PV, but the uncertainty level is very high

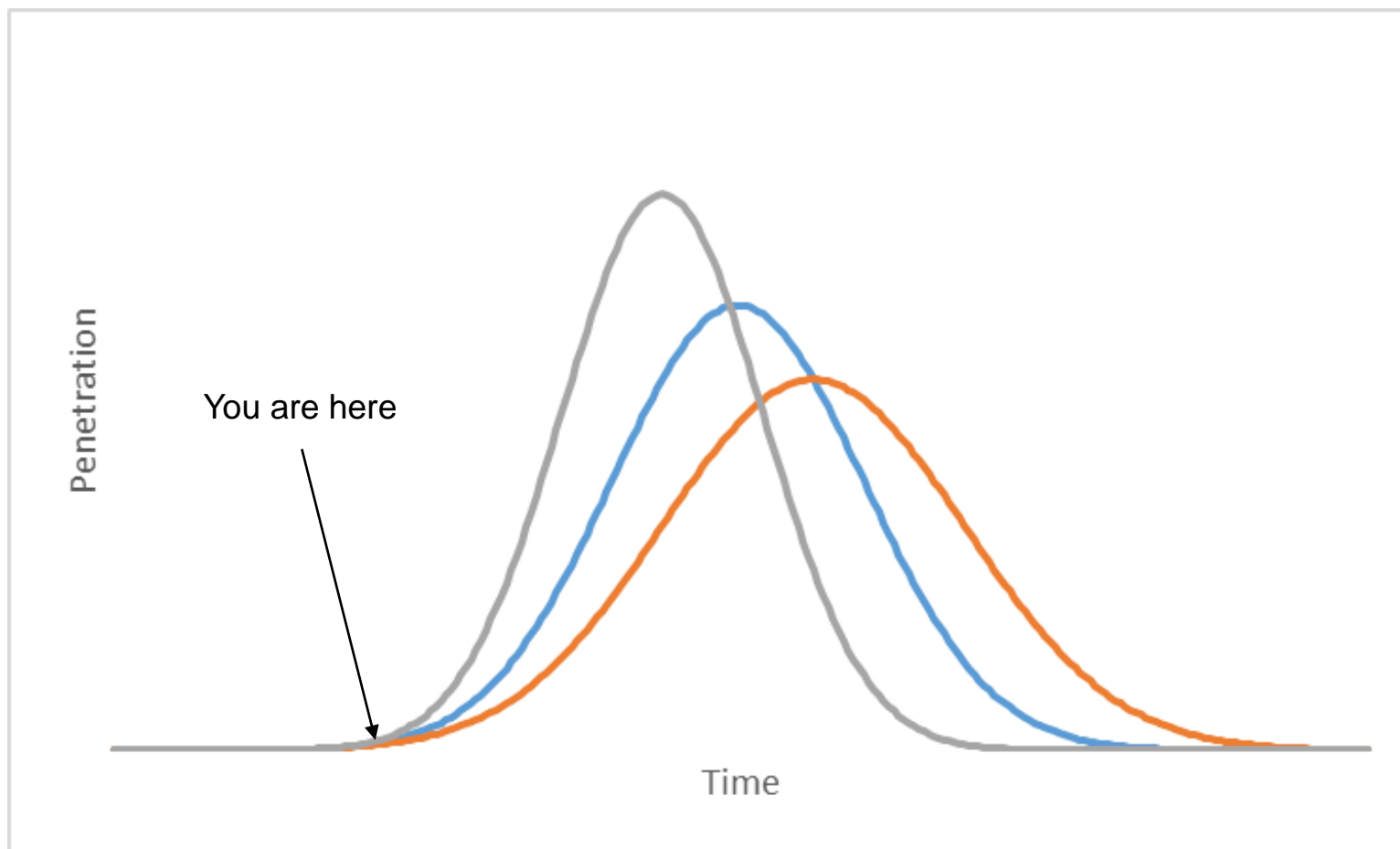
# Challenges

- While there are a number of ways to model the adoption of new technologies, none of them are particularly good at it
  - it is a fundamental characteristic of the problem that there is insufficient data

# Everett Rogers' Bell Curve



# Which Trajectory Are You On?



# Factors Affecting Adoption

- Future costs & technological improvements
  - cell phones
- Development of other technologies
  - competition (VHS vs. Betamax)
  - complementary (laser printers and PCs)
- Public policy (SEA 309, ITC ruling)
- “Chasm” between early adopters and early majority

# Geoffery Moore's Chasm

- Moore suggested that there is a gap between the enthusiasts (innovators & early adopters) and the pragmatists (early majority) for disruptive technologies
- The time lag in crossing the chasm could be several years
  - “5 years down the road”
  - I’m still waiting for my jetpack

# Potential Models

- Adoption models based on previous technologies
  - Previous technologies may not be a good indicator
- Extrapolation of adoption by innovators and early adopters
  - They may not be representative of the general public
- Adoption based on relative economics
  - Future costs are often highly uncertain



# Contact Information

State Utility Forecasting Group

765-494-4223

[www.purdue.edu/discoverypark/SUFG/](http://www.purdue.edu/discoverypark/SUFG/)

Douglas Gotham

765-494-0851

[gotham@purdue.edu](mailto:gotham@purdue.edu)