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THE EMERGENCE OF PREDICTION MARKETS

A Collaborative Research Report 2025-26

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Introduction to Prediction Markets

History of Prediction Markets

Humans have always had a tendency to predict the future- from elections to prices, and even wars. In ancient times, kings used to consult oracles and investors today look at the skies for signs. However, these forecasts are often skewed due to bias, incomplete data or groupthink. What if the best way to see tomorrow wasn't asking experts, but letting thousands of people bet real money on it? This idea led to the emergence of prediction markets: a platform where individuals trade contracts based on the outcomes of unknown future events.

i) Introduction

Prediction markets, often referred to as information markets, idea futures, or event futures, are exchanges in which participants trade contracts that pay out based on the resolution of specific future events.

A prediction market's price is a bet that something will happen. In a well-functioning prediction market, the prices of contracts take into account all of the available information, which means they accurately show how likely each candidate is to be elected. Such market dynamics give participants an incentive to make accurate predictions to maximise their gains. When the majority believes that an event has a high probability, they buy contracts according to that outcome. Subsequently, the price of the said contract rises reflecting the consensus belief.

Robin Hanson, a professor at George Mason University, is a supporter of prediction markets. He argues for prediction markets by saying that they would get rid of the need for so-called experts to rely on self-interested punditry. "Instead, let's make betting markets on the most controversial questions and use the current market odds as our best expert consensus."

The Iowa Electronic Markets have been more accurate than polls in U.S. presidential elections about 74% of the time (Berg et al., 2008) over the past few decades, and they often have much smaller error margins. In a world where opinions are loud and the media is divided, prediction markets give us something rare: a clear, real-time probability based on the combined knowledge of motivated people.

To understand how this powerful forecasting tool came to be, we must trace its deep historical roots and modern emergence.

ii) The Emergence and Background of Prediction Markets

Background

The concept of utilizing markets for future predictions predates both the internet and contemporary economics. For hundreds of years, people have used betting not only for fun, but also as a useful way to find out what the crowd really thinks. The first written records of them come from Renaissance Italy. Gamblers in Rome were betting on who would become the next pope as far back as the papal conclave in September 1503(Rhode & Strumpf, 2004). Banking houses used messengers (sensali) to move betting slips around, and odds were actively quoted on the top cardinals. People at the time said that this practice was already "old." Similar informal

betting on political and religious outcomes thrived in the Italian city-states during the 16th and 17th centuries.

By the 18th and 19th centuries, betting on elections was a popular cultural activity in both the US and the UK. During the antebellum period in the United States, informal bets were a common part of political campaigns. After the Civil War, betting mostly took place in New York City's sophisticated, centralized markets. There was a lot of trading on presidential races in poolrooms, curb markets, and later on, illegal bucket shops on Wall Street. From 1896 to the 1920s, major newspapers like The New York Times published daily betting odds and price quotes. During some election cycles, the amount of money changing hands on these political contracts was almost as high as the amount of money changing hands in regular stocks and bonds.

The same principle that drives today's prediction platforms worked in these early markets: when people put their own money on the line, prices naturally combined bits of information from different places, such as local rumors, insider insights, regional sentiment, and economic signals, into a single, publicly visible probability. The odds that came out of this process were often very accurate.

But by the middle of the 20th century, these lively betting markets had mostly disappeared from view. George Gallup and others led the way in the 1930s and 1940s with the rise of scientific polling, which seemed like a more respectable and "objective" option. More and more, people saw betting on elections as just gambling instead of a way to make serious predictions. Many of the activities went underground or to other countries because of strict laws.

In his important 1945 essay "The Use of Knowledge in Society," economist Friedrich Hayek said that no central planner could ever be as good at collecting and processing knowledge that is naturally spread out among millions of people as markets are. No one expert can know everything about local conditions, preferences, or new risks. Each person has their own pieces of information. Hayek said that market prices work like a huge telecommunications system that is always changing to reflect this knowledge that is spread out.

Kalshi brings this metaphor to today’s world. The platform’s prices update in real time each time the contracts are bought or sold on Kalshi. Such price changes reflect Hayek’s telecommunication system by combining thousands of individual opinions, news, data releases and expert insights into a single probability number. The appearance of new information leads to an immediate adjustment in Kalshi’s market prices.

These historical experiments and theoretical underpinnings sowed the seeds. They were spread out over time and space, but they all pointed to the same powerful mechanism: financial incentives and group participation could make predictions that were better than those of any one person or traditional poll. What had once been casual bets and philosophical ideas was about to be reborn as a planned, organised way to guess what would happen in the future.

Emergence

The modern prediction market came about in 1988 because academics were frustrated. During the heated U.S. presidential campaign between George H.W. Bush and Michael Dukakis, three economists from the University of Iowa namely, George Neumann, Robert Forsythe, and Forrest Nelson were sick

of seeing polls change a lot and often not be accurate, so they asked a thought-provoking question: Could a market where people bet real money on the outcome of elections do better?

The Iowa Political Stock Market (later called the Iowa Electronic Markets, or IEM) got its start after that casual talk. It started out as a small academic experiment that was mostly open to people who worked at the university. There were strict rules about how much money could be traded. Participants bought and sold contracts that paid out one cent for every percentage point of the popular vote a candidate ultimately received.

From the very first election, the results were surprising. The market's predictions were always better than the results of major national polls. This pattern stayed the same for the next few presidential cycles. A thorough analysis of five presidential elections since 1988 revealed that IEM vote-share markets were more accurate in predicting the final outcome than polls 74% of the time. The average absolute error for IEM forecasts on the night before the election has been as low as 1.34 percentage points, which is a level of accuracy that regular polls don't often reach. The IEM's reputation as a reliable way to predict future events has only grown stronger since then, thanks to its continued success in more recent elections.

The internet's growth in the 1990s turned these experiments from academic curiosities into platforms that could be used by many people. What used to require being there in person or limited mail-in trading could now include thousands of people from all over the world. The University of Iowa got special "no-action" relief from the U.S. Commodity Futures Trading Commission (CFTC). This let them do small-stakes real-money trading without breaking the law.

Soon after, new platforms came out. In 1996, the Hollywood Stock Exchange (HSX) started using fake "Hollywood dollars" to let people trade on things like movie box office receipts, Oscar winners, and celebrity news. It made the idea popular and showed that prediction markets could work well even with fake money and prizes. In the meantime, Intrade (formerly TradeSports) had bigger real-money markets for everything from elections and economic indicators to sports and current events, which drew people from all over the world.

The idea even made it to the top levels of government. The Defence Advanced Research Projects Agency (DARPA) suggested the Policy Analysis Market (PAM) as part of its FutureMAP program in 2003. Researchers, including Robin Hanson, came up with PAM to make a futures exchange for predicting geopolitical risks in the Middle East, like regime stability, military conflicts, or economic problems. The idea was simple: by letting well-informed people, like regional experts and intelligence analysts, trade contracts on these events, the prices that came out of it could give the U.S. intelligence community timely, aggregated information that other methods often missed.

The announcement caused a lot of controversy right away. Senators called it a "assassination market" or "terrorism futures," which caused a media storm. DARPA cancelled the project within a day, and Admiral John Poindexter, who was in charge of the office that oversaw it, quit. Even though critics got a lot of the details of the proposal wrong, the event brought prediction markets into the national spotlight and showed how powerful they could be and how sensitive they are to politics.

Prediction markets had officially become a serious new way to make predictions, going from a conversation in a pub in Iowa City to high-profile (but short-lived) government experiments. What started as an academic test had shown, through repeated success in the real world, that market incentives could use the knowledge of crowds much better than traditional methods. This foundation set the stage for prediction markets to go mainstream.

In 2021, Kalshi became the first and only platform in U.S. history to get full Designated Contract Market (DCM) status from the CFTC for retail event contracts. This regulatory achievement marked the start of prediction markets as a real, scalable, and widely available financial tool.

Research Methodology

This study adopts a **qualitative research design** grounded in a Systematic Literature Review (SLR) methodology. Given that regulated prediction markets represent an evolving and interdisciplinary subject, sitting at the intersection of financial economics, regulatory law, behavioural science, and political forecasting; a systematic review of existing academic and policy literature provides the most rigorous foundation for synthesising current knowledge, identifying theoretical consensus, and mapping unresolved research gaps. The SLR approach was preferred over a purely empirical or experimental design because the primary objective of this paper is analytical and conceptual: to evaluate whether regulated prediction markets can function as legitimate financial instruments and credible forecasting tools, rather than to generate original statistical data. The study is further supplemented by a qualitative case study analysis of Kalshi, the first CFTC designated contract market for event contracts in the United States, to ground theoretical arguments in real-world institutional and market dynamics.

Systematic Literature Review Protocol

i) Search Strategy and Database Selection

To ensure comprehensiveness and academic rigour, literature was sourced from the following peer-reviewed databases and repositories Google Scholar-for broad academic coverage across disciplines. The search was conducted across publications spanning 2000 to 2025, with particular emphasis on literature from 2015 onwards, reflecting the period of accelerated digital growth and regulatory recalibration in prediction markets.

ii) Inclusion Criteria

Peer-reviewed journal articles, working papers, policy briefs, and regulatory documents, studies directly examining prediction markets, event contracts, or closely related forecasting instruments, research covering market microstructure, price discovery, and information aggregation and publications in English.

ii) Exclusion Criteria

Studies focused solely on sports betting, lottery systems, or fantasy sports platforms without reference to financial or regulatory dimensions of prediction markets, opinion pieces, blog posts, or non-peer-reviewed web content (except where sourced from authoritative regulatory or institutional bodies), duplicate publications or earlier versions where a revised edition was available, literature that addressed forecasting purely through econometric modelling without relevance to market structure or design.

iii) Case Study Methodology for Kalshi

Complementing the SLR, a qualitative case study of Kalshi was conducted to examine the real world application of regulatory, structural, and market-efficiency arguments identified in the literature. Kalshi was selected as the case study subject for the following reasons:

It is the first and only CFTC-designated contract market for event contracts in the United States, making it a landmark regulatory case. Its legal battle with the CFTC over election contracts (2023-2024) provides a concrete test of how regulatory

boundaries are contested and redrawn. Its valuation trajectory, rising from $2 billion at the start of 2025 to $5 billion, and subsequently to $11 billion, offers quantifiable evidence of market confidence and institutional legitimacy.

iv) Comparative Scope

Examining Kalshi alongside Polymarket, an unregulated platform operating on blockchain infrastructure outside US jurisdiction, is essential to the report's central "United" theme, which interrogates whether regulatory integration and market unification across regulated and decentralised ecosystems can produce a more credible, accessible, and resilient forecasting infrastructure. Contrasting these two platforms illuminates how regulatory frameworks shape market behaviour, user trust, liquidity depth, and long-term institutional viability, thereby grounding theoretical arguments about market design in observable, real-world divergence.

Data sources for the case study include Kalshi's publicly available terms and product disclosures, financial press coverage, and academic commentary on the case.

Limitations of the Methodology

This study acknowledges the following methodological constraints:

Publication Lag: Prediction markets, particularly in their current regulated form, are a rapidly evolving field. While some regulatory developments, especially Kalshi's post-2024 product expansions and India's evolving stance on opinion trading, remain underrepresented in peer-reviewed literature, this limitation has been substantially mitigated by the systematic incorporation of real-time market data, regulatory filings, and institutional disclosures from 2025-2026 to supplement older academic sources. This hybrid approach ensures that the analysis reflects the current state of the field rather than relying solely on literature that may lag behind market realities.

Absence of Primary Data: This study does not involve surveys, interviews, or original empirical data collection. Conclusions are therefore inferential, drawn from secondary sources, and are subject to the inherent limitations of literature synthesis.

Platform Opacity: Platforms like Kalshi and Polymarket do not publicly disclose granular trading data, liquidity metrics, or user demographic information, which constrains the depth of quantitative analysis that can be conducted within a literature review framework.

Despite these limitations, the SLR methodology remains appropriate for the research objectives of this paper, which are fundamentally concerned with conceptual evaluation, regulatory mapping, and theoretical synthesis rather than statistical inference.

Conceptual Framework- Economic Foundations and Working of Prediction Markets

Concept, Market Structure and Mechanism

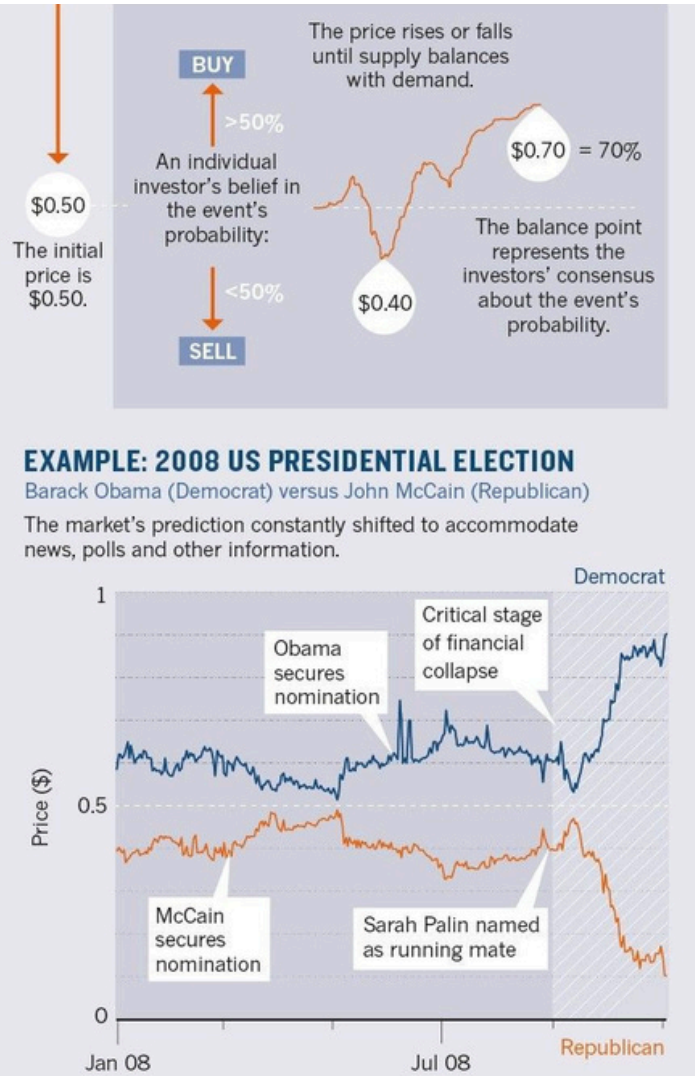
A prediction market is a platform that has become increasingly popular in recent years. Prediction markets, sometimes called betting markets, are similar to futures markets for commodities or other financial asset prices. In futures markets, traders bid up or down the price of a future contract based on their expectation of what the future price of the underlying asset will be. Prediction markets are just futures markets where the future event being traded upon is something other than the price of an asset at some point in the future. Prediction markets involve a collection of people speculating on a variety of events like exchange averages, election results, quarterly sales results, or even gross movie receipts. Robin Hanson, a professor at George Mason University, is an advocate of prediction markets. He makes the case for prediction markets by emphasizing the removal of reliance on self-interested punditry by so-called experts.

A prediction market price reflects an individual's opinion regarding how likely it is for an event to take place; it also reflects the person's estimated value of each parameter that contributes to the decision to make the wager. Prediction markets differ from traditional, publicly traded markets because the latter are based on indirect bets concerning intangible events (government policy for instance) by making a connection between those events' expected impact on an asset's price. In a prediction market, a user can directly place bets against a piece of information they believe has some intrinsic value.

Take the upcoming U.S presidential election. Speculators cannot place bets directly on the election; they are "forced" to find stocks that they feel will benefit as a result of one of the candidates being elected (like a utility stock). In contrast, in a prediction market speculators can go out and place a bet directly on their views regarding who will win the presidential election.

In a prediction market, you can purchase a contract representing the outcome of a future event. Unlike trading stocks or currency, however, you will be trading your belief that an event will or will not occur. Each of the contracts represents one of two possible outcomes- "Yes" or "No" (for example, you think there is a 90% chance that your favourite team will win), so you have the option of purchasing either a Yes or No contract depending on your opinion of the event's likelihood of happening.

If the event happens, "Yes" contracts pay out $1.00 and "No" contracts expire worthless. If the event does not happen, the reverse applies. The profit is the difference between what you paid and the $1.00 payout, or the full purchase price if you are wrong. This structure is functionally similar to a binary option, which is a critical distinction in regulatory discussions. However, prediction markets differ in that they are tied to observable real-world events rather than financial instrument price movements, and they operate on regulated exchanges with transparent order books.



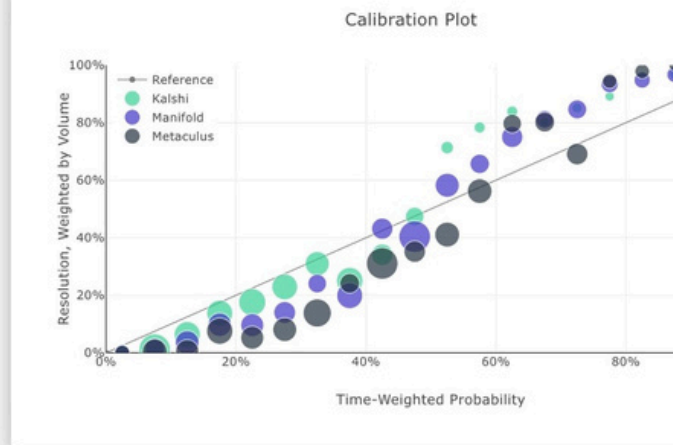
i) What can you trade on prediction markets?

The range of tradeable events has expanded dramatically, moving prediction markets well beyond their political betting origins. As of early 2026, major platforms offer contracts across several broad categories.
Financial and economic events represent the fastest-growing category and the one most familiar to forex and macro traders. Contracts cover Federal Reserve interest rate decisions, Consumer Price Index (CPI) releases, GDP growth numbers, employment data, and inflation forecasts. These events already drive currency markets, prediction markets offer a way to trade the outcome directly rather than positioning through derivatives. Politics and elections remain the original core of prediction markets. The 2024 U.S. presidential election was the catalyst that pushed Polymarket into mainstream awareness, with billions in trading volume on election night alone. Platforms now cover elections globally, legislative outcomes, and policy decisions.

Sports have become a major growth driver. Kalshi reported over $1 billion in Super Bowl LX trading volume in February 2026, a 2,700% year-over-year increase. DraftKings and FanDuel have both launched prediction market products, leveraging their existing sports audience. FanDuel partnered with CME Group to list exchange-traded sports contracts, while DraftKings operates its own CFTC-licensed exchange through its acquisition of Railbird.

Crypto and technology events include price bracket contracts (Will Bitcoin exceed $X by a specific date?), protocol upgrade outcomes, regulatory decisions affecting digital assets, and technology milestones like product launches or AI benchmarks.

Cultural and entertainment events round out the offering, covering awards ceremonies, media releases, and viral moments. While these categories typically attract lower volume, they broaden the platform's appeal to audiences who might not engage with financial markets directly.



ii) The Price-Probability Relationship

The operational genius of a prediction market lies in the direct mathematical relationship between contract prices and event probabilities. In a binary winner-take-all market, if a contract pays $1 if Event A occurs and $0 otherwise, then the equilibrium contract price must equal the market's best estimate of the probability of Event A occurring.

To see why, consider a simple arbitrage argument: if the contract trades at $0.40 but a rational trader believes the true probability is 60%, they will buy contracts at $0.40, expecting to earn $1 at settlement, a positive expected value. This buying pressure pushes the price upward. Conversely, if the price is $0.80 and a trader believes the true probability is only 50%, they will sell contracts short, expecting to profit when the price falls to its true value. This mechanism ensures the price continuously converges toward the consensus estimate of the true probability.

This property makes prediction market prices directly interpretable: a price of $0.73 for "Will the Federal Reserve cut rates in Q3?" means the market collectively assigns a 73% probability to that outcome. This is a far more informative and continuously updated signal than an expert's binary prediction or a poll's snapshot estimate.

iii) Market Participants

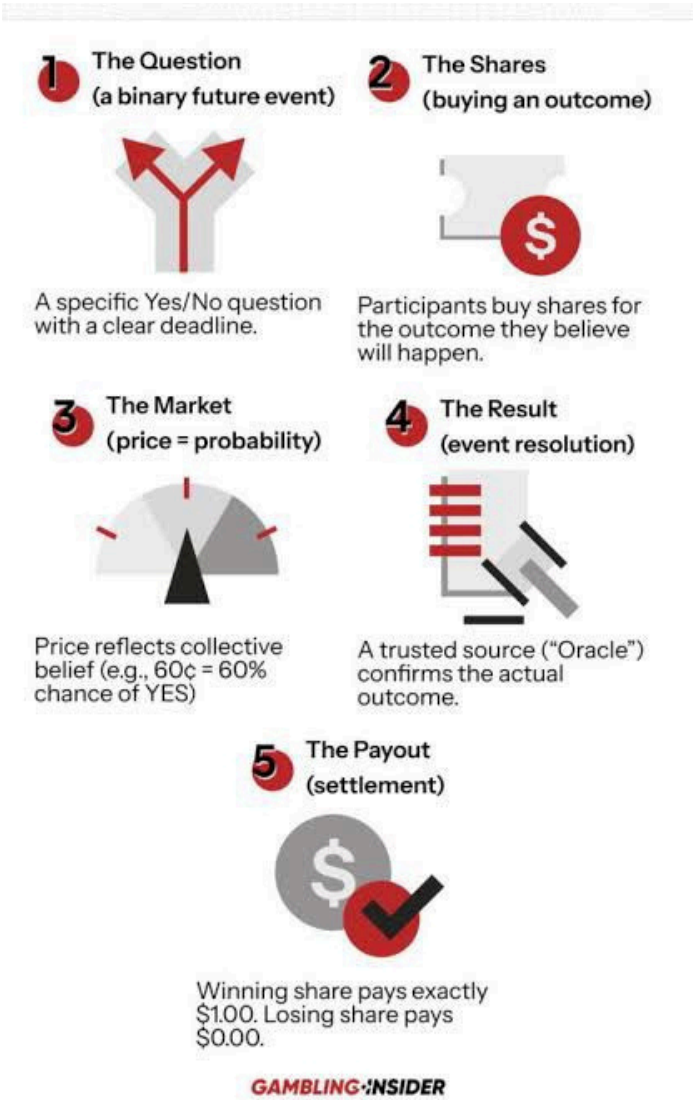
The prediction market ecosystem comprises a diverse set of participants, each bringing different information, motivations, and capital to the market:

- **Retail Speculators:** Individual traders who seek profit by identifying mispriced probabilities. Academic research suggests that only approximately 30% of retail traders earn positive returns over time, with profits concentrated among a small fraction of highly skilled participants.
- **Informed Traders:** Professionals, domain experts, researchers, and insiders who hold superior information about specific events. Their trading activity is the primary force that drives prices toward accurate probability estimates.
- **Hedgers:** Corporations, institutions, and individuals who use event contracts to offset real-world exposure to specific event risks. A media company might hedge against an unexpected election outcome; a pharmaceutical firm might hedge regulatory approval risk.
- **Market Makers:** Entities, including automated algorithms that continuously provide liquidity by posting bids and asking orders. They earn the bid-ask spread in exchange for accepting inventory risk.
- **Arbitrageurs:** Traders who exploit price discrepancies between related contracts or across different platforms, driving prices toward consistency and improving overall market efficiency.
- **Institutional Investors:** Hedge funds, asset managers, and banks that use prediction market data as an input to broader financial models, or that trade directly on macro-economic event contracts.

iv) The Information Aggregation Cycle

The lifecycle of information aggregation in a prediction market follows a structured sequence:

- **Market Creation:** A platform operator (or, on decentralized platforms, any participant) creates a contract specifying: the exact event, the possible outcomes, the resolution criteria, and the settlement date. The precision and objectivity of resolution criteria are critical, ambiguous specifications lead to disputed settlements.
- **Initial Pricing:** The market opens with an initial price set by the operator, an automated market maker, or early liquidity providers. On platforms using LMSR, the initial price reflects equal probability across all outcomes until trading begins.
- **Active Trading:** Participants begin buying and selling contracts based on their private information, research, and analysis. Each trade updates the contract price, continuously incorporating new information into the probability estimate. Large informed trades move prices significantly; small uninformed trades have minimal impact.
- **Information Events:** As real-world events unfold, a candidate gives a speech, an economic data release occurs, a court issues a ruling, participants rapidly update their positions. The price responds in real time, often repricing within seconds of a major announcement. This rapid adjustment is why prediction markets frequently act as leading indicators ahead of other forecasting tools.
- **Resolution:** When the event concludes and the outcome is determined, the oracle confirms the result. Winning contracts are redeemed for $1; losing contracts expire worthless. The settlement process distributes collateral from losers to winners.



Classification and Applications of Prediction Markets

i) Classification by Contract Structure

Building on the foundational taxonomy established by Wolfers and Zitzewitz (2004) in their landmark NBER paper, prediction market contracts can be classified into three structural types, each designed to elicit different statistical parameters from the crowd:

1. **Winner-Take-All (Binary) Contracts-** These are the most common and simplest form of prediction market contract. The contract pays a fixed amount, typically $1 if a specified event occurs, and $0 otherwise. The market price directly corresponds to the crowd's estimate of the probability that the event will occur. Example: "Will the Federal Reserve raise interest rates at its next meeting?", a contract trading at $0.35 implies a 35% market-assigned probability of a rate hike. Binary contracts are ideal for eliciting probability estimates about discrete, well-defined events with exactly two possible outcomes. They are the dominant format on both Kalshi and Polymarket, and the standard contract type used in academic election prediction markets such as the Iowa Electronic Markets.

2. **Index Contracts (Scalar Markets)-** Index contracts pay a variable amount based on the realized value of a continuous quantity, rather than a fixed payout on a binary outcome. The payout typically varies linearly with the outcome value. Example: "What will U.S. GDP growth be in Q3?" , the contract might pay $0 for 0% growth and $1 for 4% growth, with intermediate payouts for intermediate values. The market price of such a contract reflects the crowd's estimate of the expected mean value of the underlying quantity. Scalar markets are particularly valuable for forecasting economic indicators, scientific measurements, and other continuous variables. They allow more granular and informationally richer forecasts than binary contracts, but are more complex to design and settle.

3. **Spread Contracts-** Spread contracts pay based on whether a continuous outcome variable falls above or below a specified cutoff value. They function similarly to the over/under betting lines familiar from sports wagering. Example: "Will the unemployment rate exceed 4.5% in Q2?", the contract pays $1 if unemployment exceeds 4.5% and $0 otherwise. The equilibrium price equals the market's estimate of the probability that the outcome exceeds the cutoff, which corresponds to the market's estimate of the median of the underlying distribution. Spread contracts are useful when researchers or decision-makers need to assess the probability of exceeding a specific policy-relevant threshold, such as an inflation target, a legal standard, or a scientific measurement benchmark.

4. **Conditional and Combinatorial Contracts-** More sophisticated contract designs allow for conditional and combinatorial markets. A conditional contract pays contingent on both the occurrence of a specified event AND a secondary condition being met. Example: "Will GDP growth exceed 3% given that the current administration is re-elected?" These markets can reveal how participants believe one event affects the probability or expected value of another. Combinatorial markets allow trading on every possible combination of outcomes across multiple related events

simultaneously, enabling a far richer extraction of distributional information. While academically powerful, combinatorial markets face serious practical challenges including exponential contract space complexity and thin liquidity on individual outcome combinations.

ii) Classification by Market Organization

1. **Public Commercial Markets-**

These are open-access, for-profit platforms available to the general public. Examples include Kalshi (the largest CFTC-regulated prediction exchange in the United States), Polymarket (the largest global decentralized platform), Manifold Markets (a play-money platform allowing user-generated markets on any topic), and newer entrants such as DraftKings Predictions and FanDuel Predicts. Commercial markets cover the widest range of topics- politics, sports, economics, technology, culture, and more, and generate the highest trading volumes.

2. **Academic and Research Markets-**

These platforms are operated primarily for research purposes, with strict design controls and limited financial stakes. The Iowa Electronic Markets (IEM) is the canonical example. Participants trade contracts on political and financial events, with stake limits designed to minimize financial harm while preserving incentive alignment. Research markets have produced the most rigorous empirical evidence on prediction market accuracy and are the primary source of academic validation for the concept.

3. **Internal Corporate Markets-**

Internal prediction markets, sometimes called enterprise prediction markets or idea markets operate within organizations and are accessible only to employees. Major corporations including Google, Microsoft, Hewlett-Packard, Intel, and General Electric have experimented with internal markets to aggregate employee knowledge on questions such as project completion dates, quarterly sales figures, product adoption rates, and the success probability of research initiatives. These markets operate on real or virtual currency and leverage the distributed expertise of a firm's workforce.

4. **Government and Policy Markets-**

Government prediction markets use the forecasting mechanism of event contracts to assist in policy analysis and decision-making. The most famous and controversial attempt was DARPA's Policy Analysis Market (PAM) in 2003, which proposed trading contracts on geopolitical events including regime changes and conflict probabilities in the Middle East. Though cancelled under political pressure, PAM demonstrated the potential value of prediction markets for intelligence and national security applications. More recent proposals have explored prediction markets for public health forecasting, climate policy outcomes, and regulatory impact assessment.

5. **Decentralized / Permissionless Markets-**

Built on blockchain infrastructure, decentralized prediction markets allow anyone, anywhere in the world, to create, participate in, and settle prediction markets without requiring permission from any central authority. Platforms such as Polymarket (built on the Polygon blockchain using USDC), Augur (built on Ethereum), and Gnosis Protocol exemplify this category. Smart contracts govern the full lifecycle, collateral locking, trade execution, oracle resolution, and payout distribution, with all activity fully transparent and auditable on-chain.

Practical Applications of Prediction Markets

- **Political Forecasting and Electoral Analysis-** Prediction markets excel at election forecasting, outperforming polls. Iowa Electronic Markets predicts U.S. presidential two-party vote shares with 1.5% average error in the final week, better than top aggregators. Polls reflect biased snapshots, markets deliver real-time, incentivized bets blending polls, economy, news, and more. Polymarket's $4B in 2024 presidential trades was the trusted forecast for media, investors, and campaigns. They also forecast bills passing, Supreme Court rulings, and leadership shifts like cabinet reshuffles.

- **Financial and Economic Forecasting-** Prediction markets are key for pricing economic policy probabilities. Platforms like Kalshi offer contracts on Fed rate decisions, non-farm payrolls, CPI, GDP, unemployment, and housing stats. Institutions, hedge funds, and traders feed these prices into models. Kalshi's Fed markets closely track, and often leadCME FedWatch, repricing fast on speeches, data drops, and geopolitics. ICE's $2B Polymarket investment in Oct 2025 tapped this demand, making Polymarket's probabilities a licensed data product distributed globally alongside traditional feeds.

- **Public Health and Epidemiological Forecasting**- COVID-19 exposed the need for fast, accurate public health forecasts. Prediction markets beat traditional epi models by blending data and expert views, updating in real-time, and giving true probabilities, not just point estimates. They cover pandemic spread/timelines, vaccine approvals/rollouts, treatment trials, and policy targets. Platforms host these markets, and researchers push for integrating them into official public health forecasting.

- **Research and Scientific Forecasting-** Academics increasingly use prediction markets for science, especially replication markets betting on whether studies in psych, econ, and medicine hold up. They've pinpointed failures with striking accuracy, way above chance. This tackles the replication crisis head-on, offering real-time, crowd-sourced odds on robust findings, to guide journals, funders, and policymakers.

- **Climate and Environmental Risk Pricing-** Prediction markets are emerging for climate outcomes like temperature records, extreme weather odds, regs, and emissions, with big potential. They gauge probabilities, let firms hedge risks via derivatives, and pool insights from scientists, policymakers, insurers, and energy players. CFTC eyes this space, contracts on hurricanes, wildfires, and carbon prices could become key climate risk tools.

- **Sports and Entertainment-** Sports and entertainment fuel prediction markets' mass adoption, sports alone grab 60% of global volume, hooking retail users into the ecosystem. They also test accuracy easily (clear, quick outcomes) and refine market designs. Entertainment markets on Oscars, box office, Grammys, and reality TV draw culture fans, who often level up to tougher forecasts.

Evolution Trajectory of Prediction Markets

The fundamental aspect of prediction markets is that it is a system of aggregating distributed knowledge. They enable people with different degrees of information to reflect their opinions on what will happen in future using market prices - and in the process, come up with forecasts that turn out to be more accurate than any one expert. But the route between this fine theoretical concept and a legally accepted, operationally viable institutional form has been a long, controversial, and heavily influenced by the attitude of the regulators of various times and places.

Regulatory Transformation over Time

There is no linear history of prediction market regulation between banning and legalizing. It is more accurately described as a repetitive bargain among the market actors, legal regimes and policy-makers - all of whom tried to categorize and regulate a type of activity that was not entirely covered by any available legal category. In order to see the current situation of prediction markets, it is necessary to track the development of that negotiation over three general stages: the pre-regulatory period, the period of legal ambiguity, and the new period of institutional acknowledgement.

i) The Pre-Regulatory Era: Wagering on Public Events (16th-19th Century)

The first known prediction markets were not any market, as we understand it at all, but informal bartering agreements that ran on trust, social standing, and the coercive action of small groups. Betting on the results of papal conclaves, royal succession and military campaigns was a common practice in 16th century Europe. Remnants of Venice and Rome show that these contracts were actively traded, and that prices on these contracts responded sensibly to new information - indicating a primitive price-discovery role akin to that of modern markets.

By the 18th century coffeehouses in London were unofficial clearing houses of such bets. This is exactly what Lloyds of London is now, an insurance market, but originally it was such an institution where people could buy and sell probabilistic contracts on uncertain future events. The distinction between insurance, speculation and prediction market was, as of this time, virtually non-existent.

Organised political betting markets emerged in the United States in the 19th century, and were open and highly liquid. Especially Presidential elections, caused large trading on the Curb Exchange in New York, and on Wall Street generally. In a historical study that has

since become a classic, Rhode and Strumpf (2004) recorded that these markets received millions of dollars in trading volume (in modern dollar terms), and that the ultimate prices were highly sensitive to the actual election results - better than even the newspaper polls of the time. These were not hobby activities but the mainstream newspapers covered them and political observers discussed them as valid forecasting.

The regulatory environment of these early markets was surprisingly lenient, in modern terms. Gambling was common and was widely accepted as a social activity and the difference between speculation and wagering had not yet been established into law. This permissiveness would not last.

ii) The Era of Legal Ambiguity and Suppression (1900s-1980s)

The Progressive Era of the early 20 th century America was an era of moral and social reform on a grand scale - and, as such, a dramatic increase in anti-gambling laws. By the 1910s and 1920s, a majority of forms of wagering in non-sporting events had been suppressed or pushed underground by law. Political betting markets that had been publicly traded on Wall Street were mostly closed to the outside world. Cultural and legal norms had changed: election speculation was regarded as inappropriate at best, corrupting at worst.

This censorship did not imply that the intellectual grounds of prediction markets had been forsaken. Friedrich Hayek, in 1945, wrote his landmark essay, The Use of Knowledge in Society, where he held the view that prices in competitive markets were the most efficient known process of aggregating and communicating dispersed information. Although Hayek was not writing about prediction markets in particular, his model gave an intellectual foundation as to why these markets could be useful predictive instruments - a foundation that would be revisited many times by economists over the following decades.

Up to the mid-20th century, prediction markets were only found in academia in thought experiments and controlled laboratory situations. Thin and simple markets were shown to converge quickly to efficient prices in the laboratory by experimental economists such as Vernon Smith, who would later win the Nobel Prize in Economics because of this experimental work.These results were theoretically promising but lacked immediate practical implementation: the legal situation rendered practical implementation of prediction markets of real-money of political or economic outcome practically impossible in the United States.

The situation was a little different in Europe. The United Kingdom continued to have a controlled betting market, which involved fixed odds betting on political events, which, although not analogous to a modern prediction market, had a similar purpose. The UK bookmaker regulatory system, based on the Betting, Gaming and Lotteries Act of 1963, provided a legal framework of probabilistic betting which would subsequently facilitate the working of sites such as Betfair.

iii) The Turning Point: Academic Markets and the CFTC Framework (1988-2000s)

The history of prediction markets that have been legally sanctioned starts in an extraordinary institutional innovation in 1988. The Iowa Electronic Markets (IEM) was formed by economists at the University of

Iowa (Robert Forsythe, Forrest Nelson, George Neumann and Jack Wright) with the express purpose of assessing whether market prices could be more accurate than conventional polling in forecasting election results. They had to be legally covered to do so. The Commodity Futures Trading Commission (CFTC), which was authorized to oversee futures contracts, sent a letter (formally known as no-action), which stated that it would not take enforcement measures against the IEM, as long as the platform conducted itself within established parameters (small contract sizes, academic use, limited membership).

This letter of no action was a watershed. It has provided a legal route through which real-money prediction markets can exist in the United States, and has shown that, given the correct environment, regulators can accept prediction markets as something other than illegal gambling. The IEM continued to deliver an impressive track record: in several election periods, its final prices were very close to the actual vote shares, often beating major polling organisations.

The IEM model was significant not only because it could predict well, but because it demonstrated at an institutional level that a regulated, transparent prediction market would not be scandalous, manipulative, or lead to the social ills of gambling. This fact would come in handy in future regulation discussions.

The growth of internet-based platforms during the 1990s and early 2000s brought about new regulatory challenges. Sites such as Intrade (Ireland), TradeSports and subsequently Betfair started to seek users around the world including most American users. The CFTC and the Securities and Exchange Commission (SEC) were having a institutions process payments to online gambling sites, a term that, arguably, included prediction markets on the list of prohibited platforms, as well as the traditional gaming platforms.

The failure of Intrade in 2013 after a lawsuit by the CFTC that claimed it had enabled US citizens to trade contracts based on commodity price movements without appropriate registration demonstrated the actual impact of trading in regulatory uncertainty. The closure of intrade denied researchers, journalists, and policymakers a popular forecasting instrument and it paralyzed investment in the industry during a few years afterwards.

iv) The Emerging Era of Institutional Recognition (2010s-Present)

The regulatory environment for prediction markets began to shift meaningfully in the 2010s, driven by a combination of factors: accumulating evidence of their forecasting value, growing interest from policymakers in evidence-based governance, and the rise of new institutional actors willing to engage directly with regulators rather than rely on legal grey zones.

The most significant development in recent years has been the legal journey of Kalshi, a US-based prediction market founded in 2020 by two MIT graduates. Unlike previous platforms that had operated under no-action letters or offshore structures, Kalshi sought full registration as a Designated Contract Market (DCM) under the Commodity Exchange Act - the same regulatory category as the Chicago Mercantile Exchange. After an extensive review process, the CFTC granted Kalshi DCM status in 2020, making it the first fully regulated prediction market in the U.S.

However, Kalshi's application to list contracts on US congressional election outcomes encountered fierce resistance. The CFTC initially blocked the contracts in 2023, arguing that they involved gaming and were contrary to the public interest. Kalshi sued, and in 2024 a US federal court sided with Kalshi, ruling that the CFTC had exceeded its authority in blocking the contracts. This decision represented a landmark shift: it established, through judicial interpretation, that political prediction market contracts were a legitimate subject of regulated financial trading, not a form of gambling to be prohibited.

Regulatory approaches have been drifting apart internationally. The European Union has typically categorised prediction markets as financial instruments to which MiFID II (Markets in Financial Instruments Directive) applies where relevant, and as betting products to national gambling laws elsewhere. Australia has incorporated political/event betting into its licensed sports betting system. This mosaic of jurisdictional strategies implies that the identical prediction market product can be legal, regulated or illegal in different jurisdictions depending on the user location - a problem that technology firms have solved by using geolocation-based access control mechanisms.

The general direction though complex, is clearly stated: prediction markets are slowly being accepted as valid tools with real social and informational utility. The regulatory debate has moved beyond the issue of whether they should be allowed to continue or not and now focuses on how the industry should be regulated - a difference that makes the difference to the future of the industry.

b) Rise of Opinion Trading Platforms

As regulatory frameworks were gradually adaptable to the introduction of prediction markets as financial instruments, a similar revolution was occurring on the consumer side. Internet did not just open up prediction markets as accessible, but rather it essentially reinvented them. New platforms reworked the user experience, offering a wider set of questions to trade, new settlement mechanisms, and made probabilistic forecasting accessible to much broader audiences than academic economists and financial traders. This part follows the history of the emergence of opinion trading platforms, starting with the first internet versions of these sites and major, blockchain-based systems of the 2020s.

i) The First Wave: Internet-Native Markets (Late 1990s-Early 2000s)

The end of the 1990s was an era of unprecedented internet business model experimentation, and prediction markets were not an exception. One of the first exchanges to make mainstream internet users aware of trading based on future events was the Hollywood Stock Exchange (HSX) opened in 1996. The HSX enabled users to purchase and

sell shares of MovieStocks - virtual stocks that had their price pegged to the box office performance - with a play-money currency named Hollywood Dollars. The site had drawn millions of users and acquired a reputation of being able to predict Oscar nominations and box office placements with remarkable accuracy.

There are various reasons why HSX was important. First, it demonstrated that under the proper interface and incentive scheme, ordinary people would be eager to participate in market-based forecasting. Second, it established that the wisdom-of-crowds effect would be large even in the absence of actual financial incentives - but later studies would reveal that real-money markets are more precise than play-money markets. Third, it demonstrated that prediction markets could be a consumer good, not necessarily an academic or financial instrument.

About the same period, TradeSports (Ireland) and the Iowa Electronic Markets were proving that real-money political prediction markets could draw in relevant liquidity and yield valid forecasts. TradeSports, and especially, received widespread followings during the 2000 and 2004 US presidential elections, with political journalists and analysts considering its contract prices as data points in addition to traditional polls. This was the start of an epistemic culture change: the belief that market prices could be a credible source of probabilistic information on political events was becoming increasingly popular beyond academia.

ii) The Architecture of Exchange: Betfair and Peer-to-Peer Betting (2000s)

Betfair, which was launched in the United Kingdom in 2000, was a structural innovation that would be very influential in the shaping of opinion trading platforms. In contrast to the traditional bookmakers who offered fixed odds and positions against the betters, Betfair is a peer-to-peer service; users could place a bet (bet that it would happen), and lay a bet (bet that it would not happen), with the middleman being Betfair who applied a small commission to the wins.

The fundamental dynamics of a financial market were duplicated in a consumer-facing product in this exchange model. The exchange of supply and demand between users determined prices, as opposed to a centralized bookmaker. Liquidity would concentrate around favorite events and advanced users could dynamically trade positions as new information was revealed, similar to a financial trader mitigating a position in response to a market-moving news.

The model of Betfair was far-reaching. It was demonstrated that a self-sustaining self-organizing market in uncertain future events could be created and maintained at scale without the participants consciously thinking of themselves as users of prediction markets. They were sports bettors to the millions of users of Betfair. However, the principle behind it was operationally the same as a prediction market. As of 2007, Betfair boasted over two million registered accounts and was transacting with over six million transactions per day, making it one of the largest financial exchange in the world in terms of transactions.

During this time, increasing interest among economists and political scientists in political and event markets on Betfair and other platforms grew. Comparative studies of Betfair pricing to polling data repeatedly discovered that market prices were as accurate as or more so than polls, especially in the last days before an election when the market had the most information to take into account. This literature enhanced the intellectual argument of prediction markets and started to shape thinking among policymakers and journalists about predicts.

iii) The PredictIt Generation: Making Political Markets Mainstream (2010s)

The 2010s witnessed the creation of a new category of platforms that specifically aim to open up political prediction markets to American customers - a market that had been effectively shut out of international platforms by the UIGEA and other regulatory barriers. The largest of them was PredictIt, which was initiated in 2014 by Victoria University of Wellington in collaboration with the US political data company Aristotle Inc.

PredictIt was regulated by a CFTC no-action letter like that which had been used to regulate the Iowa Electronic Markets, but with one important exception: It was open to the general public and not restricted to academic researchers.
Users were allowed to bet on a vast array of political scenarios, including those that are hard to know or predict, such as, Who will win the 2016 presidential election?', Will the Senate confirm this Supreme Court nominee?', How many votes will this bill receive? with real money, limited to $850 per market, to curb financial risk. The low stakes allowed the platform to be open to casual users, yet retained the incentives to price discovery required.

PredictIt quickly grew into a resource of choice among political journalists, campaigners, and policy analysts. In the 2016 and 2020 US presidential campaigns, PredictIt prices were being quoted frequently in mainstream newspapers and on television news programmes as an addition to conventional polling data. The platform had, practically, managed to introduce market-based probabilistic forecasting to the mainstream political discourse.
PredictIt was also successful and became the focus of academic interest. The researchers discovered that PredictIt prices were calibrated well, i.e. when the market estimated a 70% probability that an event might happen, it did happen about 70% of the time; and that they reacted quickly and reasonably to new information, like debate performances, polling updates and breaking news. This calibration evidence was significant as it answered one of the main questions regarding prediction markets, which is that they could be sentiment- or manipulation-driven instead of being a true information aggregation mechanism.

iv) The Blockchain Revolution: Polymarket and Decentralised Prediction (2020s)

The use of blockchain technology has become the most revolutionary change in prediction markets in the 2020s. In 2020, Polymarket was established on the Polygon blockchain, a layer-2 Ethereum network, and utilised decentralised smart contracts to manage all market functionality: holding user funds, resolving results, and paying out winnings. There were a number of significant implications of this architecture.

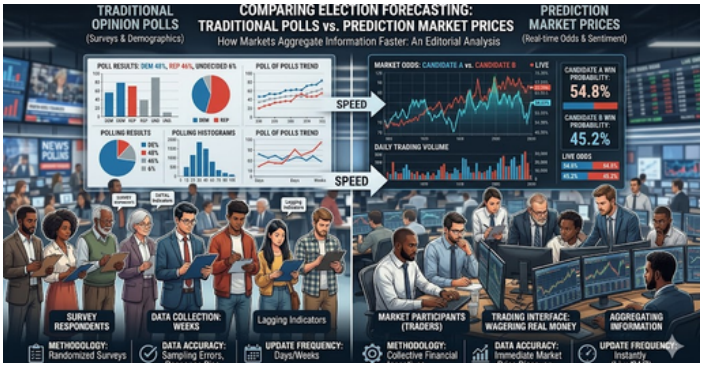
First, it removed a central operator that would have been holding user funds, greatly lowering counterparty risk. When a user deposited money on Polymarket, this money was stored in a smart contract instead of on a company account - i.e. even in the event that Polymarket the company was no longer in existence, users retained access to their money. This was specifically in reaction to the Intrade downfall where the system had left numerous users without the ability to get back their money as the site went under.

Second, settlement via blockchain allowed low-cost solutions to markets to resolve near-instantly even with complex or multi-outcome questions. This efficiency of operation rendered it possible to provide markets on an enormously broader variety of questions than could have been done on conventional platforms, including: Will it rain in New York on January 15th? and Will this particular legislation become law before December 31st?

Third, and, possibly, most importantly, the decentralised architecture introduced regulatory ambiguity that, ironically, was a protective feature in terms of operations. The smart contracts which Polymarket used were on a public blockchain so that they could not just be turned off by a regulatory order as a centralised server could. This rendered Polymarket structurally more robust to the type of regulatory shutdown to restrict operations.

The success of Polymarket spurred a flourishing of rival platforms. Metaculus, a non-financial prediction platform, active since 2015 based on structured prediction questions and a scoring-based reputation system, received high attention during the COVID-19 pandemic due to the accuracy of its aggregated community forecasts of vaccine timelines, case trends, and policy implications. In 2021, the play-money platform Manifold Markets was launched, which featured social features and was designed to be more accessible and social-oriented in terms of reputation-building and commenting, although not prioritising financial incentives.

All these platforms are a new type of digital product that is at the crossroads of social media, financial markets, and epistemics. They are not just prediction technologies; they are societies that occur around the activity of making well-informed quantified forecasts of the future. The social and reputational aspects of these platforms, such as leaderboards, track records, public calibration scores, provide incentives to epistemic honesty which work alongside the financial incentives of the real-money markets.



v) Design Evolution: From Data Dense to Mobile-First

Design is one of the least discussed factors of the emergence of opinion trading platforms. The first prediction markets were the IEM, Intrade, and early TradeSports, designed to serve financially literate customers who were familiar with order books, contract specifications, and margin requirements. They resembled monetary trading sites, as that is what they were.

The contemporary opinion trading platforms do not resemble this. The interface of Polymarket is clean, colourful and is mobile-optimized displaying each market as a simple question with a percentage of probability and a chart of how the percentage has varied over time. PredictIt offered markets as binary Yes/No contracts, with contracts priced in cents - a framing that offered the intuitive readability of the notion of buying a contract at 65 cents that would pay 1 on occurrence of the outcome to a user with zero financial understanding.

This change in design demonstrates a basic understanding, that the usefulness of a prediction market is proportional to the variety and the scale of the market participants. A thousand traders is not as accurate as a hundred thousand, since more traders implies more information being reflected in prices. Making it easier to participate, via an intuitive design, mobile accessibility, low minimum stakes, and social features, is not only a product choice, but a mechanism design choice, which directly influences the quality of epistemics in market outputs.

The rise of opinion trading platforms thus represents more than just technological progress. It signifies an essential change of the relationship between people and uncertainty: as passive consumers of expert predictions, to active participants in the production of knowledge. In the context of the world that is growing more and more nformation-saturated and expertly contested, structured, incentivised, quantified prediction platforms could turn out to be one of the most significant epistemic institutions of the 21 st century.

The regulatory transformation of prediction markets, and the emergence of opinion trading platforms, tell a unified story of how a strong idea - that markets could pool dispersed information into correct probabilistic predictions - comes out of the theoretical novelty into a social institution. It has not been an easy road; it has been challenged, argued in court and even overturned. Nevertheless, it is clear where the direction of movement is. The prediction markets are gaining momentum as an aspect of the way modern societies deal with uncertainty.

Structural and Regulatory Challenges of Prediction Markets

i) The Problem with Small Volumes

Most prediction markets still trade much less than mainstream markets, even when they receive a lot of media attention. On many platforms the total volume looks large, but each individual market often has small order books, so a single trade can move the price by a big amount. This creates what some analysts describe as a liquidity ceiling, where markets never become deep enough for institutional traders to place large orders without moving prices unfavorably.

Liquidity providers face special problems because prediction markets are winner take all. As the resolution date approaches, well informed traders concentrate on the side they believe will win, and market makers tend to be on the other side of those trades. This means that liquidity providers can lose money systematically, which makes them reluctant to support new markets . When fewer market makers participate, spreads widen and casual users are even less willing to trade, which reinforces the problem.

Key Takeaways-

1. Low trading volumes leads to single large trades swinging prices significantly
2. Market makers are consistently losing to well-informed traders near resolution dates, so they pull back from supporting markets
3. This cycle keeps volumes too small for institutional capital, creating a “liquidity ceiling” .

Market Creation Issues

Another structural issue is the limited list of markets and the difficulty of finding relevant ones. Only a tiny share of possible real world questions can be turned into contracts, and platform operators must decide which events are worth listing. Centralized venues tend to focus on high profile political or macroeconomic events, while leaving out more specific questions where some users might have useful information. Permissionless, decentralized platforms allow anyone to create a market, but that leads to duplication, low quality questions and scattered liquidity across many small markets. In both cases, discovery is hard and information that exists in society does not always flow into the prices.

Structural Inefficiencies and Price Distortions

Even when a market looks active, price signals can be distorted by structural inefficiencies. Commentators identify repeated arbitrage gaps between similar contracts, such as the same election traded on different venues at different prices for long periods. In theory arbitrage should close these gaps quickly, but in practice differences in fees, collateral rules and user interfaces keep the markets segmented.

Algorithmic traders and bots also shape outcomes. On some platforms, high speed bots place and cancel orders faster than human users can react, taking advantage of tiny price movements and any predictable behavior in the matching engine. This can discourage ordinary traders who feel that they are always a step behind and that any

mispricing will be captured by algorithms before they can act. Prices are also affected when media outlets treat market odds as objective probabilities, many users simply trade in line with the current price rather than bringing independent information, which weakens the accuracy of the prices.

Misinformation and Manipulation

Prediction markets aggregate information only to the extent that participants are informed and act honestly. In practice, low liquidity makes many markets vulnerable to manipulation by a single large trader or by coordinated campaigns that "pump" an outcome to create a misleading impression of consensus. When one trader can move the implied probability of a niche event by 20 or 30 percentage points with a modest order, outsiders may mistake that move for new information rather than a strategic bet.

There is also the risk that markets amplify misinformation and conspiracy narratives. Commentaries note that prices can react strongly to rumors or online hype that later prove false, especially in political and public health markets. Since many platforms market themselves as "truth machines," such episodes can damage trust and make regulators more skeptical about social benefits.

Source- Kuhn,Kohn & Colapinto

The Reliability of Accurate Resolutions

Prediction contracts must be resolved based on real world events, but those events are often ambiguous. Disputes arise when question wording is unclear, when the outcome depends on legal or statistical definitions, or when different data sources conflict with each other. Centralized platforms generally rely on internal rules and committees to resolve disputes, yet controversial decisions can lead to accusations of bias or unfairness, especially when large sums are at stake.

Decentralised platforms often use external data feeds or token holder voting to determine outcomes. These token holders can be attacked, bribed or manipulated, and governance processes can become politicized, which undermines confidence that markets will pay out correctly. If traders worry that resolution will be arbitrary or slow, they either demand a large risk premium or avoid those markets altogether, which again damages liquidity and accuracy.

ii) Regulatory challenges

Gambling law versus financial regulation

Regulators struggle to decide whether prediction markets are closer to online betting or to financial derivatives. In Europe, many countries treat event contracts primarily under national gambling law, and some have banned or blacklisted well known operators using those rules This classification determines which regulator has jurisdiction, what licensing is required, and how consumer protections apply.

Legal analysis notes that Belgium, France, Germany and several other states have relied on gambling frameworks rather than financial services law, although in theory European financial rules like MiFID II could apply when contracts resemble derivatives. Because gambling rules are not harmonized across the EU, the same product can be allowed in one country and prohibited in another, which creates uncertainty for any platform that serves multiple markets.

In the United States, the Commodity Futures Trading Commission (CFTC) has taken the position that most event contracts offered on platforms like Kalshi and Polymarket are “swaps” or derivatives under the Commodity Exchange Act. That means many prediction markets fall under derivatives regulation rather than gambling law, yet several U.S. states still try to treat them as illegal betting, especially when contracts involve sports or entertainment outcomes. This overlap produces conflicting demands on platforms about licensing, consumer protection and which events may be listed.

Centralized and Decentralized Models under the Law

Legal classification also depends on how centralized the platform is. Regulated venues such as Kalshi operate as designated contract markets under the CFTC, with formal rulebooks, surveillance systems and capital requirements similar to other derivatives exchanges. These exchanges have identifiable legal entities that can be licensed,supervised and sanctioned if they fail to meet obligations.

The centralised model however represents only one end of a spectrum that has grown considerably more complex with the rise of blockchain-based platforms.

By contrast, decentralized platforms built on public blockchains often lack a single operator or legal home. They may be governed by token holders scattered across many countries, with code that is open source and difficult to shut down. Regulators are beginning to argue that even these protocols can fall within derivatives or gambling rules if they enable trading in certain contracts, but enforcing those rules against anonymous developers and global user bases is technically and legally difficult. This gap encourages some projects to remain intentionally offshore or informal, which further complicates oversight. Without better tools to police decentralized systems, regulators will struggle to close this gap. Compliant platforms end up bearing the full burden of oversight while less accountable alternatives continue to operate freely.

iii) Restrictions and Compliance Issues

Licensing, Product Approval and Sensitive Topics

Platforms that choose to operate within the regulated perimeter must obtain licenses and comply with extensive rulebooks. In the United States, CFTC regulated exchanges must meet core principles related to fair trading, prevention of manipulation, financial resources and governance, and they need regulatory approval or at least non objection for many new contract designs. Regulators have indicated that contracts involving assassination, terrorism, war and similar topics are likely to be prohibited as contrary to the public interest, regardless of their forecasting value. Recent guidance and speeches show that event contracts tied to elections, sports and other socially sensitive

outcomes are especially controversial. Some state regulators argue that sports based prediction markets are simply unlicensed sports betting and have tried to shut them down under gambling law, while the CFTC insists that properly designed event contracts serve a legitimate economic purpose. To avoid legal risk, many exchanges self censor by not listing certain topics or by restricting the size of positions in contentious markets. This narrows the scope of information that can be aggregated through prediction prices.

Insider Trading, Market Abuse and Surveillance

Regulators increasingly worry that prediction markets can create a new channel for insider trading, because employees with confidential information about corporate events, economic releases or policy decisions can profit by betting on outcomes before the public learns the news. The CFTC has stated that its anti fraud rules, including Regulation 180.1, apply to misuse of material non public information in event contract markets in the same way as in traditional futures and swaps.

Recent enforcement advisories highlight two cases on Kalshi where individuals allegedly used confidential information to trade prediction contracts, and the agency has identified prediction markets as an enforcement priority for insider trading, manipulation and AML violations. In response, platforms like Kalshi and Polymarket have announced new policies requiring users to avoid trading on inside information and have strengthened their internal surveillance tools.

Legal commentators also advise companies to update their own insider trading policies so that employees disclose prediction market accounts and certify that they do not trade on confidential information.

Cross Border Fragmentation and Jurisdictional Battles

Because prediction markets are online and often global, platforms face conflicting rules across different countries and even between federal and state authorities. In Europe, national gambling regulators in countries like Romania have blacklisted unlicensed prediction market operators, while other states tolerate them if they hold local gambling licenses, and financial authorities consider whether some contracts should fall under securities or derivatives law. This patchwork forces platforms to geofence users by country and to maintain separate compliance strategies, which increases costs and fragments liquidity.

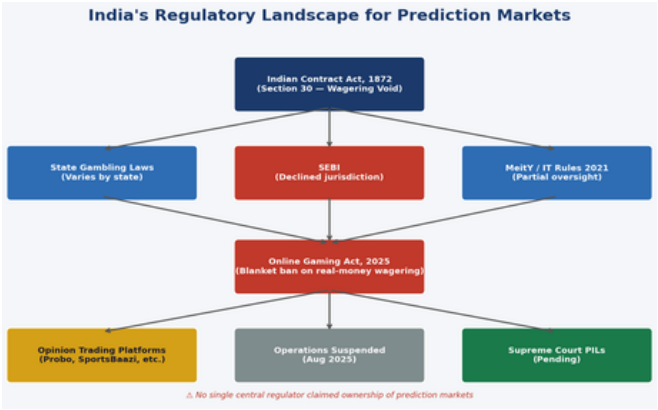
In the United States, February 2026 saw an open clash between the CFTC and several state regulators over the treatment of event contracts on Kalshi, this dispute is rooted in the legal controversies surrounding its 2024 election market victory and its entry into sports contracts,which is discussed later on in section 7. The CFTC has publicly asserted its “exclusive jurisdiction” over these markets as commodity derivatives and has filed briefs in court to defend that position, while states such as Nevada and Massachusetts have tried to restrict or ban certain contracts under gambling law. Different court decisions have produced a moving legal landscape, and further litigation is expected as the agency moves forward with formal rulemaking on prediction markets.

Prediction Markets: An Indian Standpoint

i) The Foundation: Indian Contract Act, Section 30

Any talk about prediction markets in India has to deal with Section 30 of the Indian Contract Act, 1872. This old rule is very direct: agreements made by way of wager are void. In simple terms, if two people put money on an uncertain future event, they can't go to court to settle the debt. But "void" doesn't mean "illegal." The Supreme Court cleared this up in Gherulal Parakh v. Mahadeodas Maiya (1959). They explained that while these deals aren't enforceable, they aren't criminal acts under federal law unless a specific state makes them so.

Even so, the law has always carved out a specific path for **skill-based activities**. If an outcome is mostly about a person's knowledge or judgment rather than luck, it isn't a wager. This "skill vs. chance" debate has been going on for decades. The big problem which hasn't been officially settled for this specific industry- is whether prediction markets belong on the skill side of the fence.



The Skill vs. Chance Divide: What Courts Have Said

Prediction markets haven't had a direct day in court yet, but other sectors have set the tone. In Dr. K.R. Lakshmanan v. State of Tamil Nadu (1996), the Supreme Court ruled horse racing is a game of skill because you have to study the horse, the rider, and the track. Later, in State of Andhra Pradesh v. K. Satyanarayana (1967), the court protected Rummy for similar reasons. More recently, fantasy sports apps like Dream11 got a pass because courts agreed that picking players based on stats is an analytical job.

Opinion trading platforms use this same logic. They argue that predicting a GDP number or an election result isn't a guess. If you follow the data and understand the news, you'll do better than someone who doesn't. That is their "skill" argument. The issue is that without a direct court ruling on "event contracts," the sector has lived in a very shaky legal gray zone.

State Gambling Laws and the Public Gambling Act, 1867

In India, gambling is a state-level subject, which makes the rules different everywhere you go. The central Public Gambling Act of 1867 is a colonial relic meant for physical gaming houses, so it doesn't fit the digital world well. Even so, it gets used. Police have filed FIRs against Probo using Section 13 of this Act, claiming that a mobile app is just a digital version of a gambling house.

At the same time, states like Andhra Pradesh and Telangana have enacted total bans. In 2025, Haryana introduced the Prevention of Public Gambling Act. This law was so broad it defined a "bet" as almost any agreement about an uncertain event.

SEBI's Position, IT Rules & Online Gaming Act, 2025

Since these platforms look a lot like stock exchanges, many expected the Securities and Exchange Board of India (SEBI) to regulate them. After all, they use order books and price discovery. But in April 2025, SEBI said no. They issued an advisory stating these platforms aren't under their wing because "opinions" aren't securities under the SCRA of 1956. This left the industry without a central regulator, even as it was handling massive amounts of money.

With SEBI out, the Ministry of Electronics and Information Technology (MeitY) became the main candidate for oversight. In 2023, they added a framework to the IT Rules for online gaming, which included KYC and grievance rules. Some apps registered, but the rules didn't specifically mention prediction markets. This lack of clarity meant that even though companies were following some rules, their actual product was still legally vulnerable.

The situation changed completely in August 2025. Parliament passed the Promotion and Regulation of Online Gaming Act. This law basically banned "online money games"- a term so wide it covers any digital activity where money is staked on an outcome. Facilitating these games is now a criminal offense with possible prison time.

The biggest change was that the Act ignored the "skill vs. chance" distinction. It didn't matter how much research you did; if money was involved, it was banned. This effectively killed the legal defense that prediction markets had used for years. Right after the Act passed, Probo and others stopped their real-money operations and told users to cash out.

ii) Emergence of Opinion Trading Platforms in India

The phrase opinion trading did not come from a global playbook. Indian platforms coined it deliberately, somewhere around 2019 to 2021, because every other available description carried legal or reputational baggage. Prediction markets suggested a financial instrument. Betting and gambling were clearly problematic. So the sector built its own vocabulary around terms like knowledge-based trading and skill-based prediction, and presented itself as something new rather than a local version of something that existed elsewhere.

The product under the hood was structurally identical to prediction markets everywhere: binary yes/no contracts on real-world events, prices that move with trading activity, platform revenue from a fixed transaction fee. But the framing was local, and that framing mattered legally.

The model was simple. A platform would ask a question like "Will India's GDP grow by 7%?" and users would buy a "Yes" or "No" contract for a few rupees. The price showed the market's odds. If you were right, you got a payout; if not, you lost your stake.

Key Platforms: Probo and Beyond

Probo became the dominant name in this space. It was founded in 2021, is based in Gurugram, and grew unusually fast by going after users in smaller cities rather than just the metro market. Peak XV Partners (formerly Sequoia Capital India), Elevation Capital, and Fundamentum Partnership backed it, and the company raised over $28 million in total funding. At its peak it reported over 50 million registered users, though actual active traders were a much smaller number.

What distinguished Probo from competitors was the breadth of its markets. It was not just sports. Users could trade on economic data releases, election results, entertainment outcomes, cryptocurrency price movements, even whether a particular streaming show would cross a viewership threshold. One real example from the platform was a contract asking whether UPI transaction values would cross Rs. 25 lakh crore in a given month, which requires at least some familiarity with payment system data to have a view on. This breadth was both a product strength and the core of the skill argument.

Other platforms that built meaningful presence in the space included MPL Opinio, which operated through Mobile Premier League's existing user base and focused more on sports contracts. SportsBaazi offered a format where users could buy and sell simulated stocks in individual cricketers based on expected match performance, which pushed the product closer to fantasy sports territory. Real11, PlayerzPot, and Big Cash were smaller but active participants in the category.

By the time things started unravelling in 2025, the sector had accumulated over 50 million users across platforms, annual transaction values above $6 billion, revenues of roughly $120 million for FY 2024-25, and aggregate venture funding of close to $500 million from over 35 investors. None of this was tiny. It was a real industry operating at scale, without a legal basis.

Consumer Protection Concerns

The consumer protection record of this sector has not been clean, and the platforms did not help themselves here. ASCI documented a pattern of advertising that made claims no honest platform could make: zero risk, guaranteed profits, reliable income. Social media influencers promoted these apps without disclosing the genuine probability of financial loss. The CAIT wrote to central ministers about what it described as systematic misleading of users, particularly in financially vulnerable demographics. There were also reportedly videos going around in some states suggesting these apps could guarantee returns, which is a straightforwardly false claim.

There were individual cases of real harm. A woman in Maharashtra filed an FIR after Rs. 1 lakh disappeared from her account following her son's activity on a platform.

These cases are anecdotal, but they are not isolated, and they tell a story about the gap between how the platforms positioned themselves to regulators and what some users actually experienced. By late 2025, the industry was essentially over. The Online Gaming Act turned the gray area into a red line.

Authorities started investigating founders, and most apps shut down their real-money features. For these markets to ever come back, they would need a specific law from Parliament that recognizes "event contracts" as a real financial product, separate from gambling. Until then, the doors are closed.

Kalshi as a Model for Prediction Market Platforms

i) Company Overview

Kalshi's growth has been exceptional by any measure, as captured in the table below:

Year	Revenue	YoY Growth	Trading Revenue	Key Drivers
2024	$24M	1,221%	~$1.2B (election month peak)	2024 Presidential Election
2025	$260M	994%	$22.88B	Sports markets (89% of fee revenue)

Source: https://sacra.com/c/kalshi/

Sports markets drove this expansion, accounting for 89% of 2025 fee revenue.
Kalshi was founded in 2018 by Tarek Mansour (CEO) and Luana Lopes Lara (COO), two MIT graduates with backgrounds in quantitative finance. Headquartered in Manhattan, New York City, the company spent its first two years navigating the U.S. regulatory apparatus before launching publicly in July 2021. Its defining institutional achievement was securing Designated Contract Market (DCM) status from the Commodity Futures Trading Commission (CFTC) in November 2020, making it the first and only platform in U.S. history to hold this designation for retail event contracts, placing it in the same regulatory category as the Chicago Mercantile Exchange.

On the product and distribution front, Kalshi integrated with Robinhood in 2025, bringing its event contracts to one of the largest retail brokerage platforms in the United States, and announced formal media partnerships with CNN and CNBC. The platform currently offers over 3,500 individual prediction markets spanning macroeconomic indicators, sports outcomes, political events, cryptocurrency prices, entertainment, and weather, serving as largest opinion trading platform.

ii) Product Architecture and Market Microstructure

At its core, Kalshi operates as a binary prediction exchange. Every market on the platform is structured as a yes or no question with a defined resolution date. Contracts are priced between $0.01 and $0.99, where the price reflects the market's collective implied probability of the event occurring. A correct prediction pays out $1 per contract, and the spread between the purchase price and the $1 payout constitutes the trader's profit.

Unlike traditional sportsbooks or bookmakers, Kalshi does not act as the counterparty to user positions: it does not 'take the other side' of a trade. Instead, it simply matches opposing predictions and earns a transaction fee on the taker side of trades. The platform follows a maker-taker model: makers are traders who post limit orders (providing liquidity), and takers are traders who immediately accept existing offers. Fees are charged only to takers and follow a sliding scale, where low-probability contracts attract higher fees. For example, a contract priced at 80 cents (high probability) incurs approximately a 1.4% fee, while a contract at 20 cents incurs roughly a 5.6% fee. This incentivises liquidity provision while contributing to monetise both ends of

the probability spectrum. There has also been observed a systematic favourite longshot bias in the academic analysis of Kalshi's market microstructure (Burgi, Deng & Whelan, 2025) identifies a key favourism bias in the platform's pricing. Using transaction-level data on over 300,000 contracts, the authors find that low-priced contracts (below 10 cents) lose over 60% of their invested capital on average, while contracts priced above 50 cents yield small positive returns. This pattern mirrors behavioural biases observed in traditional horse-racing and sports betting markets, where participants systematically overestimate the probability of low-likelihood outcomes. The study concludes that Kalshi's pricing is broadly informative but not perfectly efficient, particularly for long-shot bets; a finding with important implications for both retail traders and the use of Kalshi as a forecasting tool.

The platform supports a diverse range of market categories: macroeconomic indicators (GDP growth, Federal Reserve decisions), political outcomes (election results, congressional control), cryptocurrency price targets, entertainment events (Oscar winners), weather outcomes, and increasingly; sports results. As of late 2025, sports markets had come to dominate the platform, accounting for over 90% of trading activity and 89% of fee revenue thus, having significant contribution.

iii) Growth Trajectory and Funding Milestones

Kalshi's growth story is one of the most dramatic in recent fintech history, compressed into an extraordinarily short timeline. From its public launch in 2021 through the first half of 2024, growth was steady but restrained largely because the most commercially significant contract category that was the political and election markets, remained locked in a protracted legal battle with the CFTC.

The inflection point came during the 2024 U.S. Presidential Election. Having secured the legal right to offer election contracts following a favourable ruling by the DC District Court in September 2024, Kalshi became a genuine cultural phenomenon. Millions of users flocked to the platform to trade on the outcome of the Trump-Harris contest, generating a record $1.2 billion in monthly trading volume. Kalshi's markets notably predicted a high likelihood of a Trump victory even when most conventional polling suggested a near-toss-up: a performance that significantly boosted the platform's credibility as a forecasting mechanism.

Post-election, the company pivoted aggressively into sports markets, which by 2025 had grown to represent three-quarters of all trading activity. This pivot was commercially rational: sports offer a far higher frequency of resolved events than political cycles, with thousands of games, matches, and tournaments occurring year-round across global leagues, generating continuous trading opportunities rather than the episodic spikes tied to election calendars. The launch of NFL season contracts in September 2025 proved transformative: September through November alone generated $138 million in sports fee revenue. December 2025 became the company's strongest single month, recording $63.5 million in fee revenue, with the final week of the year generating $20 million: more than the first four months of 2025 combined.

The financial performance prompted successive waves of venture investment. Kalshi raised $185 million in the month of June 2025 during election in Series C at a $2 billion valuation , led by Paradigm with participation from Sequoia. By October 2025, a $300 million Series D at a $5 billion valuation followed, co-led by Andreessen Horowitz and Sequoia. In billion Series E at an $11 billion valuation, led by Paradigm with participation from a16z, ARK Invest, CapitalG, and Y Combinator. In March 2026, Kalshi raised an additional $1 billion at a $22 billion valuation, led by Coatue. Total funding across all rounds stands at approximately $2.89 billion.

A significant distribution milestone was Kalshi's integration with Robinhood in 2025, through which event contracts became accessible within Robinhood's familiar retail brokerage interface, dramatically expanding Kalshi's retail reach. Formal media partnerships with CNN and CNBC were also announced, potentially embedding prediction market odds into NFL broadcasts; mirroring how traditional sports book odds have become standard in sports television.

Regulatory Battles and Legal Controversies: Kalshi's trajectory has been shaped by ongoing legal and regulatory battles that highlight tensions between federal commodities law and state gambling rules. Its most significant win came in 2024, when a federal court overturned the CFTC's ban on its congressional control contracts, allowing election markets to resume and affirming the legality of event-based trading.

However, conflicts persist. Kalshi's expansion into sports contracts in 2025 triggered opposition from multiple states, leading to mixed court rulings: some upholding federal preemption, while others, like in Ohio, sided with state authority, creating legal uncertainty. The platform has also faced ethical backlash, notably for contracts tied to a high-profile murder case, and scrutiny over transparency through a pending class action lawsuit. Together, these issues underline unresolved questions about the legal scope, ethics, and design of prediction markets.

iv) Kalshi as a Macroeconomics Forecasting Tool

Beyond just being a trading platform, Kalshi has also become important for academic research because it provides real-time data on what markets expect about the economy. A 2026 study by the National Bureau of Economic Research (by economists from the Federal Reserve, Northwestern, and Johns Hopkins) is one of the most detailed analyses so far.

The study looked at how well Kalshi predicts major economic indicators like inflation (CPI and Core CPI), unemployment, GDP growth, job numbers, and Federal Reserve interest rate decisions. Overall, the results are quite positive. For example, when predicting Federal Reserve rate decisions 150 days in advance, Kalshi performs about as well as professional economists surveyed by the Federal Reserve Bank of New York. Even more impressively, just one day before Federal Reserve meetings, Kalshi's predictions were perfectly accurate, better than traditional market tools like fed funds futures. For inflation, Kalshi also outperformed the Bloomberg consensus forecast.

What makes Kalshi different is not just accuracy, but the type of data it provides.

Traditional surveys are released only occasionally (about every six weeks) and usually give just one estimate. Financial markets like options can sometimes show probability distributions, but only for a limited set of variables. Kalshi, on the other hand, provides continuously updated probabilities for a wide range of economic outcomes, including areas where no such data existed before.

The study also finds that Kalshi reacts quickly to new information. For instance, when Federal Reserve officials made dovish statements in 2025, the market increased the probability of a rate cut.
When strong job data came out later, that probability dropped. This shows that Kalshi captures changing expectations in real time, which can be useful for researchers and policymakers.

However, there are some limitations. Kalshi markets are not perfectly accurate and show a common issue called “favourite-longshot bias,” where unlikely outcomes can be mispriced. Also, especially in political markets, results may reflect the specific type of people using the platform rather than the general population. Finally, even though its economic forecasting is valuable, it is not Kalshi’s main business: over 90% of its activity comes from sports-related markets.

v) Business Model Analysis and Scalability

Kalshi's business model is structurally similar to a financial exchange rather than a sportsbook, and this distinction matters for its scalability. Traditional sportsbooks earn revenue by building a margin into the odds they offer, effectively acting as counterparty to all trades. This model is capital-intensive and risk-bearing. Kalshi, by contrast, earns only transaction fees, it bears no directional risk and has near-zero marginal cost on incremental trading volume. This exchange economics model creates powerful operating leverage as volume scales.

The company has implemented several liquidity-boosting mechanisms: market makers receive rebates of up to 1% through a tiered reward system (capped at $7,000 weekly), deposits as low as $1 are accepted, and idle cash balances earn interest of up to 4.05% annually; a feature that functions similarly to a brokerage cash sweep programme and helps retain user capital on-platform. Integration with Robinhood, which brings Kalshi contracts into a platform with over 20 million active users, represents perhaps the most significant distribution achievement in the platform's history.

The fee structure, however, poses a potential competitive challenge. Kalshi's taker fees (ranging from 0.07% to 7% depending on contract price) are meaningfully higher than the implicit costs in deep traditional futures markets. As the market matures and more professional liquidity providers enter, competitive pressure on fees will likely intensify.

vi) Critical Assessment

Kalshi represents the most mature and institutionally credible attempt to establish prediction markets as a mainstream financial asset class in the United States. Its regulatory architecture is genuine, its forecasting metrics are exceptional. Yet several structural challenges warrant serious scrutiny.

First, there is a tension between the platform's stated mission, to provide Americans with tools to hedge real economic risks, and the observed reality of its operations: over 90% of activity is sports betting, driven by the

same psychological impulses that animate any gambling product. The academic utility of Kalshi's macro markets is real, but it is commercially marginal. This raises the question of whether Kalshi is fundamentally a financial exchange that happens to offer sports betting, or a sports betting platform that happens to be licensed as a financial exchange.

Second, the retail participation is systematically wealth-destroying for a significant fraction of users; particularly those who trade low-probability contracts. Average returns before fees are already negative at -20%; after fees, they decline to -22%. This is not unusual for financial markets, but it warrants transparency, particularly given that Kalshi's KYC and onboarding processes resemble a brokerage more than a casino, potentially attracting users who do not adequately appreciate the speculative nature of the instruments.

For context, this compares somewhat favourably to traditional sports betting: major U.S. sportsbooks typically retain 7-10% of all wagered amounts (the 'hold'), meaning an average bettor loses $7-$10 per $100 wagered. Kalshi's blended effective take rate of approximately 2% on trading volume is structurally lower, but critically, Kalshi's -22% average return figure reflects total capital at risk per contract, not per dollar wagered and recycled, making direct comparisons difficult. For retail participants concentrated in low-probability contracts (below 10 cents), Kalshi's losses exceed 60% of invested capital; materially worse than a typical sportsbook hold.

The comparison suggests Kalshi is better than traditional sports betting for disciplined traders in high-probability markets, but significantly worse for those drawn to long-shot contracts, which are also the platform's most heavily traded instruments.

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Third, the ongoing legal uncertainty; particularly the circuit split between state and federal courts on sports contract preemption, and the possibility of future administrations reversing the CFTC's current permissive stance: introduces material regulatory risk that is not fully reflected in the platform's current valuation trajectory.

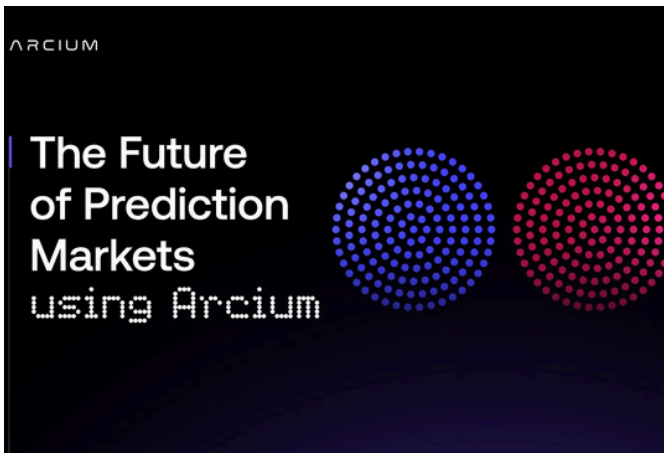
Nevertheless, Kalshi's trajectory is likely to be studied in business schools and policy circles for years. It has, almost single-handedly, forced regulators, academics, economists, and investors to take prediction markets seriously as a financial category. Whether it ultimately fulfils the theoretical promise of prediction markets as a superior forecasting mechanism, or evolves primarily into a regulated sports betting operator, the case study of Kalshi illuminates the messy, contested, and genuinely consequential process by which new financial instruments achieve legitimacy.

Future Outlook and Implications of Prediction Markets

Prediction markets are moving billions of dollars, changing how the media talks about things, and getting the attention of big institutions. Prediction markets let people put their money where their mouth is. This makes it possible to get real-time information about everything from elections to interest rates to player trades and more. Prediction markets have gone from being academic experiments to billion-dollar businesses. Polymarket and Kalshi are examples of platforms that can show how politics, economics, and culture are changing in real time. These signals can be used to make dashboards, hedge treasuries, and make decisions about how to run a government. But their long-term importance goes beyond how much they trade.

By turning collective expectations into programmable, financialized forecasts, prediction markets create a new class of infrastructure: **truth signals priced by incentives.**

- For builders, that means access to data streams that are dynamic, composable, and monetized.
- For institutions, it means a chance to integrate real-time probabilities into decision-making.



Growth Potential of Prediction Markets

Prediction markets have surpassed $162.65 billion in notional volume as of 2026, covering 757.6 million transactions and $939.9 million of open interest across the top 10 prediction markets. Prediction markets are becoming increasingly prominent, active and commercially relevant; volume growth, however, is not the only factor contributing to the full entrance of prediction markets into mainstream trading. Prediction Markets are also significantly more prevalent in sectors that are highly valued by regulators (government), media companies and market operators.

On January 21, 2026, Google made a significant change to their policy by updating the existing ad policies for prediction markets to allow for ads for prediction markets in the U.S.; however this is only allowed if the ads are placed by federally regulated entities. Trading categories normally do not receive this type of flexibility, unless these markets have matured into a more commercial trading lane.

The growth of prediction markets is now showing measurable growth in metrics other than conversation. The total monthly transaction volume in prediction markets increased from approximately $1.2 billion in March of 2025 to over $20 billion in January of 2026. In addition, there are now over 800,000 unique wallets trading in prediction markets with some estimates indicating that by the end of February 2026, the number will be approximately 840,000.What is driving that growth is fairly clear. The format is easier to understand than most trading products, the markets are tied to events people already

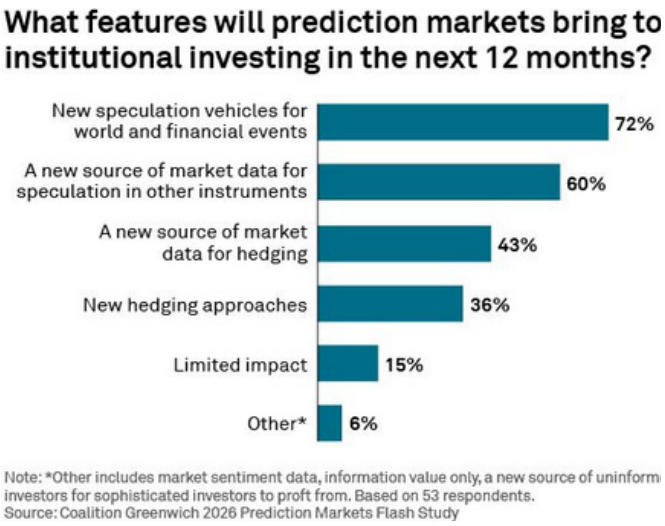
follow, and the prices update in real time as expectations change.

- **Near-Term Projections (2026)-** The momentum shows no signs of abating. Bernstein analyst Gautam Chhugani estimates that total market volumes in 2026 will reach $240 billion, a 370% increase compared to last year. Combined volume on Kalshi and Polymarket has already exceeded $60 billion in the first months of 2026, surpassing the $51 billion recorded across all of 2025. Monthly trading volume on Kalshi, Polymarket, and Polymarket US has surged since mid-2025, with combined activity topping $24 billion in March 2026.

- **Long-Term Projections (2030)-** At a compound annual growth rate of roughly 80% between 2025 and 2030, Bernstein projects prediction market trading volume could reach $1 trillion a year by the start of the next decade. Corroborating this, Citizens Financial Group projects that the revenues of prediction-market firms will balloon to more than $10 billion by 2030, from around $2 billion annually at present.

- **Platform Dominance and Institutional Capital-** Two platforms now dominate the entire space. Polymarket and Kalshi together accounted for approximately 97.5% of total prediction market trading volume in 2025. The duopoly is real, reinforced, and growing stronger._Massive institutional capital is also flowing in. The two platforms raised an estimated $3.6 billion in equity investment in 2025 from some of Wall Street's and the venture capital world's largest names, with Kalshi's valuation rising in just a few months. This includes a landmark $2-billion investment from the Intercontinental Exchange (ICE), owner of the New York Stock Exchange, into Polymarket._Robinhood's prediction markets hub built on Kalshi's infrastructure, is generating roughly $350 million in annual recurring revenue and accounts for approximately 30% of Kalshi's total volume.

- **Diversification Beyond Sports and Politics-** An important structural signal for long-term growth is sectoral diversification. Technology & Science markets grew 1,637% year-over-year in 2025, and Economics markets followed at +905%. Politics grew 43%, the slowest category despite receiving the most press coverage. In 2025, economic markets expanded by around 10 times, while tech and science markets grew by more than 17 times. Capital is also staying in the market longer, since combined open interest across major platforms increased from about $3.3 billion to nearly $13 billion.__Sports contracts currently account for more than 60% of overall prediction market volume, though Bernstein expects that share to drop to about 31% by 2030 as institutional interest in economic, political, and macroeconomic contracts grows.



- **New Entrants Expanding the Market-** Crypto companies such as Coinbase and Crypto.com are already entering the space, with Coinbase confirming its purchase of prediction-market startup The Clearing Company.

The world's leading derivatives exchange, CME Group, is also seeking to leverage its existing regulatory framework, partnering with FanDuel to launch a new platform, FanDuel Predicts. DraftKings and Underdog are among the other platforms entering the space.

The future of prediction markets will be shaped by how responsibly they are built and how resiliently they are powered. With the right compliance, infrastructure, and imagination, they can become not just platforms for speculation but a pillar of digital finance and collective intelligence.

Conclusion

Prediction markets originated as informal wagers on papal elections in sixteenth-century Rome and evolved, through successive phases of experimentation, suppression, and academic revival, into a multi-billion dollar financial category that now materially shapes how institutions and individuals process uncertainty. This trajectory is not incidental. It reflects a persistent underlying principle: when participants are required to commit genuine resources to their stated beliefs, the resulting prices aggregate dispersed information in ways that consistently outperform expert opinion and conventional polling methodologies.

The evidence presented across this report substantiates a coherent analytical case. Historically, even the comparatively rudimentary political betting markets of nineteenth-century New York demonstrated superior electoral forecasting accuracy relative to the newspapers covering the same contests. The Iowa Electronic Markets formalised this finding from 1988 onwards, outperforming major polling organisations across 74 percent of presidential election cycles studied. Contemporary platforms such as Polymarket and Kalshi have since extended this principle to billions of dollars in notional volume, spanning asset classes from Federal Reserve rate decisions to sporting outcomes, while generating forecasting accuracy that has attracted sustained peer-reviewed scholarly attention. The 2026 National Bureau of Economic Research study examining Kalshi's macroeconomic forecasting performance, which found it matching or surpassing professional economist surveys across key indicators, represents perhaps the clearest empirical signal yet that prediction markets have transitioned from speculative novelty to demonstrable institutional utility.

Nevertheless, significant structural and regulatory challenges persist. Prediction markets continue to contend with thin liquidity in specialised contract categories, contested resolution mechanisms, susceptibility to manipulation, and a systematic favourite-longshot bias that places retail participants at a structural disadvantage. The capacity of a single large-volume trader to shift implied probabilities in minor markets by 20 to 30 percentage points introduces a feedback dynamic between perception and price that cannot be easily separated from genuine information incorporation, particularly when media outlets treat market-implied probabilities as objective measures of ground truth.

The regulatory landscape compounds these structural concerns. The same financial instrument may constitute a licensed product in one jurisdiction and an unlawful wager in another. Within the United States, the sustained tension between Commodity Futures Trading Commission federal preemption authority and state-level gambling statutes has produced a shifting legal environment in which platforms must operate geofencing mechanisms, maintain parallel compliance architectures, and voluntarily restrict entire market categories to limit regulatory exposure. The divergence is more pronounced at the international level. In India, a sector that had expanded to more than 50 million registered users and in excess of six billion dollars in annual transaction volume was effectively curtailed by the Online Gaming Act of 2025, illustrating the fragility of market legitimacy when it rests on legal ambiguity rather than unambiguous legislative recognition. Across European

jurisdictions, the overlapping authority of MiFID II, national gambling statutes, and financial services regulatory frameworks creates analogous uncertainty for cross-border operators.

Kalshi's institutional trajectory captures the central tension of the broader industry with particular clarity. It is simultaneously the most credibly regulated prediction market in United States history and a platform where more than 90 percent of activity is sports-derived, raising substantive questions regarding whether its financial exchange classification is accurately descriptive or strategically instrumental. The academic value of its macroeconomic forecasting function is real and empirically documented. The consumer welfare implications embedded in its retail participation data, where average post-fee returns are negative and low-probability contracts generate average capital losses exceeding 60 percent, are equally real and have received considerably less critical attention. Whether Kalshi ultimately establishes itself as the infrastructure layer for an emerging class of financial intelligence products, or consolidates as a regulated sports wagering operator with a sophisticated regulatory narrative, will serve as a significant indicator of the trajectory of the category as a whole.

The aggregate volume data alone establishes that the market has reached a conclusion regarding prediction markets as an enduring asset class. Total notional volume crossed 162 billion dollars in 2026. Bernstein projects one trillion dollars in annual volume by 2030. Institutional capital commitments from entities including Intercontinental Exchange, Andreessen Horowitz, Sequoia Capital, and Paradigm are substantial and sustained. Google has revised its advertising policies to permit prediction market promotion from federally regulated entities. CME Group, the operator of the world's largest derivatives exchange by volume, has entered the category directly. These developments are not characteristic of a speculative or marginal market segment; they are indicative of a category in the process of becoming foundational financial infrastructure.

The more consequential question this report has sought to examine is not commercial but epistemic. Prediction markets, at their most effective, represent a genuinely novel institutional mechanism: the conversion of distributed, frequently tacit knowledge held across large and heterogeneous populations into a single, continuously updated, financially accountable probability estimate. Friedrich Hayek theorised this possibility in 1945. The Iowa Electronic Markets subjected it to rigorous empirical testing from 1988. Polymarket and Kalshi have since operationalised it at commercial scale. Should the forecasting function be preserved as these platforms continue to scale, should incentive structures remain sufficiently honest to sustain information revelation, and should regulatory frameworks mature to provide the stability necessary for meaningful contract coverage without constraining market breadth, prediction markets may prove to be among the more significant epistemic institutions to emerge in the twenty-first century. Not because they are invariably correct, but because they fail in ways that are observable, correctable, and directly tied to real economic consequences.

Appendix

1. https://www.investopedia.com/terms/p/prediction-market.asp
2. https://beincrypto.com/learn/prediction-markets/#h-how-do-prediction-markets-work
3. https://www.fia.org/marketvoice/articles/predicting-future-prediction-markets
4. https://link.springer.com/book/9784431552291#publish-with-us
5. https://wifpr.wharton.upenn.edu/blog/a-primer-on-prediction-markets/
6. https://4pillars.io/en/articles/the-definitive-guide-to-prediction-markets
7. Burgi, C., Deng, W., & Whelan, K. (2025). Makers and Takers: The Economics of the Kalshi Prediction Market. MPRA Paper No. 126350. University College Dublin. https://mpra.ub.uni-muenchen.de/126350/1/MPRA_paper_126350.pdf
8. Contrary Research. (2023). Kalshi's Business Breakdown & Founding Story. https://research.contrary.com/company/kalshi
9. Diercks, A. M., Katz, J. D., & Wright, J. H. (2026). Kalshi and the Rise of Macro Markets. NBER Working Paper No. 34702. National Bureau of Economic Research. https://www.nber.org/system/files/working_papers/w34702/w34702.pdf
10. KalshiEX LLC v. CFTC, No. 24-5205 (D.C. Cir. 2024). Justia Law https://law.justia.com/cases/federal/appellate-courts/cadc/24-5205/24-5205-2024-10-02.html
11. Sacra. (2025). Kalshi revenue, valuation & funding. https://sacra.com/c/kalshi/
12. Sacra. (2025). $24M/year FanDuel for prediction markets. https://sacra.com/t/prediction-markets/
13. Sacra. (2025). Kurush Dubash, CEO of Dome, on unified API for prediction markets. https://sacra.com/research/kurush-dubash-dome-unified-api-for-prediction-markets/
14. Stinson LLP. (2025). Sportsbooks or Commodity Exchanges? The Rising Legal Tensions Between Sports Betting and Prediction Markets. https://www.stinson.com/newsroom-publications-sportsbooks-or-commodity-exchanges-the-rising-legal-tensions-between-sports-betting-and-prediction-markets
15. TALG. (2024). Kalshi's Legal Battle With CFTC Over Political Betting Markets. https://talglaw.com/kalshi-cftc-political-betting-markets/
16. SSRN Working Paper No. 5502658. (2026). Prediction Markets and Price Discovery. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6452858
17. Rhode & Strumpf (2004) — Historical Presidential Betting Markets https://www.nber.org/papers/w10fugitive
18. Wolfers & Zitzewitz (2004) — Prediction Markets, Journal of Economic Perspectives https://doi.org/10.1257/0895330041371119
19. Berg, Forsythe, Nelson & Rietz (2008) — Results from a Dozen Years of Election Futures Markets Research https://www.biz.uiowa.edu/iem/archive/BFNR_2008.pdf
20. Forsythe, Nelson, Neumann & Wright (1992) — Anatomy of an Experimental Political Stock Market, American Economic Review https://www.jstor.org/stable/2117471
21. Hayek (1945) — The Use of Knowledge in Society, American Economic Review https://www.jstor.org/stable/1809376
22. Pennock, Lawrence, Giles & Nielsen (2001) — The Real Power of Artificial Markets, Science https://doi.org/10.1126/science.1057584

23. Leigh & Wolfers (2006) — Competing Approaches to Forecasting Elections, Economic Record https://doi.org/10.1111/j.1475-4932.2006.00361.x
24. Rothschild (2015) — Forecasting Elections: Comparing Prediction Markets, Polls, and Their Biases, Public Opinion Quarterly https://doi.org/10.1093/poq/nfp082
25. Zitzewitz (2012) — Forensic Economics, Journal of Economic Literature https://doi.org/10.1257/jel.50.3.731
26. Sunstein (2006) — Infotopia: How Many Minds Produce Knowledge (Oxford University Press) https://global.oup.com/academic/product/infotopia-9780195189797
27. Esya Centre — Prediction Markets: A Regulatory Quagmire (December 2024) https://www.esyacentre.org/perspectives/2024/12/4/prediction-markets-a-regulatory-quagmire
28. Finshots — The Curious Case of Indian Prediction Markets (May 2025) https://finshots.in/archive/the-curious-case-of-indian-prediction-markets-opinion-trading-asci-sebi-kalshi/
29. Business Standard — ASCI Calls for Regulatory Clarity on Opinion Trading (May 2025) https://www.business-standard.com/markets/news/asci-calls-for-regulatory-clarity-on-opinion-trading-in-india-125052001415_1.html
30. G2G News — ASCI Flags Financial Risks in Opinion Trading (May 2025) https://g2g.news/online-gaming-laws/asci-flags-financial-risks-in-opinion-trading-calls-for-clear-advertising-rules/
31. The Wire — Study Reaffirms Opinion Trading on Probo Is a Game of Skill (May 2025) https://m.thewire.in/article/ptiprnews/a-study-reaffirms-opinion-trading-on-platforms-like-probo-is-a-game-of-skill
32. G2G News — ASCI Updates Opinion Trading Whitepaper After Rs.50 Cr Legal Notice from MPL (June 2025) https://g2g.news/online-gaming-laws/asci-updates-opinion-trading-whitepaper-after-%E2%82%B950-cr-legal-notice-from-mpl/
33. MediaNama — Explainer: All You Need to Know About Opinion Trading in India (June 2025) https://www.medianama.com/2025/06/223-explainer-opinion-trading-in-india/
34. MediaNama — MPL Sues ASCI for Rs 50 Crore Over Opinion Trading Whitepaper (June 2025) https://www.medianama.com/2025/06/223-mpl-legal-notice-asci-defamation-opinion-trading-rs-50-crore-in-damages/
35. The Tribune — Opinion Trading Platforms Take Off Globally Amid Investor and User Surge (July 2025) https://www.tribuneindia.com/news/funding/opinion-trading-platforms-take-off-globally-amid-investor-and-user-surge
36. Inc42 — Is Opinion Trading Gambling? A Question of Survival for Probo and Co (July 2025) https://inc42.com/features/opinion-trading-gambling-question-survival-probo-gaming-startups/
37. IndiaCorpLaw — Assessing the Viability of Opinion Trading Platforms in India (August 2025) https://indiacorplaw.in/2025/08/18/assessing-the-viability-of-opinion-trading-platforms-in-india/
38. Storyboard18 — Digital Satta: Opinion Trading Platforms Face Ban Under Online Gaming Bill (August 2025) https://www.storyboard18.com/gaming-news/digital-satta-opinion-trading-platforms-face-ban-under-online-gaming-bill-79322.htm
39. Storyboard18 — Breaking: Probo Shuts Operations in India (August 2025) https://www.storyboard18.com/gaming-news/breaking-opinion-trading-platform-probo-shuts-operations-in-india-79357.htm

40. Legal500 — What the Online Gaming Act 2025 Means for India's Gaming Industry (August 2025) https://www.legal500.com/developments/thought-leadership/legal-gamechanger-what-the-online-gaming-act-2025-means-for-indias-gaming-industry/
41. The Tribune — Probo's Learning Ecosystem Crosses 60,000 Users (August 2025) https://www.tribuneindia.com/news/business/opinion-trading-platform-probos-learning-ecosystem-crosses-60000-users-aims-to-reach-1-lakh-by-early-2026/
42. ORF Online — Online Gaming Regulation in India: A Preliminary Review (September 2025) https://www.orfonline.org/expert-speak/online-gaming-security-and-regulation-in-india-analysing-the-new-act
43. CoinTelegraph — Prediction Markets Are Testing Legal Limits in Strict Asian Markets (April 2026) https://cointelegraph.com/features/prediction-markets-testing-legal-limits-asia
44. Wikipedia — Promotion and Regulation of Online Gaming Act, 2025 https://en.wikipedia.org/wiki/Promotion_and_Regulation_of_Online_Gaming_Act,_2025
45. Indian Kanoon — Section 30, Indian Contract Act 1872 https://indiankanoon.org/doc/1295756/
46. Manifold Markets — Prediction Markets Legalized in India by 2035? https://manifold.markets/Hakari/prediction-markets-legalized-in-ind
47. https://www.nber.org/system/files/working_papers/w10504/w10504.pdf
48. https://en.wikipedia.org/wiki/Prediction_market
49. https://www.nerdwallet.com/investing/learn/what-are-prediction-markets
50. https://www.mexc.com/learn/article/what-is-a-prediction-market-how-does-it-work-and-why-traders-are-paying-attention-/1
51. https://www.britannica.com/money/prediction-markets
52. https://metamask.io/news/prediction-markets-concepts-terminology
53. https://www.nber.org/papers/w10fugitive https://doi.org/10.1257/0895330041371119
54. https://www.biz.uiowa.edu/iem/archive/BFNR_2008.pdf
55. https://www.jstor.org/stable/2117471 https://www.jstor.org/stable/1809376
56. https://doi.org/10.1126/science.1057584 https://doi.org/10.1111/j.1475-4932.2006.00361.x
57. https://doi.org/10.1093/poq/nfp082 https://doi.org/10.1257/jel.50.3.731
58. https://global.oup.com/academic/product/infotopia-9780195189797