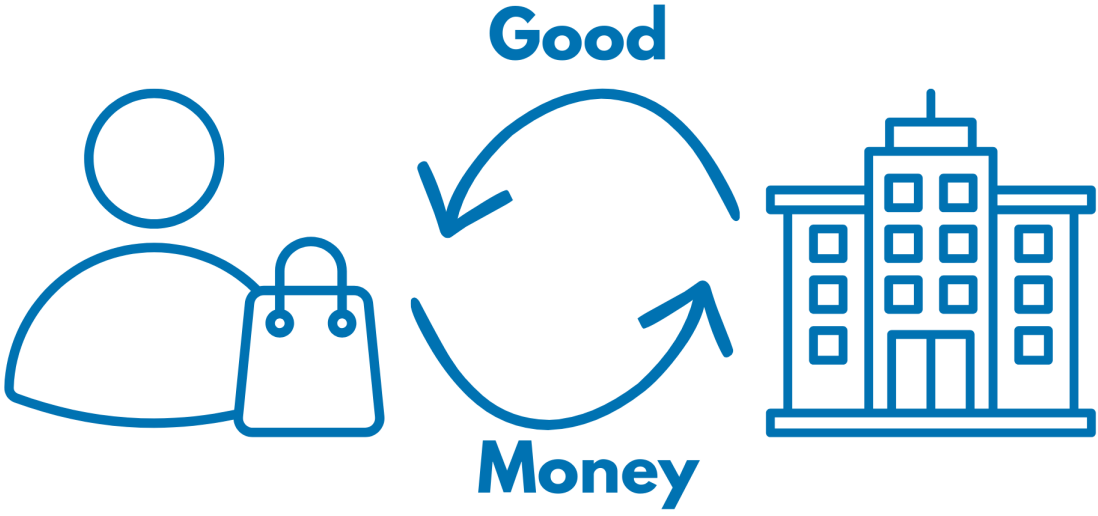
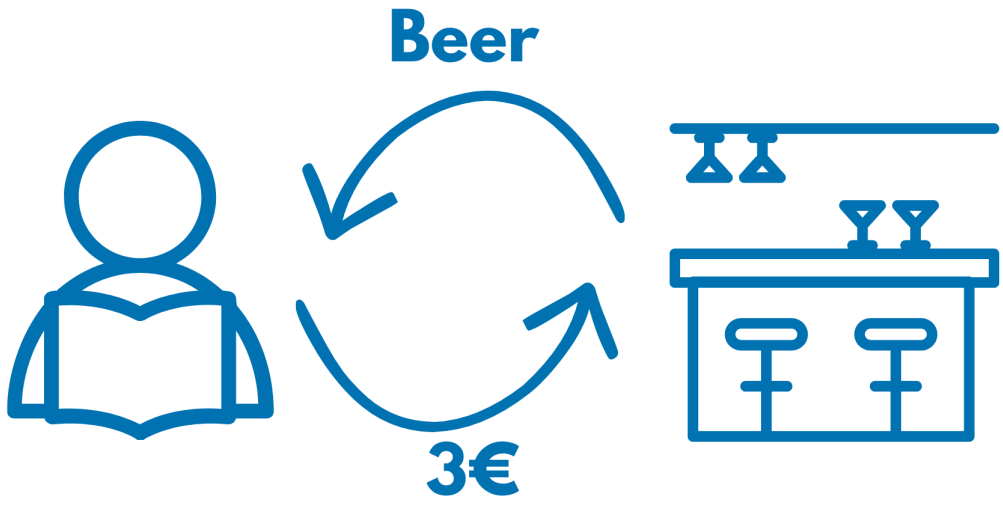
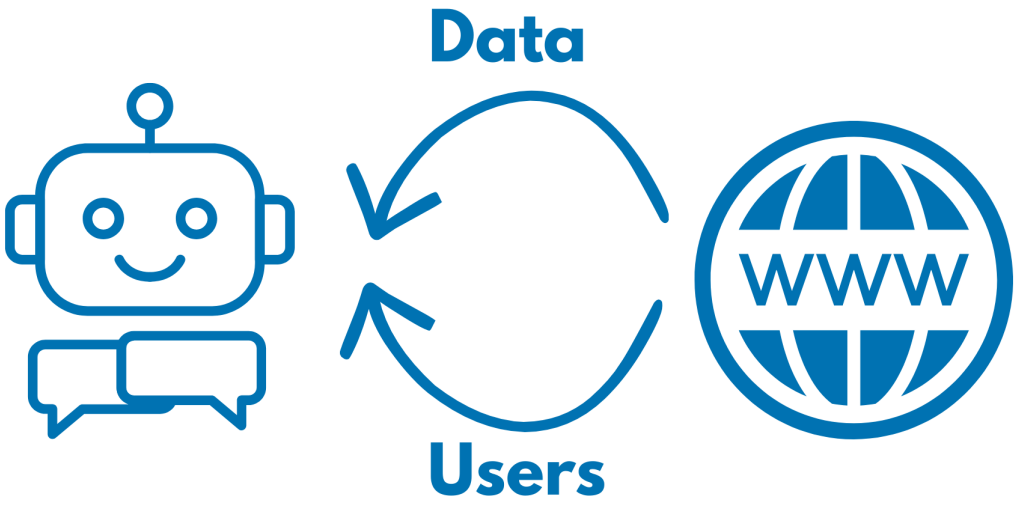
Will AI change the internet?


Good
Money


Beer
3€


Data
WWW
Users

Introduction

- **RQ:** *How does* ***Generative AI*** *(GenAI) affect* ***online content supply*** *and* ***quality****?*

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  - Future: Bring the Data to the Model
- **Preview:** Gen AI makes things worse but not always.

Literature Review

- **Gen AI's Impact Online**
  Burtch, Lee, and Chen 2024; Rio-Chanona, Laurentsyeva, and Wachs 2023; Reeves, Yin, and Simperl 2025; Shan and Qiu 2025; Lyu et al. 2025; Zhao and Berman 2025; Koren et al. 2026
  Contribution: Structured, comprehensive adn credible evidence of Gen AI's impact both on supply and demand.

- **Discrete Choice & Monopolistic competition**
  Melitz 2003; Krugman et al. 1980; Train 2009 adn many many many many more
  Contribution: Novel literature application to a new field: Online market with interest of AI.

The Model

Users

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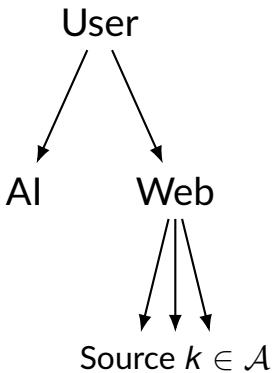
Gen AI

- Aggregates information available online.
- Altrenative to the Web.
- Decreases costs for providers.

User Side



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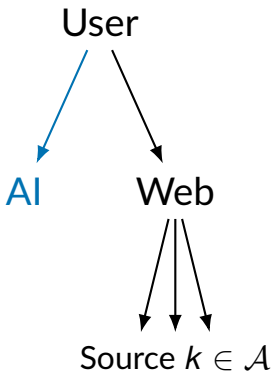

$\mathbf{Q_j}$-Quality of j

- Utility:

$$U_{iA} = lnQ_A + \epsilon_{iA}$$

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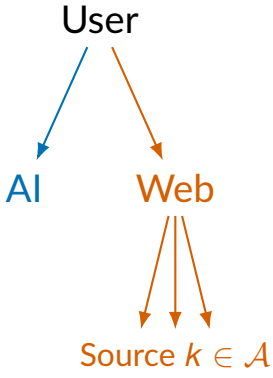

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δ_W-Web preference;

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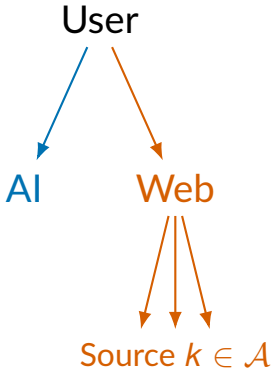

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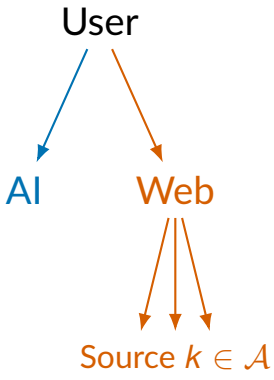

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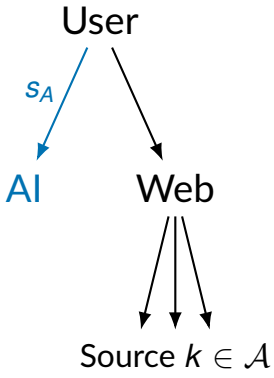
- AI aggregates the information available on the web, with efficiency ϕ

$$Q_A = \phi \left(\sum_k Q_k^{1/\theta} \right)^{\theta}$$

User Side



- The shares of users that go to:
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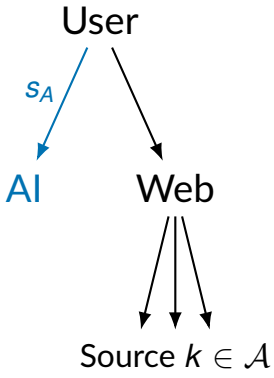

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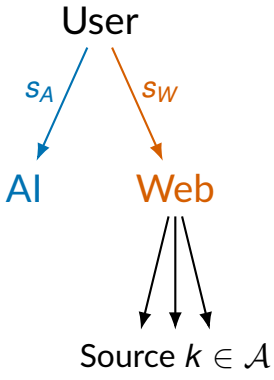

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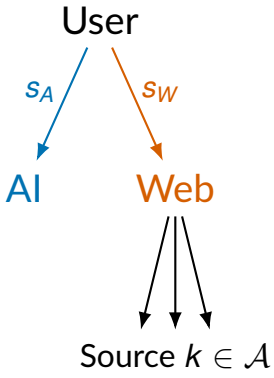

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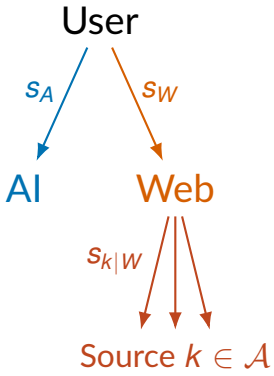

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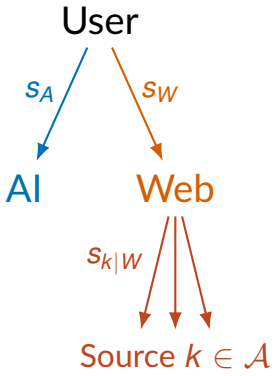

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Provider Side

$\mathbf{Q_j}$-Quality of j; $\mathbf{s_j}$-share of users using j;
$\mathbf{Q_0}$-Quality cutoff of entry;

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$$Q_0 = \left[\frac{Fm\gamma}{r(\gamma - 1/\theta)}(1-\eta)\frac{\delta_W + \phi}{\delta_W}\right]^{1/\gamma}, \quad \downarrow \eta \text{ and } \uparrow \phi$$

δ_W-Web preference; ϕ-AI's Ability r-Revenue per share; F-Fixed cost; η-Cost reduction due to AI

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Supply of information:

- **increases**$\uparrow$ because AI decreases the cost of provision (η).
- **decreases**$\downarrow$ because AI steals the consumers, thus there is less incentive to produce (ϕ).

Quality

- We care about the quality that is consumed by the users:

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