

Designing for Trust Amidst Information Chaos

COMMENTARY

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The 2025 Edelman Trust Barometer highlights a concerning trend about the declining credibility of news and information media (Edelman Trust Institute 2025). Information, like clean air or safe streets, is a public good, and it's indeed paradoxical that its technology-driven abundance is now leading to chaos and a pervasive crisis of truth.

Nobel laureate economist Joseph Stiglitz argues that without mechanisms to ensure fair access to trustworthy information, both markets and communities fail. Using information as a strategic tool is not a new phenomenon -- people twisting or withholding facts, turning interactions into opaque guessing games, is a routine behaviour -- however, in modern times, the chaos seems to have supercharged. This corrodes social cohesion, impedes collective knowledge creation and leads to poorer outcomes for organizations and communities.

The challenge requires rethinking institutional schemes to foster trust and enhance the utility of information; leading to richer social interactions, more efficient markets, and better informed political choices that maximize public good. The key stakeholders in creation of such designs are legislators, who set the framework; institutional and system architects and regulators, who enforce and shape its operation; and citizens, who hold these arrangements to account. These designs should encourage truthfulness as the default and promote cooperation. Before dismissing this as wishful thinking, let's assess whether historical lessons or current ideas can tackle the issue.

History, for example, provides a seemingly simple yet interesting instance of the invention of money. Primitive economic interactions usually involved a cumbersome process of barter, where if you had a sack of grain but needed a shovel, you first had to find someone who not only had a shovel, but also wanted your grain, thus a cumbersome 'double coincidence' of wants. The use of money solved this inefficiency. While early forms of money, such as commodity money or precious metals were practical as convenient substitutes for barter, the state's role in issuing currency added a critical layer of trust (Asmundson and Oner 2012). It emerged as a universally-accepted medium, simplifying transactions and enabling clearer expressions of demand and supply.

This innovation paved the way for more efficient markets, allowing people to exchange goods and services with confidence. Just as money provided a trusted layer to channel economic interactions

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towards utility, we now need to conceptualize new designs to channel the informational abundance towards greater clarity and public interest.

In recent times, online marketing platforms (e-commerce) have pulled off a parallel feat. On these platforms buyers and sellers transact with confidence without even coming face to face or knowing much about each other. In this case, unlike money, trust is not a result of state intervention ; it is introduced through platform designs which incorporate reputation systems as part of their governance schemes.

Amazon's review system incentivizes honest feedback by marking verified buyers' reviews with a "Verified Purchase" badge, signalling authenticity to shoppers. Reviews which are helpful and truthful are voted up by the community and gain prominence. This encourages buyers to share balanced feedback for recognition. These reviews drive seller success as high ratings boost sales and at the same time, Amazon's algorithms penalize bot actions or fake reviews with removal or account bans, deterring dishonesty.

However, it is important to note that such mechanisms may not be perfect. Complex layers of biases and strategic play between the actors on the platform necessitate that regulation is so engineered that it constantly evolves to intercept any potential foul play. Take the case of eBay, which before 2008 had a feedback system for both buyers and sellers (Tadelis 2023). However, upon realising that the feedback from sellers were largely retaliatory, resulting in distortion of honest expressions; the platform shifted to one-sided feedback system only.

On the other hand, platforms like Airbnb may require two-sided feedback system as an operational necessity as the improper usage of the dwelling by a user should be recorded and accounted for (Tadelis 2023). X's Community Notes, where users add fact-checked context to misleading posts, are a mechanism to curb misinformation, but such notes are added only after the original post. As a result, inaccurate claims can amass millions of views, outpacing truth before cautionary notes appear.

In game theory terms, mechanism designs should encourage honest behaviour, naturally steering the society toward a cooperative focal point (Basu 2015). So, as everyone comes to expect a similar empirical and normative behavioural choice by others, these focal points reinforce expectations (Bicchieri n.d.). This may result in gradually locking in trust-based behaviours that harden into social norms.

As an example, consider the Nobel-winning second prize auctions (Vickrey 1961; Klemperer 2004). In a second-price auction, the highest bidder wins but only pays the amount of the second-highest bid. This means, it is best to just state your own true value or utility regardless of what others are doing. So, an honest expression of choice is incentivised. However, this is not to suggest that this mechanism is a perfect solution, as possible collusion by bidders cannot be ruled out.

Another interesting insight comes from the fact that index like "Quality Score" by Google, used for ranking the sponsored search links, do not reveal the exact estimation methodology (Tadelis 2023). As there is an apprehension that with such information the players may game the system. So, a

compromise on transparency paradoxically serves a greater utility here. These examples just emphasise the need for mechanisms to not only elicit honest behaviour but also withstand strategic exploitation.

Mainstreaming trust and cooperation in the long term

It seems fitting to look around and explore how the ideas of trust and cooperation are positioned in nature's scheme. Evolutionary sciences, especially when viewed through the lens of game theory, show that cooperation is not at odds with natural selection; rather, it often emerges as one of its most enduring outcomes (Cowden 2012). Interestingly this natural selection in the evolutionary space is intrinsically a long-term game with multiple interactions and exchanges of information.

American political scientist Robert Axelrod, whose simulations revealed that cooperation thrives in repeated interactions (Axelrod and Hamilton 1981; Levitt 2021). So, perhaps at the cellular level our genes might be wired for strategizing for survival but at the same time we cannot forget the fact that humans are profoundly social animals as well. Altruism and cooperative behaviour evolve and persist through stable patterns of interaction, particularly when people engage with each other repeatedly over time. These social behaviours flourish in a rule-based environment in our societies.

Now, as a large part of our interactions and information sharing takes place on social media or other digital spaces, it is important that rules for these interactions be inbuilt in their design. For example, shouldn't it be necessary that the algorithms running these platforms be tested and held accountable for any bias, as the customized feed that we receive (perhaps unknowingly) distorts and reinforces our misconceptions?

With payoff being the singular motivation for content creators, if clickbait reliably delivers more views, it's no surprise that it quickly overwhelms our feeds. But what if we could shift this fundamental dynamic? This is precisely where thoughtfully designed platform rules become crucial. To facilitate systemic checks, regulators could mandate *standardized API access* for accredited third-party auditors, allowing them to probe an algorithm's decisions without needing full source code disclosure (Digital Regulation Cooperation Forum 2022). Successful audits and demonstrated compliance may even lead to certifications or "trust labels" for platforms, and provide users with assurance that content curation algorithms are being run fairly and real consequences are imposed for manipulative feeds. This may set off a virtuous cycle, keeping everyone engaged in fair play without much need for constant and heavy-handed policing.

Calls for such audit mechanisms often stall over questions of liability, platform resistance and regulators limited technical capacity. Open-source options like Mastodon show that there are alternatives, but they have struggled to overcome the powerful network effects that keep users locked into dominant platforms (Iansiti 2021; "The Importance of the Network Effect to Become Mainstream" 2022).

How smart systems turn complexity into trust

Effective collective decisions depend on more than just gathering preferences; rather, they require sophisticated systems that can aggregate those preferences and create stable matches, closing critical information gaps along the way. Market design and matching theory pioneered by Nobel laureates Alvin Roth and Lloyd Shapley offer tools to bring order to informational chaos (Roth 2007). The key idea remains that markets don't emerge or function smoothly on their own; they are to be engineered with suitable mechanisms that align incentives and foster cooperation.

In this context Roth's work on kidney exchange offers valuable takeaways. In a kidney exchange, a patient may have a willing donor, but they may not be biologically compatible. Roth's mechanism links such incompatible pairs into a chain. This means that your donor gives to someone else's patient and in return you receive a compatible kidney from another donor in the chain (Roth, Sönmez, and Ünver 2003; Rose 2019). It's important to note that in Roth's kidney exchange, truthful reporting is the best way to maximize your own chances of a successful transplant and any attempt at manipulation is either pointless or harmful. Also, all surgeries in a cycle are carried out simultaneously, so that no participant is left exposed.

We realise that in absence of a mechanism design like this, patients and donors might hide or misrepresent their preferences, hoping for a better match, which might lead to overall poorer outcomes. The same principles now underpin how doctors are matched with hospitals, or students with schools, ensuring the right fit in high-stakes, imperfect-information settings.

In our times, as AI proliferates, suspicion and anxiety in job markets cannot be ruled out as prevailing paradigms of matching people to opportunities might rapidly fade. However, research suggests that tasks yet unforeseen, novel avenues to collaborate, and new agglomerations may also emerge; in such a scenario, the design of job-matching systems remains crucial (Shen and Zhang 2024). Platforms that encourage honest expression of skills and needs and make matching transparent help conserve or rebuild the trust between workers and employers.

Demand intelligent design and cultivate institutional literacy

Institutionalizing trust and cooperation demand a layered design that is built on sequential stages of reputation building, truth-revealing inputs, and then the subsequent outcome of fair collective decisions. Each layer cross-checks others, shrinks information asymmetry, and rewards honest cooperation to forge robust systems. The process may appear to be complex and challenging; however, as Nobel Laureate Paul Milgrom observes, AI and machine learning can be a crucial force multiplier in the design of such novel mechanisms (Milgrom and Tadelis 2018).

Thus, against this backdrop we should first assess whether current systems (social media or algorithms, public consultations, media etc.) reward truthful and honest expressions. The next step might be to design systems which elicit genuine preferences and contain inbuilt mechanisms for

penalty and rewards over quality of information. Ideas like disclosure tags on a customized feed and public declaration of algorithm bias should be evaluated. These ideas, no doubt, pose some technical and legal challenges for the regulators. However, a dash of pragmatism in our laws and a spirited regulator's urge to stay ahead in the technology game could make a difference.

Wide-scale cooperation in building capacities in the domain of mechanism design and behavioural insights could enable us to co-create more trustworthy systems. This would be vital for navigating AI-driven employment shifts, ensuring equitable sharing of benefits.

Conclusion

No doubt, the path to building such an architecture of trust is not without formidable challenges. The most significant obstacle often lies with interest groups, who may benefit from opaque systems and thus resist changes towards greater truth and transparency. We must convincingly demonstrate that while individuals may lose short-term advantages, trust-based systems foster resilience, efficiency, and lasting societal benefits that far outweigh those trade-offs. For example, tendencies to break a traffic rule for a short-term individual gain, like running a red light to save time, make a long-term impact on the safety and efficiency of the system for everyone.

Overcoming these tendencies demand more than clever institutional design; it requires sustained advocacy and a collective shift in mindset. Citizens must actively demand these changes, ensuring that outdated, trust-damaging systems become unsustainable in the face of a shared commitment to truth and cooperation.

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