

# The “Pedia Effect”: A Credibility Algorithm

(How Wikipedia Changed Marketing Forever)

EJ Park

[ejp@pedia.com](mailto:ejp@pedia.com)

[www.marketingpedia.com](http://www.marketingpedia.com)

Abstract. The “Pedia Effect” is a proven algorithm that automatically maximizes the credibility of all information, including advertising and marketing. Maximizing credibility<sup>1</sup> multiplies marketing “voice and tone,” amplifies all (past, present, and future) marketing exposures while unlocking increased returns from past exposures and creating a consumer “point-of-need” (PON<sup>2</sup>) marketing platform more powerful than any “point-of-interruption” (POI<sup>3</sup>) ad platform. Credibility is the most valuable asset.

Marketers employ the “Pedia Effect” by simply constructing company “encyclopedias” that contain the truthful<sup>4</sup> information consumers want about the company, its products, and services, provided by a “perceived independent third-party, higher authority” encyclopedia brand that consumers believe and remember. And everyone knows what it is.

Marketers create individual company “encyclopedias” based on simple standards and rules that are “enforced” by engaged consumers.<sup>5</sup> The “encyclopedias” are truthful, transparent<sup>6</sup> and include democratized control by consumers and marketers together to ensure benefits remain consumer and marketer aligned. Think, “mini-commercial Wikipedias.”

## 1. Introduction – the Problem

For 20+ years marketers ignored the fact that “(M)arketing/advertising” (like all information), isn’t only about “(e)xposures.” It’s the product of 2 variables – “(e)xposures” (what you see/hear/experience), and “(C)redibility” (what you believe of what you see/hear/experience), as demonstrated in the equation:  $M = eC$ . And of the two variables, “(C)redibility” is by far, the most important.

Online marketing has been primarily “exposures-by-the-ton, surveillance-based tracking” (SBT<sup>7</sup>). The main results? The creation of the richest mega-monopolies in history and the fraud-fueled<sup>8</sup> ad-tech supply chains that dominate online ads.

SBT was the 21st century’s “new and improved” version of traditional interruption advertising. This time with big tech, big data, and behavioral targeting algorithms<sup>9</sup> promising “big effectiveness.” The methodology of SBT generated such heated debates over privacy,<sup>10</sup> data security,<sup>11</sup> consumer rights,<sup>12</sup> and the unintended consequences<sup>13</sup> of so much data and power in so few unaccountable hands that it has drawn the ire of consumers, experts, scholars, and governments worldwide.<sup>14</sup>

In pursuit of ever greater profits, the mega-monopolies exploited their positions, marketers, consumers, and society-at-large, with little regard for transparency,

responsibility,<sup>15</sup> or cooperation,<sup>16</sup> and siphoned off both consumers' and marketers' power and influence. And now, with the viral expansion of "AI-driven personal assistants" (AI-PAs<sup>17</sup>) that choose for consumers, marketers face an existential threat of being cut out of the choosing and buying process<sup>18</sup> altogether.

Even while providing the benefits of convenient, apparently "free" services (search, social, and selling), the SBT model extracted significant indirect "costs" from consumers,<sup>19</sup> marketers, and society including:

- Invasive Surveillance<sup>20</sup>
- Reduced Personal Privacy
- Exploitation w/o Permission
- Destructive/Extractive/Fraudulent Ad Tech Supply Chains<sup>21</sup>
- Exploitive Opaque Mega-Monopolies
- Value of Personal Data Goes to Third Parties
- Increasing Supply-Side Manipulation
- Increasing Information Asymmetry<sup>22</sup>
- Narrowing Choices w/Algorithmic "Echo Chambers"<sup>23</sup>
- Increased Cyber Insecurity (data breaches, hacking, ID theft, etc.<sup>24</sup>)
- Disastrous Unintended Consequences<sup>25</sup>
- Pending/Increasing Worldwide Regulation

Reviewing the indirect costs it's clear that SBT is not the "bargain" it claimed to be<sup>26</sup> and the disruptive expansion of AI doesn't offer marketers any respite either, since marketers cannot afford a "seat at the AI table" and will once again be subject to the mega-monopolies that can afford to deploy AI in their own self-interests – further increasing the distance between marketers and consumers. Maximizing credibility by establishing a permanent direct connection to consumers is marketers' only sustainable solution.

## 2. The Foundation - The 4 Basic Laws of Information

- There are two ways we use information
  - Knowledge, and
  - Decision making
- There are two ways we obtain information
  - Information we seek at our "point of need" (PON), and
  - Information that seeks us at our "point of interruption" (POI)
- There are two main components that compose information
  - Exposures - what we see/hear/experience, and
  - Credibility - what we believe of what we see/hear/experience
- Information we seek @ our PON is more credible than information that seeks us @ our POI<sup>27</sup>

These laws govern all information systems including marketing and advertising – defining how we use, obtain, perceive, and value information. The 3<sup>rd</sup> law is the basis for The Marketing Equation and the existential importance of "credibility."

### 3. The Marketing Equation

Like all information, (M)arketing is the product of 2 main variables – “(e)xposures” (what we see/hear/experience) and “(C)redibility” (what we believe of what we see/hear/experience)

$$M = eC$$

To increase overall “(M)arketing” results you increase “(e)xposures” or “(C)redibility.”

Over just the last 20 years, the “(e)xposures” variable totals millions or billions of mostly interruption-based exposures for large companies. So, any new “(e)xposures” added to the existing “pile” of millions or billions are, by definition, incremental and can produce only minimal increase in overall “(M)arketing results.” However, any increase in “(C)redibility” is multiplied by those same existing millions or billions of “(e)xposures” producing a greater increase in overall “(M)arketing” results. Which makes all marketing - past, present, and future, work better.

**The equation demonstrates the critical importance of “(C)redibility”<sup>28</sup> to increase a company’s overall “(M)arketing results.”**

In 20+ years, marketers spend trillions of dollars of interruption-based ads across the Internet.<sup>29</sup> Increasing the “(C)redibility” of all those past “(e)xposures” (as well as present and future exposures) increases overall “(M)arketing results.” This makes everything a marketer has done – work better. The math is undeniable. Increasing “(C)redibility” has the greatest effect on “(M)arketing results.”

For example: If a marketer simply doubles the total amount of marketing information available to consumers online with the additional marketing information made available from a “perceived independent third-party, higher authority” - the “(C)redibility” of the combined marketer’s information will be **MORE** than double, because the “perceived independent third-party (C)redibility” of the additional information is **greater** than the “first-party (C)redibility” of the original information, so when added together, is **more than double** the original information. A significant result by simply doubling the amount of marketing information available to consumers by using a “perceived independent third-party.” Increasing the “(C)redibility” variable has by far the greatest impact on overall “(M)arketing results.”

|                                    |           |                         |                      |
|------------------------------------|-----------|-------------------------|----------------------|
| (e) = 500,000,000                  | (C) = 2   | M = 500,000,000 (2) =   | <u>1,000,000,000</u> |
| <i>Increase (e) by 5,000,000 –</i> |           |                         |                      |
| (e) = 505,000,000                  | (C) = 2   | M = 505,000,000 (2) =   | <u>1,010,000,000</u> |
| <i>Increase (C) by 0.5 –</i>       |           |                         |                      |
| (e) = 500,000,000                  | (C) = 2.5 | M = 500,000,000 (2.5) = | <u>1,250,000,000</u> |

Increasing “(C)redibility” is the only way to unlock increased returns from all past “(e)xposures” and make everything a company has already done work better.

And the only way to automatically increase “(C)redibility” beyond the traditional, time-consuming “be a good citizen-isms” is to use a “credibility optimization algorithm.”

#### 4. The “Pedia Credibility Algorithm” (PCA)

**THVI + PON + AAM + ITPHA**

**Truthful High-Value Information** delivered at the consumer’s **Point of Need**  
**Across All Markets** by an **Independent Third-Party Higher Authority**  
(Maximum Credibility + Consumer Aligned + Convenience)

##### **Truthful High-Value Information**

Truthful information consumers use to make their buying decisions including specifications, reviews, comparisons, ratings, etc.

##### **Point Of Need**

The point when consumers are intentionally seeking such information.

##### **Across All Markets**

The convenience of providing truthful high-value information on the products and services consumers want to buy in one location.

##### **Independent Third-Party Higher Authority/ Brand/Perception**

#### 5. The “Pedia Effect” - The ITPHA Brand/Perception

The “Pedia Effect,” described by this author in a patent application filed in December 2000,<sup>30</sup> is based on the term “encyclopedia,” the most widely known and proven brand to organically generate the highest “independent third-party, higher authority” (ITPHA) credibility in consumers’ minds. How?

The “Pedia Effect” is the result of multiple cognitive heuristics/biases<sup>31</sup> all working together – the “*representativeness heuristic*,” the “*availability heuristic*,” the “*framing bias*,” and the “*confirmation bias*.” The first “if it looks like a duck, walks like a duck, quacks like a duck, etc.,” the second “I’ve seen a lot of ducks,” the third, “It says it’s a duck,” and finally “I knew it was a duck all along.” Just swap “Pedia” for “ducks.” A single bias is strong – four working together are irresistible.

The perception is so powerful that even when told the information is not credible by Wikipedia and all schools, consumers still seek the information in droves.<sup>32</sup> Wikipedia has proven beyond any doubt that the “Pedia Effect” can be massively popular and authoritative without advertising and despite being constructed by “a bunch of nobodies”<sup>33</sup> (volunteers) for academic, non-profit purposes.

This same “Pedia Effect” also enables a “bunch of somebodies”(marketers) to build “commercial Wikipedias” to provide consumers with “everything they want to know about everything they want to buy” in convenient “company-Pedias.” The model is the ultimate in simplicity - “truthful evergreen content + Pedia brand.”

## 6. The “Pedia Effect” - Fulfillment Case Examples

1995 – Autopedia - The Automotive Encyclopedia,<sup>34</sup> was the first free online encyclopedia and winner of Yahoo Internet Life’s 1998 4-star (highest) award for automotive lemon laws. The other top five 4-star winners were “Consumer Reports,” “Edmund’s Automotive Buyer’s Guides,” Microsoft’s “Car Point,” and “Car and Driver Magazine.” Autopedia was included in more than 100 books, including college textbooks, consumer guides, the Judge Advocate General’s Corps and finally, inclusion in Transformer comic books. All of Autopedia, including the graphics, programming, editorial content, the research on lemon laws throughout the USA – was created by 1 person, part-time, late at night in his living room.

1999 – Investopedia<sup>35</sup> was created by 2 college students at the University of Alberta, in Edmonton, Canada, who wanted to “explain the complex world of finance in everyday language.” Investopedia was sold to Forbes in 2007 for an undisclosed sum. Forbes sold it in 2010 to ValueClick for \$42 million, and in 2013 ValueClick sold it (with other properties) to IAC for \$80 million.

2001 – Wikipedia - The Free Encyclopedia, is known throughout the world and is the 6-7<sup>th</sup> largest site on the Internet with billions (9.2B) of monthly visits, millions of articles, including tens of millions of pages in just the English version.<sup>36</sup> Wikipedia is non-profit, uses thousands of volunteer editors, does no advertising, is not considered a credible source by schools and universities and itself specifically states on its pages that, “Wikipedia is not a reliable source.” Imagine any website, much less an “encyclopedia” website, where schools and colleges tell students that the content is not considered credible and the website itself is stating the same thing. And still the people keep coming in the billions. Why?

In all “Pedia Effect” use cases the model is exactly the same – a “pedia brand (expectation) + evergreen content (fulfillment) + ads” (for profits) or “+ donations” (for non-profits). And since 2001 there have been many “Pedias” utilizing the same model and in every case the “Pedia Effect” generates powerful ITPHA brand heuristics that consumers perceive as authentic, credible, and trustworthy, regardless of whether the content (fulfillment) is created by - one person, two college students, or thousands of volunteer contributors, and regardless of what the creators or anyone else has to say about the credibility or reliability of the content. People overwhelmingly believe what’s in a “pedia.”

The “Pedia Effect’s” combination of behavioral cognitive biases and heuristics is the only logical explanation for the durable credibility, authenticity, and trust that people perceive of the content in every “pedia” despite any and all warnings

The value of such perceptions in an academic non-profit is obviously immense (Wikipedia), but the value of these perceptions applied in a commercial for-profit enterprise is beyond measure - adding credibility to all past, present, and future marketing efforts, increasing returns from all past marketing – and creating a powerful “point-of-need” marketing platform that consumers directly and intentionally seek – a “commercial Wikipedia.”

## **7. Pedia ITPHA Brand Heuristics<sup>37</sup> + The Power of Truth**

Starting with the PCA and amplifying it with simple “standards and rules” to maximize truth and create an “increasing returns”<sup>38</sup> model that any marketer can deploy on their own website by simply assembling a truthful company “encycloPedia.” Marketers assemble information about the company into an “encycloPedia” that consumers perceive to be an “independent third-party, higher authority” they believe and remember. The identical information that would appear under “about us” or “history” is perceived as more credible, simply because it appears with a “pedia” brand’s associated cognitive heuristics and biases.<sup>39</sup>

## **8. The PediaNetwork® + ITPHA Brand Heuristics + Truth**

Truthful High-Value Information “encyclopedias” about companies, services and products is also aggregated into a “network of encyclopedias” by a true Independent Third-Party “standards-setting organization” (SSO) – PediaNetwork®.

The aggregation of company encyclopedias into a network platform utilizing proprietary trademarks and domains, generates “network effects”<sup>40</sup> more powerful than individual marketer “pedias,” maximizing organic credibility, and creating the first self-defining and self-organizing PON consumer information platform more powerful than any POI ad-based platform. Think, “commercial Wikipedia.”

Whether it’s word of mouth from a friend, an expert review, or information from a credible source - there is no marketing information more powerful than Truthful High-Value Information delivered at the consumer’s PON by an Independent Third-Party Higher Authority consumers believe and remember.

The PCA creates the most truthful marketing platform, the PediaNetwork® - where marketers provide truthful information (enforced by consumers) and consumers intentionally seek that truthful information at their PON, from a true independent third-party higher authority consumers believe and remember across all markets.

## **9. Independent Third-Party (ITP) and Real Truth**

Fundamental increasing returns models are rare and given the power and scale of such a model in marketing, it is in marketers’ existential self-interest to tell the truth and engage consumers to ensure that they create and control the most powerful consumer PON marketing platform(s) – by creating truthful comprehensive encyclopedias about their companies.

## **10. Dual-Purpose Consumer Enforcement-Engagement**

Using consumer enforcement of truth/rules is credible, powerful, and adaptive – serving the dual purposes of enforcement credibility and engagement:

- **A4** (Anyone, Anywhere, at Anytime can object to Anything) then,
- **SMP** (marketers must then Substantiate, Modify, or Pull) the information
- Consumer enforcement creates powerful participation for consumers and an optimum engagement strategy for marketers by identifying genuinely engaged consumers (who object)

## **11. Giving Consumers What They Want - Truthful Information**

“The most truthful marketing” - Consumers want exactly the truthful information they want, exactly when they want it from an independent third-party they believe and remember, across all markets. Consumer enforcement optimizes the perception, particularly in the coming era of AI, where real truth is the “grail.”

It is impossible to achieve such fulfillment with any POI ad strategy, no matter how well targeted or manipulated. It is only possible by creating an information resource that consumers intentionally seek at their PON. The Pedia platform provides truthful marketing information that consumers intentionally seek at their PON.

## **12. Giving Marketers What They Want - Control**

- Simple rules
- Zero fraud
- Full transparency
- Information consumers seek and do not block
- ITPHA “effect” – the more independent – the more credibility
- Consumer-based enforcement = optimal consumer engagement
- Proven organic credibility perception and taxonomy
- No brand risk - complete control of messaging at all times
- Democratized consumer and marketer control of the network platform ensures continued marketer and free-market benefits and influence
- Marketers get back control ceded to the mega-monopolies
- Marketers gain a powerful defense against AI-driven processes such as personal assistants that choose for consumers now and into the future
- Marketers are prepared for any future online advertising environment
- Marketers remain forever relevant by telling the truth

After 20+ years of SBT and ceding customer influence to the mega-monopolies they supported, marketers can recover their influence and effectively defend against all future “network effects”<sup>41</sup> driven media platforms, including AI.

The PCA makes everything marketers have ever done (including SBT and all other POI-based ads) work better.

## **13. Conclusion**

The final evolution of marketing is a simple, proven, credibility maximization algorithm that automatically increases marketers’ credibility and multiplies marketer “voice and tone” by creating the most powerful PON marketing platform that makes everything a marketer has ever done, work better. The PCA enables marketers to create the most powerful “commercial Wikipedia.”

The PCA maximizes the ROI of trillions of dollars of past ad exposures already paid for by marketers, unlocking increased returns from those exposures, as well as maximizing the ROI of present and future exposures. Without maximum credibility, maximum ROI is impossible.

The PCA is a simple bargain between consumers and marketers where consumers intentionally engage with marketers' information as long as marketers provide truthful information to consumers, giving both sides what they want and creating the most powerful PON marketing platform on the Internet controlled by consumers and marketers together. A powerful "commercial Wikipedia."

The Pedia Platforms are powerful because marketing is primary at the consumer's PON, while on other platforms marketing is secondary at the consumer's POI. There is no "bait and switch" to ads – truthful marketing is what consumers are seeking and what they get. Marketing is the message and the media.

Democratized control of the PediaNetwork® platform by marketers and consumers ensures that both stakeholders will always have a powerful platform from which to defend themselves and free markets from the monopolistic "winner take all" effects of any future "network effects" platforms or AI-driven strategies.

A consumer PON marketing platform that enhances all past, present, and future marketing and protects the interests of consumers, marketers, and society is indeed, "the final evolution of marketing." Anything less is going "backwards."

## 14. Fulfillment

An "algorithm"<sup>42</sup> is just a fancy way of saying "formula" or "recipe" that's deterministic in nature, meaning if you follow the recipe, you get the results. If you follow the recipe for brownies, you can't get potato salad. This white paper is the "recipe", and the marketers are the "cooks."

**All fulfillment is by the marketers** – and it's only 2 steps. Create comprehensive truthful company encycloPedia and engage with consumers' enforcement of SSO rules. Like a "franchise" marketers bear the sole responsibility for fulfillment. Marketers control their own destinies in their own self-interest.

"Pedia" provides the Credibility Algorithm, the brand, the standards, and simple rules upfront. There is no "execution" or "management," as the "encyclopedias" operate on simple rules with consumers as the arbiters of the "truth in marketing."

AI/ML and "lightweight" blockchain processes will be developed to automate the mundane and repetitive tasks to provide security and transparency.

Marketers have always dreamed of creating marketing that consumers intentionally seek and engage, just before a transaction. The PCA delivers that dream.

Marketers have never been offered a proven, simple solution of this magnitude that can completely change the balance of power, based on their actions alone. All parties are on notice. Marketers can finally end up with the power by simply acting in their own best interest. (See [www.marketingpedia.com](http://www.marketingpedia.com) for detailed information.)



## References

- <sup>1</sup> Erdem, Tülin and Joffre Swait, (2004) "Brand Credibility and its Role in Brand Choice and Consideration," *Journal of Consumer Research*, 31 (1), 191-199. <https://www.acrwebsite.org/web/acr-content/652/brand-credibility-brand-consideration-and-choice.aspx>
- <sup>2</sup> Kim G. Read & Maureen Joyous Morasch (2016) Research Performance Support: Connecting Online Graduate Students from the LMS to the Library, *Internet Reference Services Quarterly*, 21:3-4, 101-113. <https://doi.org/10.1080/10875301.2016.1240736>
- <sup>3</sup> Acquisti, A., & Spiekermann, S. (2011). Do Interruptions Pay off? Effects of Interruptive Ads on Consumers' Willingness to Pay. *Journal of Interactive Marketing*, 25(4), 226-240. <https://doi.org/10.1016/j.intmar.2011.04.003>
- <sup>4</sup> Beattie, G. (2014, November 14). The Number One Thing Consumers Want From Brands? Honesty. *Fast Company*. <https://www.fastcompany.com/3038488/the-number-one-thing-consumers-want-from-brands-honesty>
- <sup>5</sup> Kucuk, S. U. (2009). Consumer empowerment model: from unspeakable to undeniable. *Direct Marketing: International Journal*, 3(4), 327–342. <https://doi.org/10.1108/17505930911000892>
- <sup>6</sup> Birchall, C. (2014). Radical Transparency? *Cultural Studies & Critical Methodologies*, 14(1), 77-88. <https://doi.org/10.1177/1532708613517442>
- <sup>7</sup> Zuboff, S. (2019). The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. *PublicAffairs*. <https://www.amazon.com/Age-Surveillance-Capitalism-Future-Frontier/dp/1610395697>
- <sup>8</sup> World Federation of Advertisers (WFA). (2021). The economic cost of bad actors on the internet: Ad fraud 2020. Retrieved from <https://info.cheq.ai/hubfs/Research/Economic-Cost-BAD-ACTORS-ON-THE-INTERNET-Ad-Fraud-2020.pdf>
- <sup>9</sup> Kant, T. (2021). Identity, Advertising, and Algorithmic Targeting: Or How (Not) to Target Your “Ideal User.” *MIT Case Studies in Social and Ethical Responsibilities of Computing*, Summer 2021. <https://doi.org/10.21428/2c646de5.929a7db6>
- <sup>10</sup> McMahon, Robert, "Surveillance and Privacy in the Digital Age: A Primer for Public Relations" (2015). *Graduate Theses & Dissertations*. 4. [https://scholarworks.arcadia.edu/grad\\_etd/4](https://scholarworks.arcadia.edu/grad_etd/4)
- <sup>11</sup> Andrew, J., Baker, M., & Huang, C. (2023). Data breaches in the age of surveillance capitalism: Do disclosures have a new role to play? *Critical Perspectives on Accounting*, 90, 102396. <https://doi.org/10.1016/j.cpa.2021.102396>
- <sup>12</sup> Mani, Tamil. (2023). CONSUMER RIGHTS IN THE DIGITAL AGE CHALLENGES AND SOLUTIONS Original Research Paper. *Global Journal For Research Analysis*. 12. 1-3.
- <sup>13</sup> Wiertz, C. & Kittinger-Rosanelli, C. (2021). Illuminating the Dark: Exploring the Unintended Consequences of Digital Marketing. *NIM Marketing Intelligence Review* 13(1), 10-17. <https://doi.org/10.2478/nimmir-2021-0002>
- <sup>14</sup> Fabbri, F., & Celeste, E. (2020). The Right to Be Forgotten in the Digital Age: The Challenges of Data Protection Beyond Borders. *German Law Journal*, 21(S1), 55-65. <https://doi.org/10.1017/glj.2020.14>
- <sup>15</sup> Lauer D. (2021). Facebook's ethical failures are not accidental; they are part of the business model. *AI and ethics*, 1(4), 395–403. <https://doi.org/10.1007/s43681-021-00068-x>
- <sup>16</sup> Stanford Institute for Human-Centered AI. (2020). Facebook's algorithm: How it spreads misinformation and disinformation. Retrieved from <https://www.facebook.com/StanfordHAI/>
- <sup>17</sup> Pout, S. (2018, October 31). How AI Assistants Will Impact Businesses and Consumers. *Boye & Co*. <https://www.boy-co.com/blog/2018/10/31/how-ai-assistants-will-impact-businesses-and-consumers>
- <sup>18</sup> Stucke, M. E., & Ehrzachi, A. (2017). How Digital Assistants Can Harm Our Economy, Privacy, and Democracy. *Berkeley Technology Law Journal*, 32(3), 1239–1300. <https://www.jstor.org/stable/26488981>
- <sup>19</sup> Mustri, E.S., Adjerid, I and Acquisti, A, (March 23, 2023). Behavioral Advertising and Consumer Welfare: An Empirical Investigation. Available at SSRN: <https://ssrn.com/abstract=4398428>
- <sup>20</sup> Geoghegan, S. (2023, August 8). Data minimization: Regulating the ineffective, irrelevant, and invasive practice of surveillance advertising. *Electronic Privacy Information Center*. <https://epic.org/data-minimization-regulating-the-ineffective-irrelevant-and-invasive-practice-of-surveillance-advertising/>

- 
- <sup>21</sup> Vekaria, Y., Nithyanand, R., & Shafiq, Z. (2022). The Inventory is Dark and Full of Misinformation: Understanding the Abuse of Ad Inventory Pooling in the Ad-Tech Supply Chain. <https://arxiv.org/abs/2210.06654>
- <sup>22</sup> Bashir, M., Hayes, C., Lambert, A.D., & Kesan, J.P. (2015). Online privacy and informed consent: The dilemma of information asymmetry. *Proceedings of the Association for Information Science and Technology*, 52, 1-10. <https://doi.org/10.1002/prs.2015.145052010043>
- <sup>23</sup> Cinelli, M., De Francisci Morales, G., Galeazzi, A., Quattrociocchi, W., & Starnini, M. (2021). The echo chamber effect on social media. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 118(9), 1–8. <https://doi.org/10.1073/pnas.2023301118>
- <sup>24</sup> Andrew, J., Baker, M., & Huang, C. (2021). Data breaches in the age of surveillance capitalism: Do disclosures have a new role to play? *Critical Perspectives on Accounting*, 90, 102396. <https://doi.org/10.1016/j.cpa.2021.102396>
- <sup>25</sup> Debatin, B., Lovejoy, J.P., Horn, A-K., & Hughes, B.N. (2009). Facebook and Online Privacy: Attitudes, Behaviors, and Unintended Consequences. *Journal of Computer-Mediated Communication*, 15(1), 83–108. <https://doi.org/10.1111/j.1083-6101.2009.01494.x>
- <sup>26</sup> Stanger, A. (2022). The Real Cost of Surveillance Capitalism: Digital Humanism in the United States and Europe. In: Werthner, H., Prem, E., Lee, E.A., Ghezzi, wiki. (eds) *Perspectives on Digital Humanism*. Springer, Cham. [https://doi.org/10.1007/978-3-030-86144-5\\_5](https://doi.org/10.1007/978-3-030-86144-5_5)
- <sup>27</sup> Thompson, D. (2014, June 13). A Dangerous Question: Does Internet Advertising Work at All? *The Atlantic*. <https://www.theatlantic.com/business/archive/2014/06/a-dangerous-question-does-internet-advertising-work-at-all/372704/>
- <sup>28</sup> O’Neil, J., Eisenmann, M., & Holman, M. (2020) A Mixed Methods Examination of How People Assess the Credibility of Sources Used by Public Relations Practitioners, *Journal of Promotion Management*, 26:1, 75-96, <https://doi.org/10.1080/10496491.2018.1536619>
- <sup>29</sup> Gordon, B. R., Jerath, K., Katona, Z., Narayanan, S., Shin, J., & Wilbur, K. C. (2021). Inefficiencies in Digital Advertising Markets. *Journal of Marketing*, 85(1), 7-25. <https://doi.org/10.1177/0022242920913236>
- <sup>30</sup> Park, E.J. (2000, December 18). Method and Apparatus for Internet Marketing and Transactional Development. (U.S. Patent Application No. 09/740753). USPTO (2002, June 27)
- <sup>31</sup> Ehrlinger, Joyce & Readinger, W.O. & Kim, Bora. (2016). Decision-Making and Cognitive Biases. *Encyclopedia of Mental Health*. <https://doi.org/10.1016/B978-0-12-397045-9.00206-8>
- <sup>32</sup> Wikipedia contributors. Wikipedia:Wikipedia is not a reliable source. In *Wikipedia, The Free Encyclopedia*. Retrieved Nov 9, 2023 from [https://en.wikipedia.org/wiki/Wikipedia:Wikipedia\\_is\\_not\\_a\\_reliable\\_source](https://en.wikipedia.org/wiki/Wikipedia:Wikipedia_is_not_a_reliable_source)
- <sup>33</sup> Lih A. (2009). *The Wikipedia Revolution : how a bunch of nobodies created the world's greatest encyclopedia* (1st ed.). Hyperion. <http://books.google.com/books?id=-6ImAQAAMAAJ>.
- <sup>34</sup> Park, E. (2023) - Autopedia Reviews. Retrieved from <https://autopedia.com/Reviews.html>
- <sup>35</sup> Wikipedia contributors. (2023, September 22). Investopedia. In *Wikipedia, The Free Encyclopedia*. Retrieved 15:14, December 10, 2023, from <https://en.wikipedia.org/w/index.php?title=Investopedia&oldid=1176507323>
- <sup>36</sup> Semrush. (2024, February). Traffic statistics for Wikipedia on Semrush. Retrieved April 2, 2024, from <https://www.semrush.com/website/wikipedia.org/overview/>
- <sup>37</sup> Bobadilla-Suarez, S., & Love, B. C. (2018). Fast or frugal, but not both: Decision heuristics under time pressure. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 44(1), 24–33. <https://doi.org/10.1037/xlm0000419>
- <sup>38</sup> Arthur, W.B. (1996, July-August). Increasing Returns and the New World of Business. Retrieved September 28, 2023 from HBR.org: <https://hbr.org/1996/07/increasing-returns-and-the-new-world-of-business>
- <sup>39</sup> Dale, Stephen. (2015). Heuristics and biases: The science of decision-making. *Business Information Review*. 32. 93-99. <https://doi.org/10.1177/0266382115592536>
- <sup>40</sup> Tellis, G. J., Yin, E., & Niraj, R. (2009). Does Quality Win? Network Effects versus Quality in High-Tech Markets. *Journal of Marketing Research*, 46(2), 135-149. <https://doi.org/10.1509/jmkr.46.2.135>
- <sup>41</sup> Stobierski, T. (2020, November 12). What are Network Effects. Retrieved September 28, 2023, from Harvard Business School: <https://online.hbs.edu/blog/post/what-are-network-effects>
- <sup>42</sup> Merriam-Webster. (n.d.). Algorithm. In Merriam-Webster.com dictionary. Retrieved November 8, 2023, from <https://www.merriam-webster.com/dictionary/algorithm>