

## Search and search ads: Innovation and competition

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## Algo and paid search: a quick look

### Algorithmic Search

Determines natural search results for web pages based on user query

Advertisers and publishers (via search syndication) rely on natural results to drive traffic to their sites

### Search Advertising

Appears on results pages for search engines (e.g. Google)

- > Advertisers bid on “key words”
- > Advertisers “pay per click” based on:
  - > bids
  - > quality of advertisements
- > Advertisements are ranked based on quality scores

The screenshot shows a Google search for "houston pizza". The search bar at the top contains the text "houston pizza" and the Google logo. Below the search bar, there are tabs for "Web", "Images", "Video", "News", "Maps", and "more". The search results are divided into two main sections: "Paid Search Ad" and "Algorithmic Search".

**Paid Search Ad:** This section is highlighted with a blue box and contains two sponsored links. The first link is "Pizza Houston" from "www.papajohns.com" with the text "Order a Papa John's Pizza Online & High-quality pizza delivered to you". The second link is "Houston Pizza Restaurants" from "houston.Citysearch.com" with the text "Read Local review on Pizza on Citysearch. Try it!".

**Algorithmic Search:** This section is highlighted with a blue box and contains organic search results. The first result is "Best of Citysearch Houston - Best Houston Pizza" from "houston.Citysearch.com" with the text "Best of Citysearch Houston. Visit Citysearch to find the best Pizza in Houston, plus the best Houston restaurants, bars, night clubs, hotels, etc.". The second result is "Welcome Papa John's Pizza Houston Texas" from "www.papajohnshouston.com" with the text "Franchise of Papa John's Pizza, with locations in Houston, College Station, Galveston, Baytown and Katy. Information on restaurants and employment.". The third result is "Maui Bros Pizza Company Houston Pizza Delivery New York Style Pizza" from "mauibros.com" with the text "Maui Brothers Pizza company delivers delicious authentic New York Style pizza and wings to northwest Houston area and Jersey Village pizza lovers.". The fourth result is "Houston Pizza Pizza, Pasta, Salads Lots of Real Good Food. Monday pizza and salad" from "houstonpizzapizza.com" with the text "Houston Pizza Pizza, Pasta, Salads Lots of Real Good Food. Monday pizza and salad".

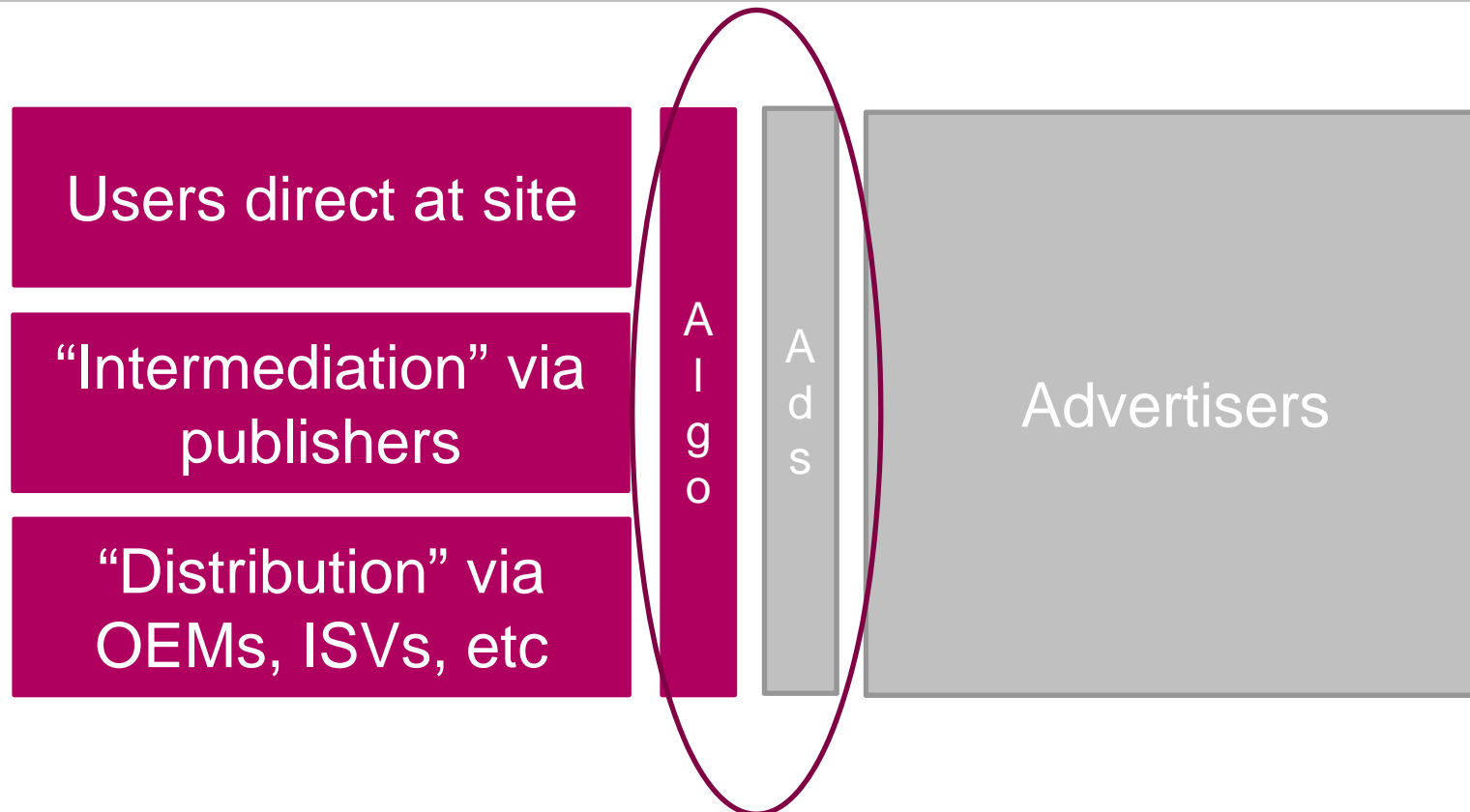
**Sponsored Links (Right Side):** This section is highlighted with a blue box and contains three sponsored links. The first link is "Houston Pizza" from "CityGuide.AOL.com" with the text "City's Best 2007 - Find the Best Dining & Nightlife in Your City!". The second link is "Houston Pizza" from "MapQuest.com" with the text "Whatever it is, find it here. Houston local search & maps.". The third link is "Extreme Pizza" from "www.extremepizza.com" with the text "Award-winning pizza delivered Order on-line-now! It's Easy Houston, TX".

**ITZ - Family, Food & Fun:** This link is also visible on the right side with the text "Opening Early Summer 2007 Willowbrook Mall Area www.itzcomingsoon.com Houston, TX".

**Domino's® Official Site:** This link is also visible on the right side with the text "Order Online Today For Delivery To Your Door in Houston. www.Dominos.com Houston, TX".

## “Match making” between users and advertisers

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Powerful scale and network effects in operation

## Scale is critical to competitiveness

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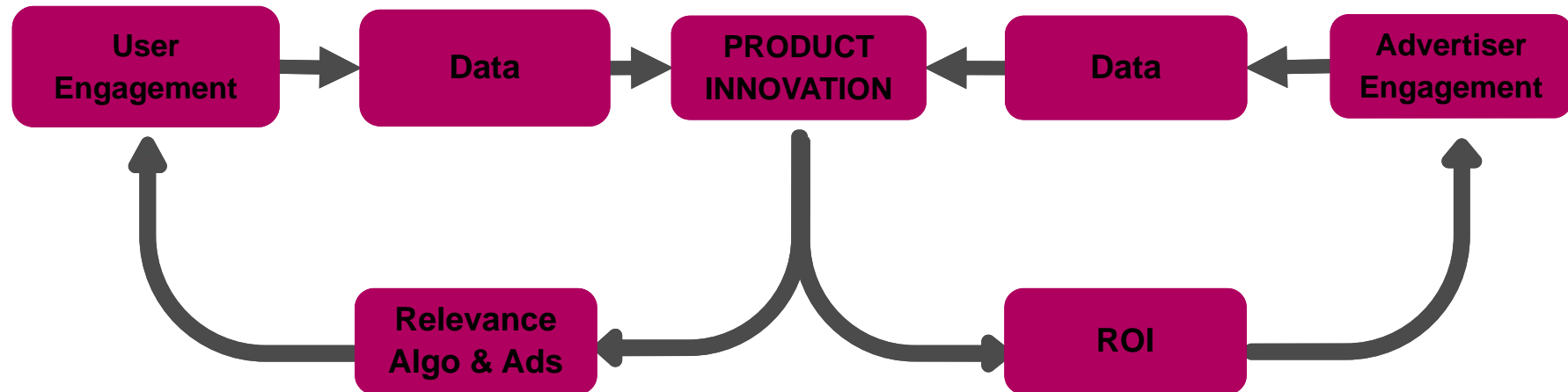


***“Competitors that responded to the market investigation indicate almost unanimously that scale is important in order **to be an effective competitor** in search advertising<sup>49</sup>.***

<sup>49</sup> 10 out of 11 answers to question 70 of the Competitors questionnaire”

Commission Decision, *Microsoft/Yahoo!* para. 173

## Scale is necessary for innovation



Scale limits a platform's ability to experiment, match relevant algo search results to queries (especially rare search terms) and to improve algorithms for selecting ads

Machine learning and training simply cannot occur without ample observations

Low scale gives rise to bottlenecks in the innovation process

## Scale is key also on the advertiser side

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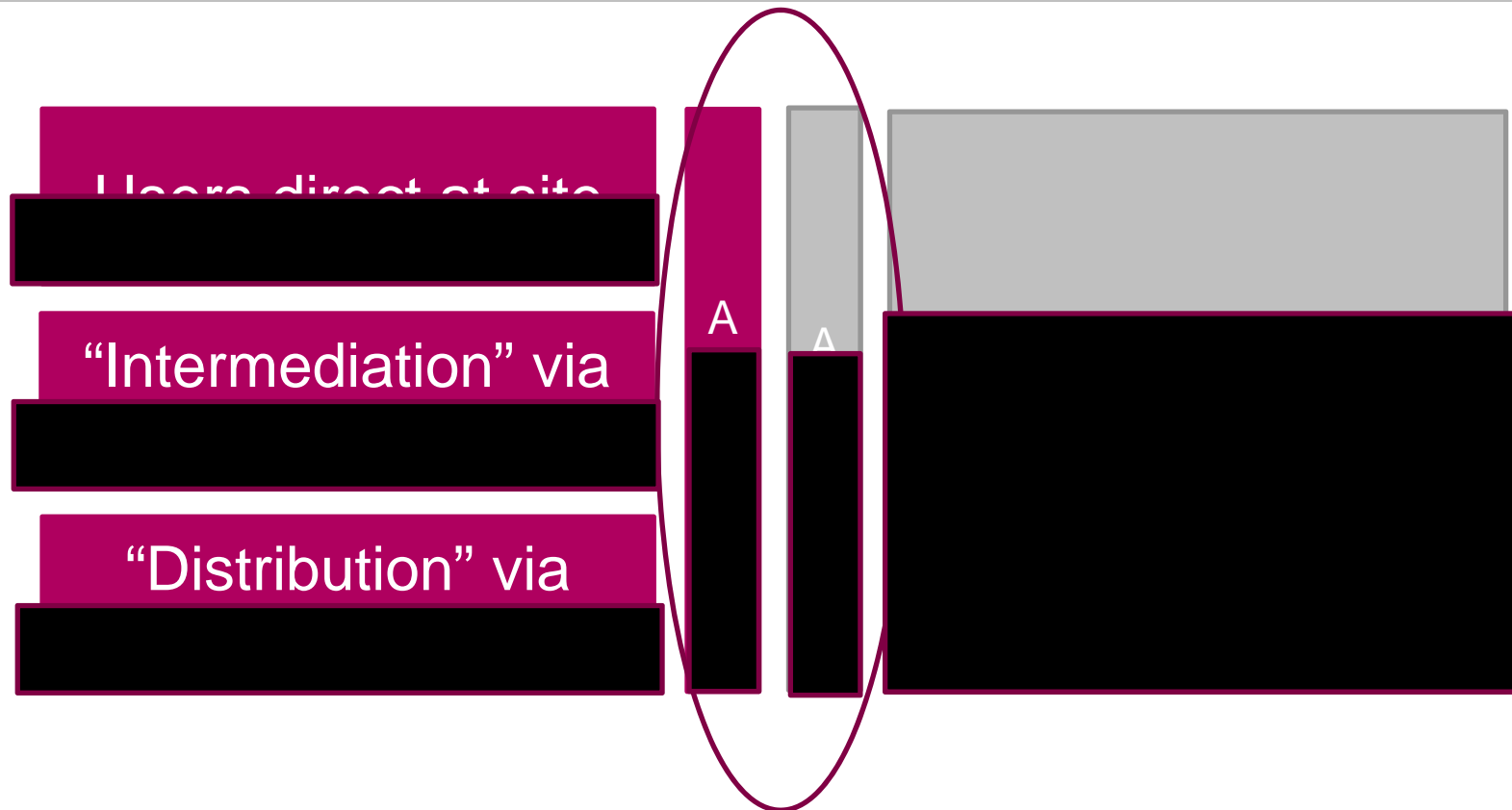
With sufficient scale, advertisers enter the platform and engage in optimizing campaigns, so that relevant ads are available to be served in response to user queries

Improved user experience

Improved Return on Investment (ROI) for advertisers

By “closing off” rivals’ paths to grow scale

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A vicious cycle is created: effective competition is inhibited

# Competition in this space increasingly important

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Google's position (often > 95% share) persist across Europe

One by one, rivals have exited – “excluded by Google” is a frequent claim

Europeans are increasingly connected, research by IAB shows that :

- 426.9 million Europeans use the internet every week. The average European spends nearly 15 hours online each week
- One third of Europeans access the internet using more than one device, for instance a tablet computer, personal computer or a smartphone
- Nearly each (96%) European internet user conducts research online for purchases
- In the six month period of IABs research, European online consumer spending totalled €188 billion - on average €544 for each shopper

European search ad spend around €10 billion annually, steadily increasing