

From Diffusion of Innovations to System Transformation

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Tyndall°Centre®
for Climate Change Research

S I L C I
Social Influence and *disruptive* Low Carbon Innovations

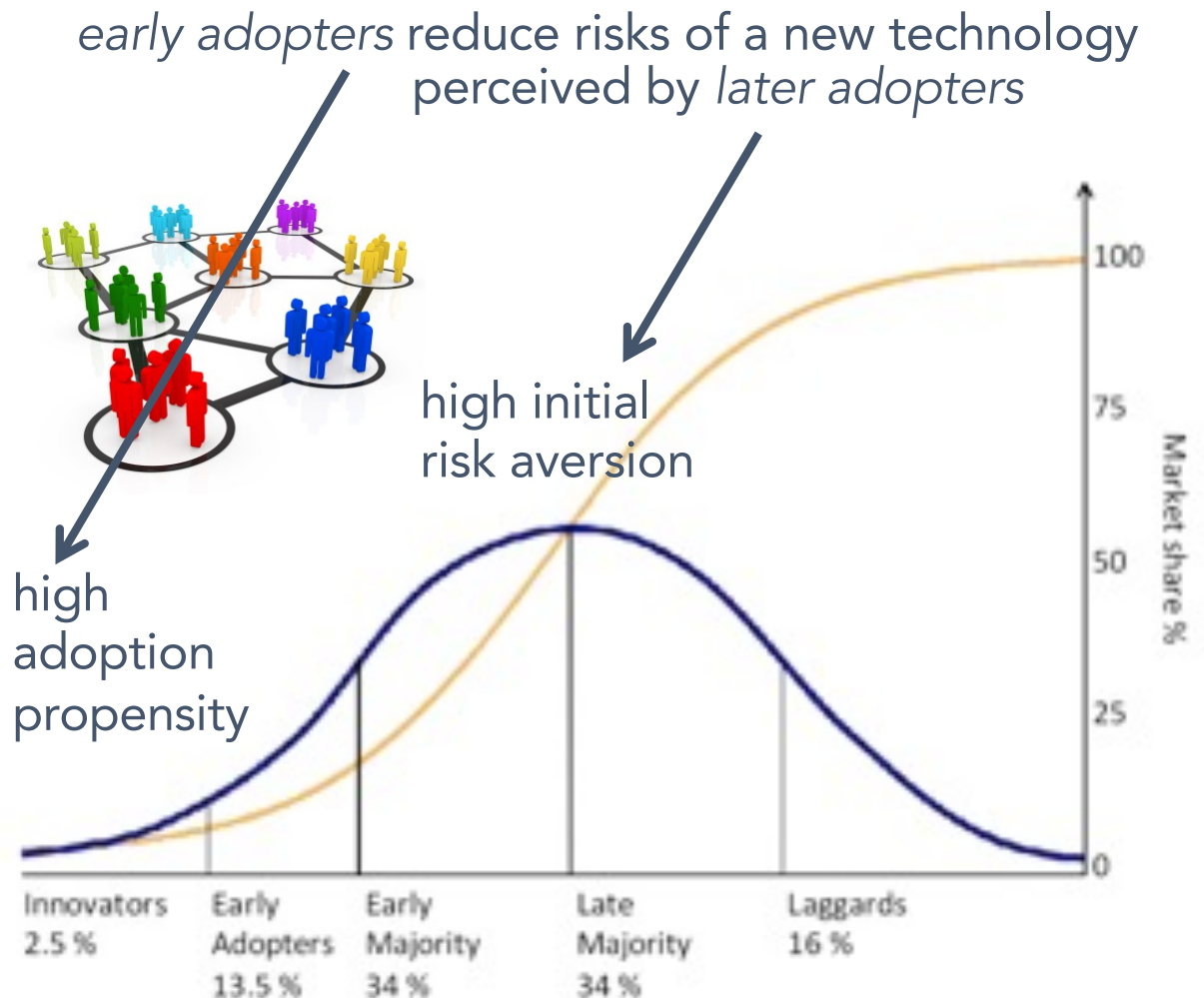
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Innovation-centric models of adoption & diffusion have a **robust evidence base** and are **analytically tractable**

Diffusion = communication over time about an innovation *among members of a social system*



Everett Rogers
1931-2004



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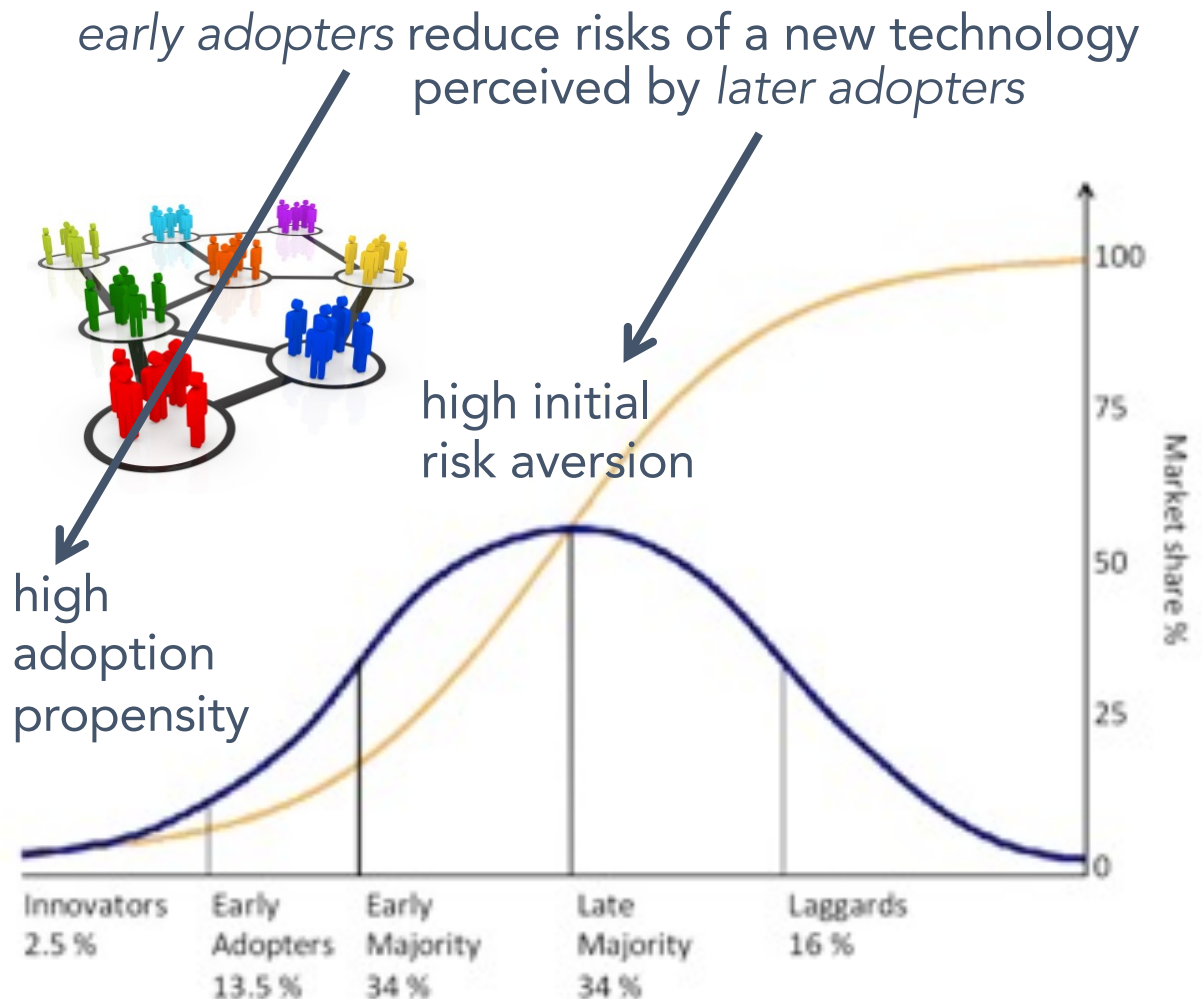


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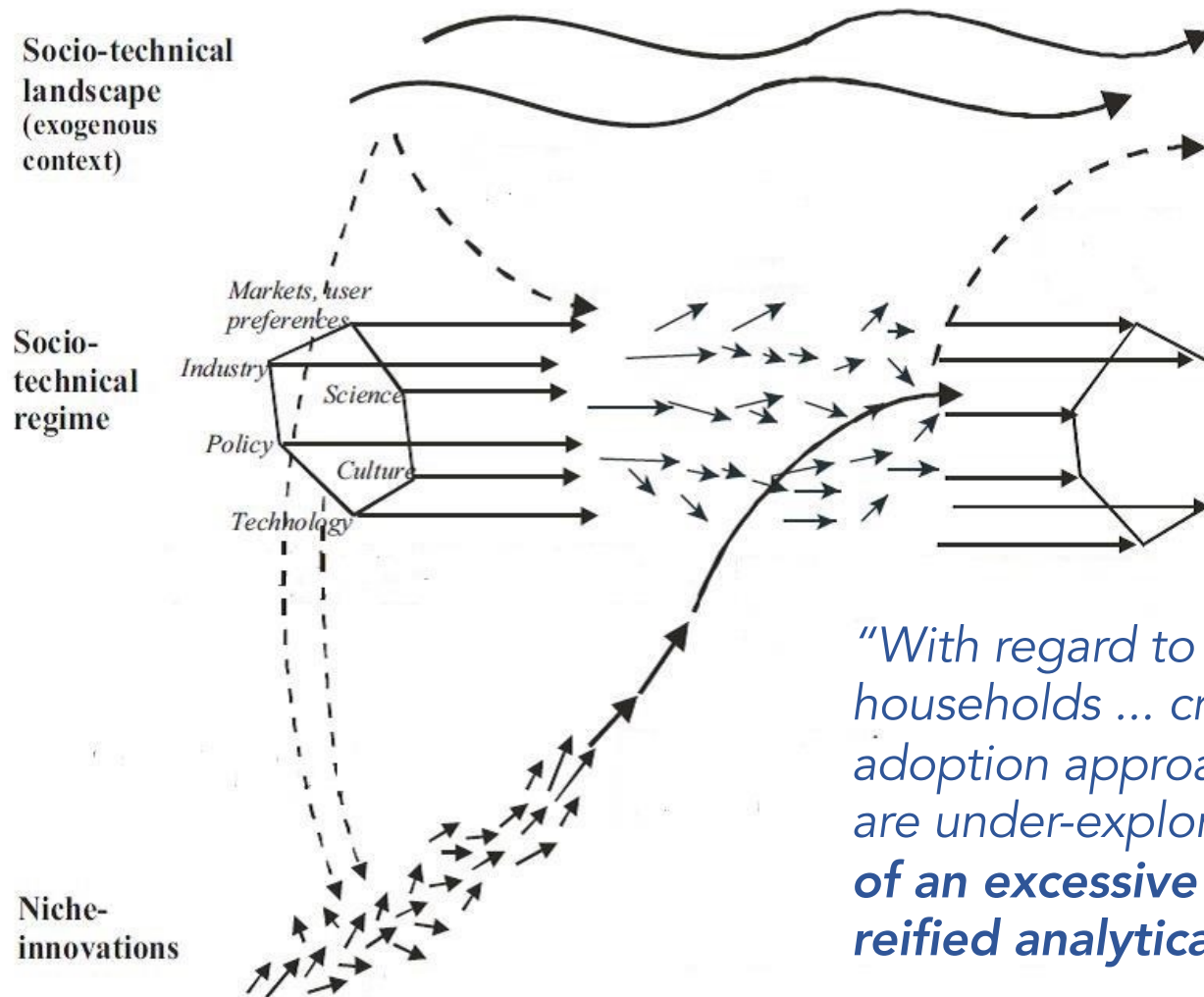


Five **attributes** of innovations determine adoption rates:

- (1) relative advantage
- (2) compatibility
- (3) ease of use
- (4) observability
- (5) triallability



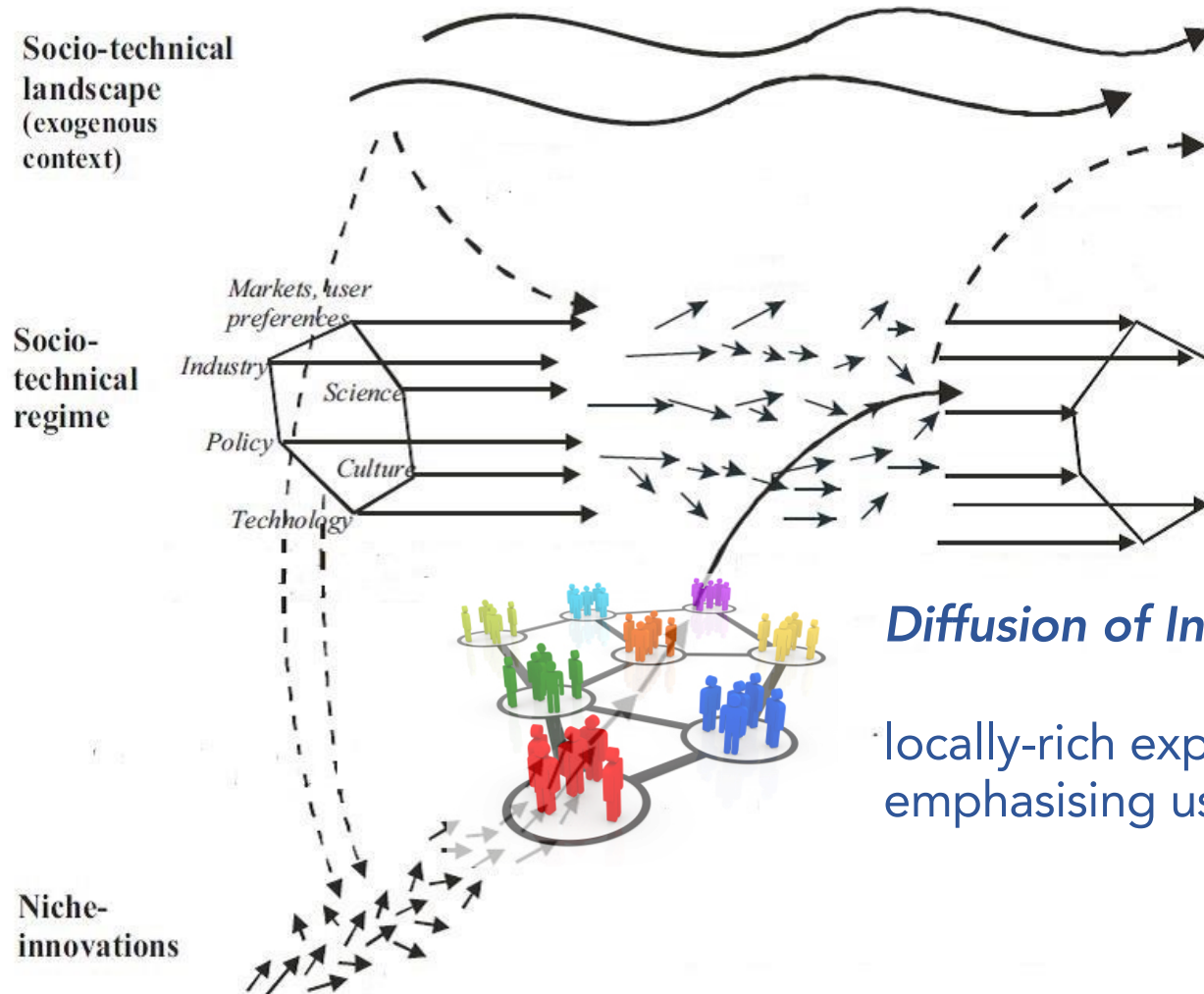
Multi-level perspective explains **change and stability** at the **systems level**



*"With regard to consumers and households ... crossovers to traditional adoption approaches (Rogers, 1996) ... are under-explored, **perhaps because of an excessive fear of using reified analytical categories.**"*

Diffusion of innovations' contribution to MLP?

(1): users (consumers) & social influence

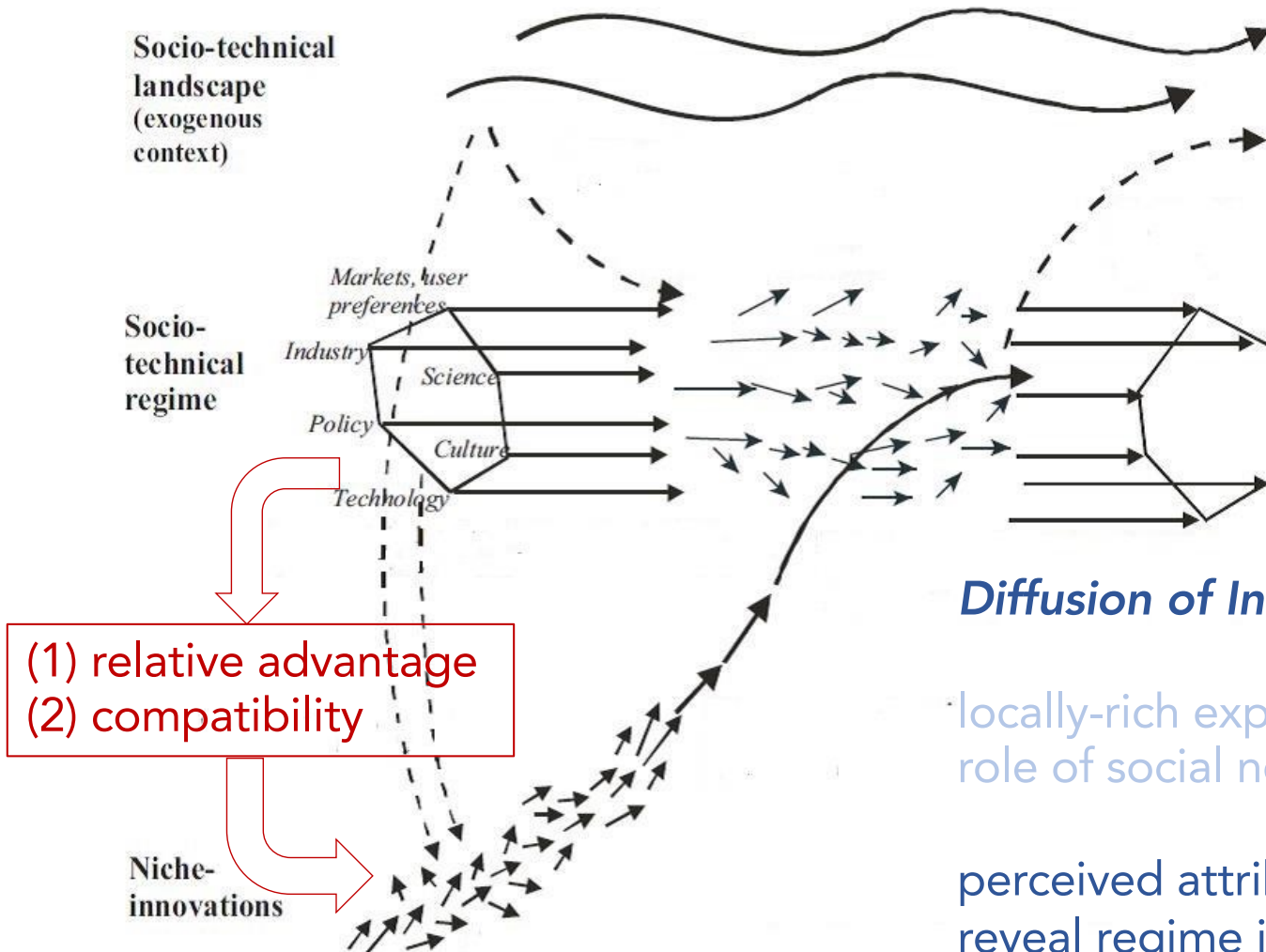


Diffusion of Innovations --> MLP

· locally-rich explanation of diffusion, emphasising users and social networks

Diffusion of innovations' contribution to MLP?

(2): innovation attributes as a lens into regimes



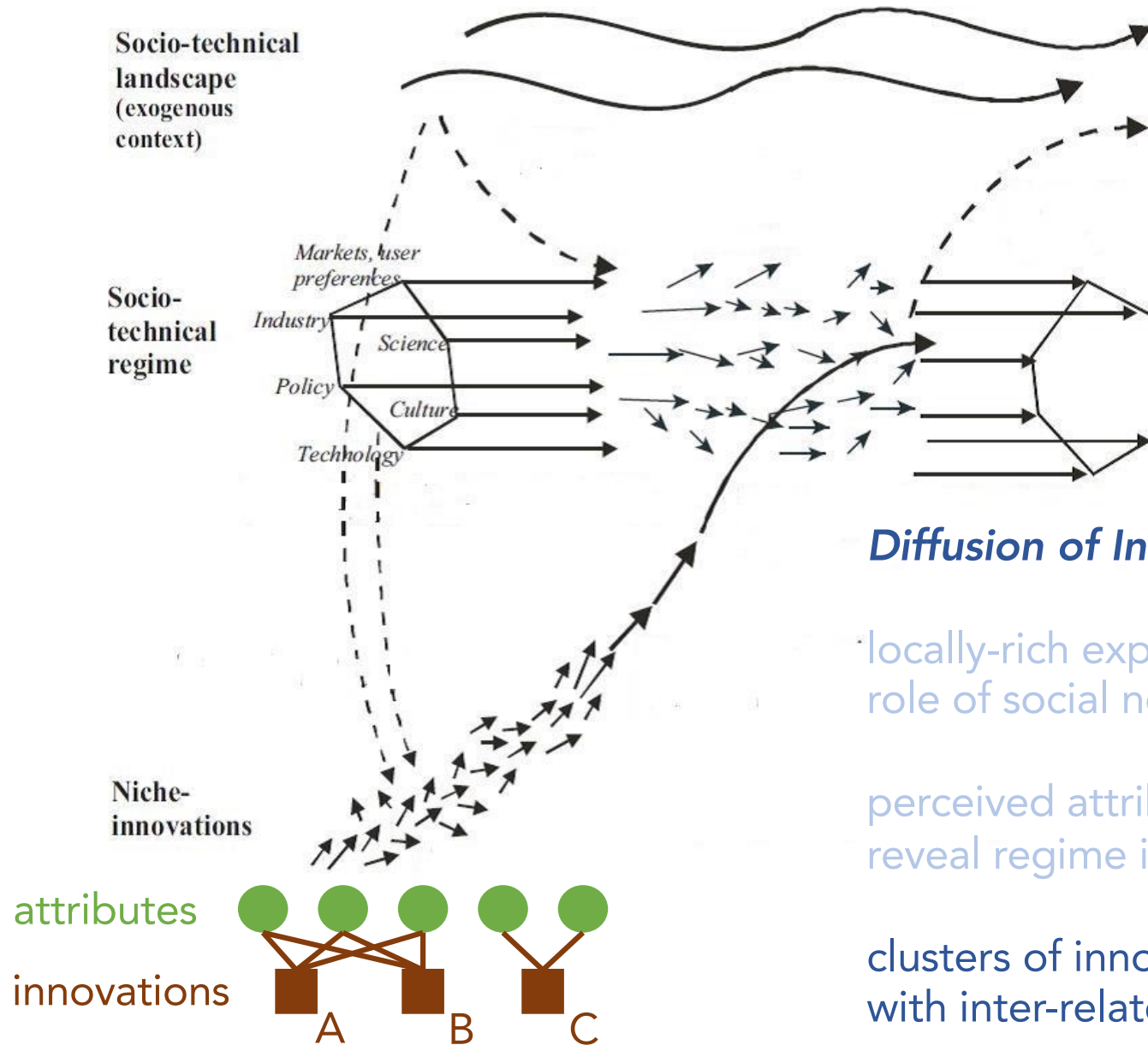
Diffusion of Innovations --> MLP

· locally-rich explanation of diffusion and role of social networks (and users)

perceived attributes of innovations reveal regime influence on niches, e.g., *extent of alignment*

Diffusion of innovations' contribution to MLP?

(3): inter-related innovations, adopters, niches



Diffusion of Innovations --> MLP

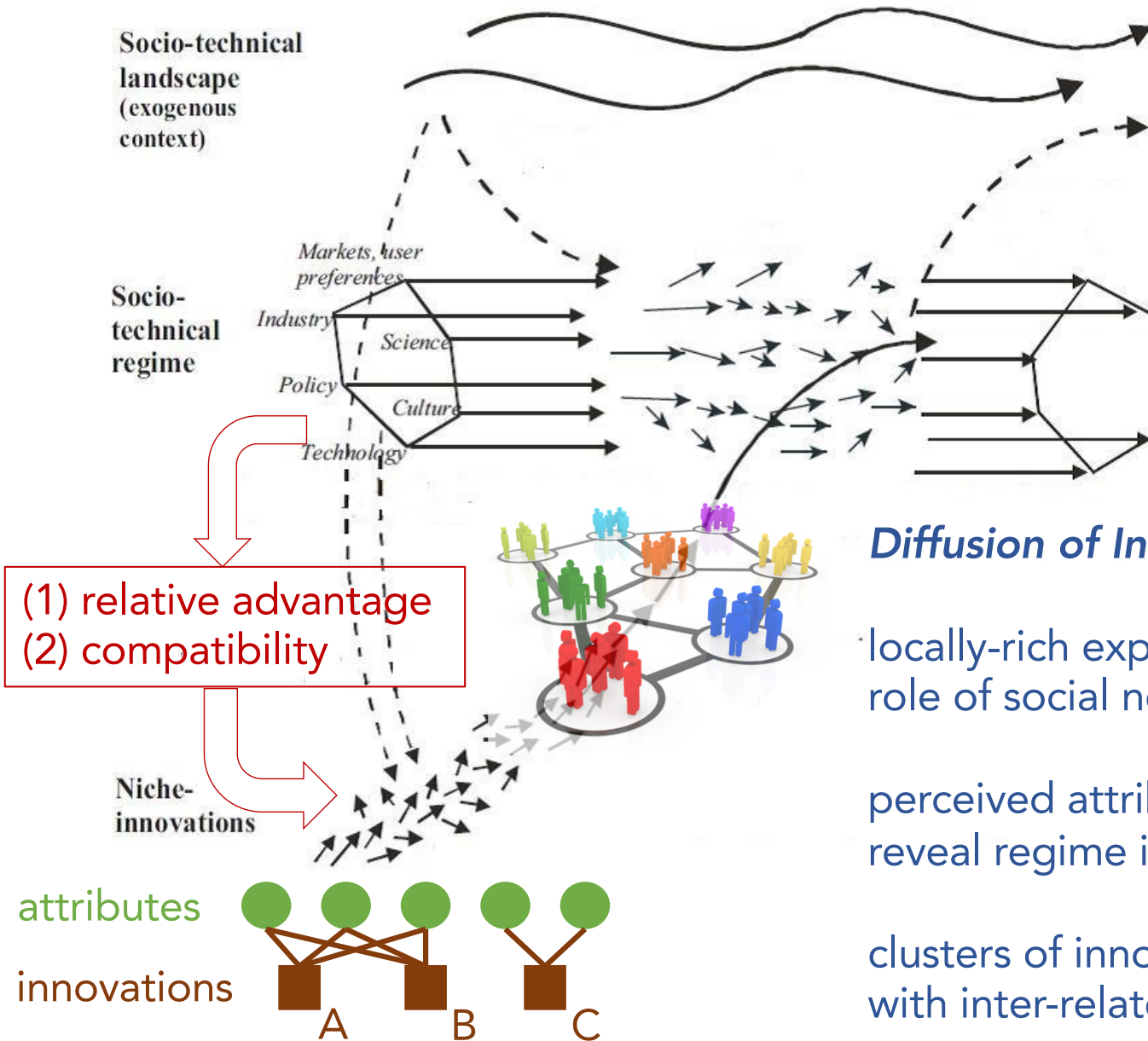
locally-rich explanation of diffusion and role of social networks (and users)

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clusters of innovations (by attribute) with inter-related niches & adopters

Diffusion of innovations' contribution to MLP?

next steps ... meta-analyse niche-led MLP studies



Diffusion of Innovations --> MLP

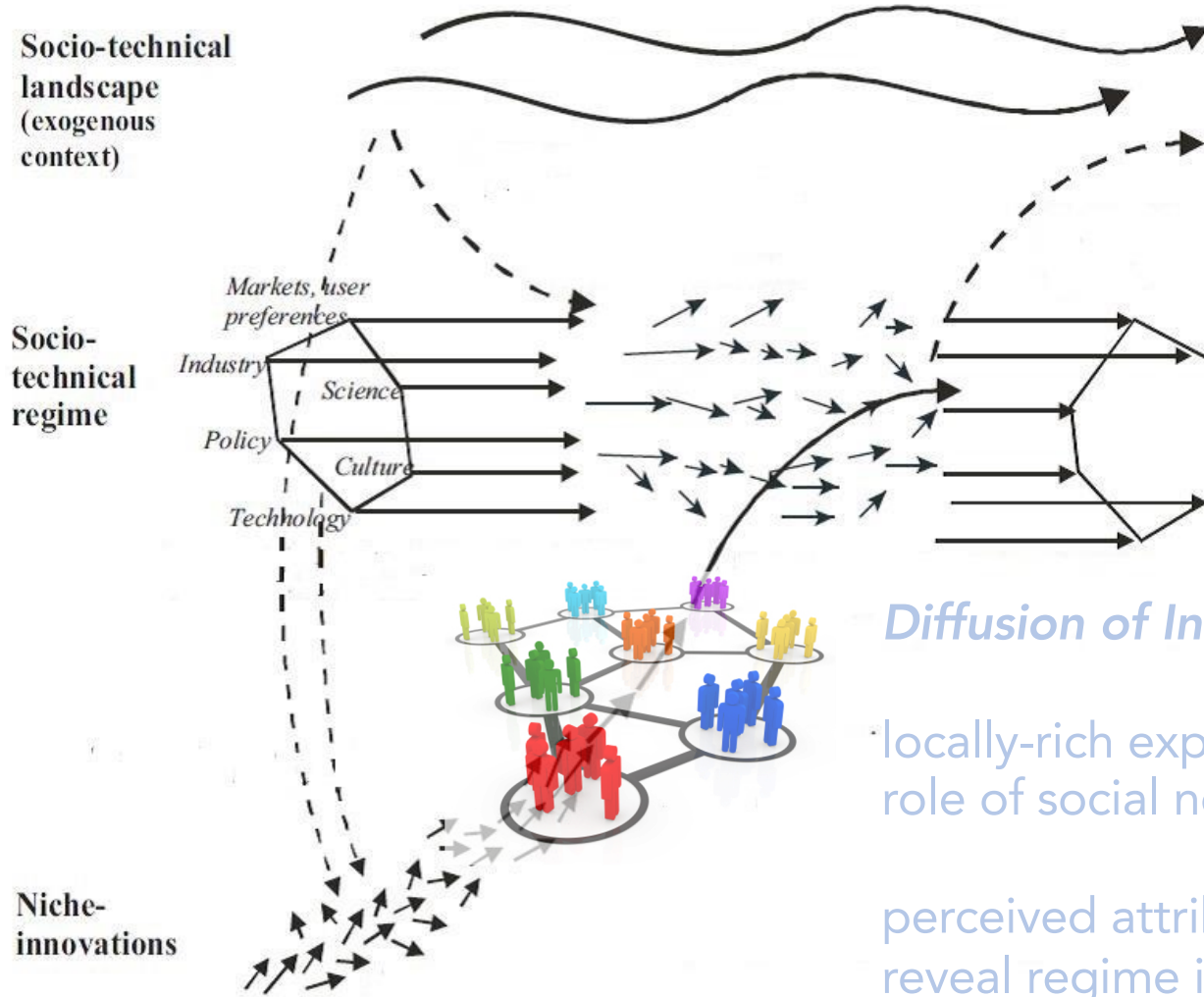
locally-rich explanation of diffusion and role of social networks (and users)

perceived attributes of innovations reveal regime influence on niches

clusters of innovations (by attribute) with inter-related niches & adoption

Dol meets MLP

Disruptive innovations also identify (1) potential of consumer novelty (2) on incumbents



Disruptive Innovations

dislodging incumbent providers of mainstream goods and services

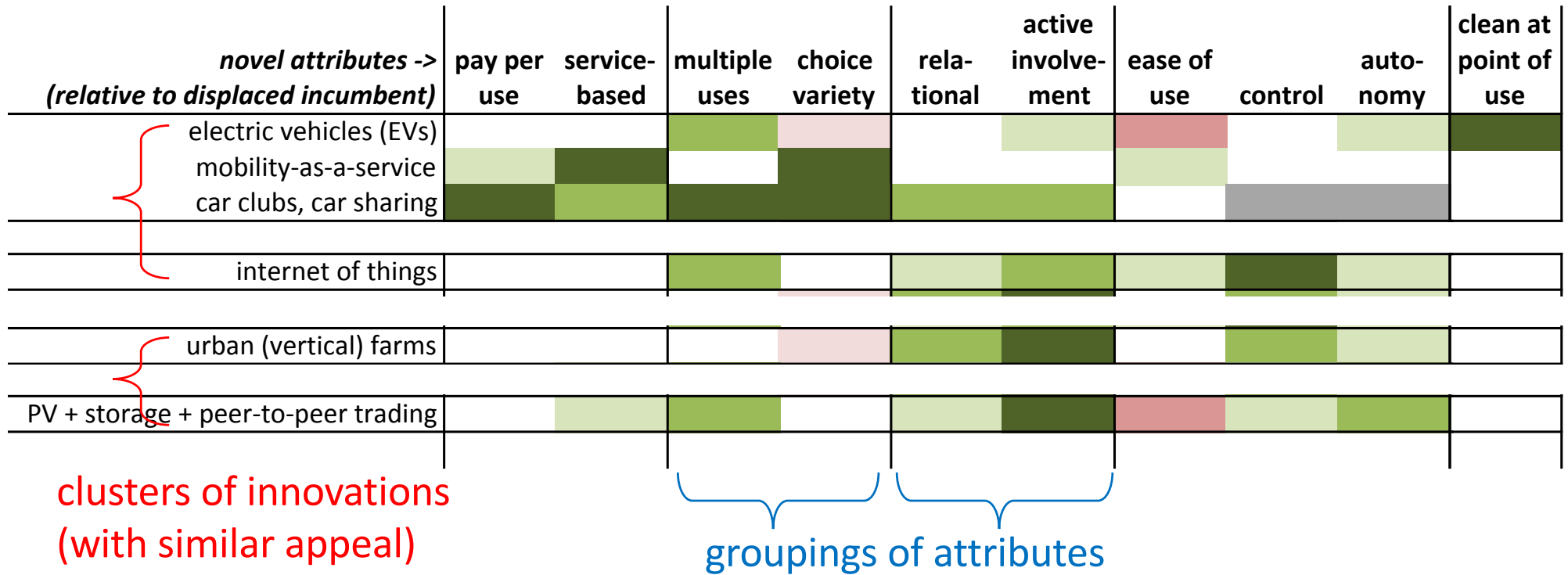
Diffusion of Innovations --> MLP

locally-rich explanation of diffusion and role of social networks (and users)

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clusters of innovations (by attribute) with inter-related niches & adoption

Different low-carbon innovations appeal to consumers in similar ways



KEY VARIABLES AND RELATIONSHIPS

