CMU

Behavioural Economics Intensive

CASE STUDIES

Five Cases in Five Days

May 2026

DAY 1: RATIONALITY & ITS LIMITS

The Store That Stopped Playing Games

Business Case

The Situation

In January 2012, JCPenney's new CEO Ron Johnson—freshly recruited from Apple, where he had built the most profitable retail stores in history—announced a radical overhaul. He would eliminate all sales, coupons, and markdowns, replacing them with simple, honest "fair and square" everyday low pricing. The logic was impeccable: JCPenney's prices had become absurd, with fake "original" prices inflated so that inevitable discounts would seem tempting. Johnson would cut to the chase.

What Happened

Store traffic declined by 10% within months. By the end of 2012, same-store sales had dropped 25%, producing a net loss of $985 million. One quarter saw a 32% sales collapse—described by analysts as potentially the worst quarter in retail history. Johnson was fired in April 2013, barely 15 months after launching his strategy.

The prices under "fair and square" were genuinely lower. Customers were objectively getting better deals. Yet they fled the store in droves.

The Behavioural Economics

Johnson's mistake was assuming shoppers are rational price-minimizers. In reality, the coupon-and-markdown game served deep psychological needs. The crossed-out "original price" functioned as an **anchor**—a reference point that made the sale price feel like a gain. The "How Much You Saved" line at the bottom of the receipt was a **score** in a game shoppers enjoyed playing. Eliminating the game didn't make shopping more rational—it made it less satisfying.

When confronted with the backlash, Johnson said customers needed to be "educated" about how the new pricing worked. He reportedly described coupons as "drugs that customers needed to be weaned off." This framing—that the customers were the problem—is itself a case study in the limits of rational-actor thinking.

Discussion Questions

1. If JCPenney's prices were objectively lower under "fair and square," why did customers perceive less value? What does this tell us about how people evaluate prices?

2. Johnson came from Apple, where transparent pricing works beautifully. Why didn't the same approach transfer to JCPenney? What's different about the two contexts?

3. Is there an ethical dimension to anchoring? JCPenney's old system used fake prices to create the illusion of savings. Johnson tried to be honest and was punished for it. What should we make of that?

Sources

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DAY 2: LOSS AVERSION & PROSPECT THEORY

The Default That Changed a Nation's Retirement

Policy Case

The Situation

By the early 2000s, the United Kingdom had a retirement savings crisis. Workplace pension participation in the private sector had been declining for years as defined-benefit schemes wound down and employees simply didn't join replacement schemes. By 2011, only 42% of eligible private-sector employees were saving in a workplace pension. Tax incentives, public information campaigns, and financial literacy programs had all been tried. None had moved the needle.

What Happened

Beginning in October 2012, the UK implemented automatic enrolment: employers were required to enrol eligible employees into a pension scheme by default. Employees could opt out at any time—no coercion, no mandate. The only thing that changed was the starting position.

The results were dramatic. Pension participation surged from 42% to 86% of eligible private-sector employees by 2022. There was a tenfold increase in defined-contribution scheme membership, from 0.9 million to 10.6 million. Opt-out rates were far lower than expected—roughly 8–14%, compared to the 28% the government had originally projected. The policy reversed decades of decline in a single stroke.

The Behavioural Economics

This is the canonical case of **default effects** and **status quo bias** in action. Under opt-in, not joining a pension was the path of least resistance. Under opt-out, staying enrolled became the path of least resistance. The financial product was identical—the only change was the frame.

Loss aversion plays a critical role here. Once auto-enrolled, opting out feels like giving up something you already have—including the employer's matching contribution. The loss of the match creates an asymmetric incentive: staying in avoids a concrete, visible loss, while the gain from opting out (slightly higher take-home pay) feels abstract and diffuse.

But there's a darker edge. Among the least financially secure 3% of employees—those with little savings, low incomes, and poor health—participation rates are still above 90%. For some of these individuals, reducing current take-home pay to save for retirement may not be in their best interest. The same inertia that helps most people also traps a few who would be better served by opting out.

Discussion Questions

1. Is auto-enrolment a "nudge" or a "shove"? Where do you draw the line between making it easier for people to do the right thing and making it harder for them to do what's actually best for their situation?

2. The same behavioural insight—status quo bias—both helps the majority and potentially harms a minority. How should policymakers weigh these competing effects?

3. Why did traditional tools (tax incentives, information campaigns) fail where a simple default change succeeded? What does this reveal about the limits of the rational-actor model in policy design?

Sources

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DAY 3: SOCIAL PREFERENCES & COOPERATION

The Letter That Collected £1.9 Million

Policy Case

The Situation

Every year, millions of UK taxpayers file their returns declaring income but then fail to actually pay what they owe. Her Majesty's Revenue and Customs (HMRC) sends standard reminder letters, but compliance rates on these outstanding debts remained stubbornly low. The cost of unpaid taxes runs into the billions annually, reducing funding for public services.

What Happened

In 2011, the Behavioural Insights Team (BIT)—sometimes called the "Nudge Unit"—partnered with HMRC to run a large-scale randomized controlled trial. Approximately 100,000 taxpayers with outstanding liabilities were sent one of several letter variants. A control group received the standard reminder. Treatment groups received letters with one additional sentence.

The most effective message was location-specific: something along the lines of "9 out of 10 people in your area have already paid their tax." This single sentence increased timely payment by up to 15% compared to the standard letter. The trial generated an estimated £1.9 million in accelerated tax payments within just 23 days. Subsequent trials with local council tax confirmed that the more specific the social reference group (your town, your postcode), the larger the effect.

The Behavioural Economics

This case demonstrates the power of **descriptive social norms** in driving cooperative behaviour. People don't just respond to incentives and penalties—they respond to what they believe others are doing. When told that the vast majority of their neighbours have paid, non-payers are confronted with the fact that their behaviour is deviant, not normal.

The geographic specificity matters. A national norm ("most UK taxpayers pay on time") had a smaller effect than a local one ("most people in your town pay on time"). This is consistent with research showing that people's behaviour is more strongly influenced by socially proximate reference groups—the people they feel most connected to and most similar to.

Critically, the social norm message outperformed enforcement-salience messages (those emphasizing penalties and legal consequences). People were more motivated by the desire to conform with their neighbours than by the fear of punishment.

Discussion Questions

1. Why does a geographic social norm work better than a national one? What does this tell us about how people define their reference group?
2. In your Public Goods Game today, did knowledge of others' contributions change your own? How does that parallel the tax letter finding?
3. Is there a risk that social norm messages could backfire? What would happen if the message said "Only 60% of people in your area have paid"?

Sources

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DAY 4: NUDGES & TIME PREFERENCES

The App That Nudges Its Own Workers

Business Case

The Situation

Uber's drivers are classified as independent contractors, not employees. This saves the company enormously on labour costs—but creates a fundamental control problem. Uber cannot mandate when drivers work, where they drive, or how long they stay on the road. Yet the entire business model depends on having enough drivers available at the right times and places.

Surge pricing was Uber's original tool for matching supply to demand: raise the price when demand spikes, and drivers will be drawn to the area. But surge pricing creates a perverse misalignment. When prices surge, Uber loses potential customers and current riders face longer waits—bad for Uber. For drivers, however, surge means more money per ride and shorter waits between fares—good for drivers. Uber needed a way to influence driver behaviour that didn't rely on paying them more.

What Happened

As reported by the New York Times and subsequently analysed by behavioural scientists at Harvard Business School and Georgia Tech, Uber deployed a battery of behavioural nudges designed to keep drivers on the road longer and steer them toward high-demand areas.

The earnings goal nudge: When a driver tries to log off, the app sends a message: "You're only $15 away from $200 today!" The $200 target is arbitrary—set by the app, not the driver—but it exploits the pain of falling just short of a round number.

Auto-queuing the next ride: Before a driver's current ride ends, the app pre-loads the next fare request. The driver must actively decline rather than actively accept. This flips the default from "stop" to "continue," exploiting status quo bias.

The sunk cost bonus: New drivers receive a financial bonus upon completing 25 rides. By the time they're at ride 20, the time and effort already invested makes quitting feel like a waste—classic sunk cost reasoning.

Phantom surges: Some drivers reported being directed to areas with supposed surge pricing, only to find no surge when they arrived. Uber denied intentional deception, but the information asymmetry was real.

The Behavioural Economics

This case is the dark mirror of the UK pension nudge. The same principles—defaults, loss aversion, status quo bias—are deployed not to help people save for retirement but to extract more labour from gig workers. Francesca Gino of Harvard Business School argued that the ethical test for nudges is whether they benefit both parties or create gains for one side at the other's expense. Uber's nudges systematically benefit the platform at the driver's expense.

The time preference dimension is particularly rich. Uber's data scientists found that drivers whose phone batteries are low are more willing to accept surge pricing—suggesting that present-biased decision-making (urgency, anxiety) can be exploited in real time. The app becomes what Thaler and Sunstein would call a **choice architect**—but one whose interests are misaligned with the people whose choices it shapes.

Discussion Questions

1. Compare Uber's nudges to the UK pension auto-enrolment. Both use defaults and loss aversion. What makes one ethical and the other questionable?

2. Uber's spokesperson said: "Any driver can stop work literally at the tap of a button." Does the formal availability of opt-out make a nudge ethical, even when it's designed to make opting out psychologically difficult?

3. Thaler and Sunstein's three criteria for ethical nudges: transparent, easy to opt out of, and driven by belief that the behaviour improves the welfare of those being nudged. How does Uber score on each?

Sources

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DAY 5: MARKETS, BUBBLES & SYNTHESIS

The $7.20 Question: Porter Airlines and the Irrationality of Flight

Business Case

The Situation

The global airline industry earns an average profit of approximately US$7.20 per passenger per flight segment. After fuel, crew, aircraft leasing, maintenance, airport fees, insurance, and catering, the entire institutional apparatus of commercial aviation captures roughly the price of a fancy latte. The industry's net margin is about 3.7%—roughly half the average profitability across all industries.

Into this punishing environment, Porter Airlines—a Canadian carrier founded by the Deluce aviation family—has not only survived but expanded aggressively, reporting C$1.3 billion in revenue and C$60 million in profit in 2025. Their strategy: spend more per passenger on complimentary wine, premium snacks, and a 2-2 seating configuration with no middle seats, then build a C$450 million airport terminal.

What Happened

Porter ordered up to 100 Embraer E195-E2 jets and doubled its fleet. It launched a new terminal at Montreal Metropolitan Airport—a joint venture with Macquarie Asset Management, one of the world's largest infrastructure investors—with capacity for 4 million passengers annually. The terminal opens June 15, 2026.

The effect on competitors has been immediate. In October 2025, Air Canada reversed years of cost-cutting by reintroducing free beer, wine, and premium snacks in economy—a direct response to what the industry press called "the Porter effect." Air Canada's VP of product explicitly acknowledged that food and beverage have a "disproportionate impact on customer satisfaction" relative to their cost.

The Behavioural Economics

Porter's model is a masterclass in behavioural strategy, touching every theme from this week:

Anchoring (Day 1): The complimentary wine and snacks cost Porter perhaps $3–4 per passenger. But passengers anchor on the perceived value—"free wine!"—not the cost. The psychological value far exceeds the economic cost, just as JCPenney's crossed-out prices created perceived savings that exceeded actual ones.

Loss aversion (Day 2): "No middle seat" is framed as the elimination of a loss, not the provision of a gain. Porter doesn't say "we give you more space"; they say "you'll never get stuck in the middle." The 2-2 configuration is actually the E195-E2's natural layout—it costs Porter nothing—but the loss-framed marketing generates enormous perceived value.

Social norms (Day 3): Porter's strategy relies on word-of-mouth as a social norm mechanism. When passengers rave about free wine to friends, they establish a new reference standard for what economy flying should be. Air Canada's response proves the social norm is shifting.

Choice architecture (Day 4): Porter's fare structure (PorterClassic vs. PorterReserve) uses default bundling. PorterClassic includes all the perks most people want; PorterReserve bundles everything for one price. Unlike airlines that strip everything out and charge for each add-on, Porter defaults to generosity.

Market irrationality (Day 5): The deepest question. The airline industry earns $7.20 per passenger. Porter is investing C$450 million in a terminal. The rational capital allocator would put that money anywhere else. But the industry persists because human demand for movement is so deep, so inelastic, and so psychologically non-negotiable that it sustains an entire global industry operating on margins that would bankrupt any other sector. The airline isn't the product—the desire to move is. The airline is just the thinnest possible institutional layer between that desire and its fulfilment.

Discussion Questions

1. Porter spends roughly $3–4 per passenger on free perks in an industry that earns $7.20 per passenger. From a purely rational perspective, this is insane. Why does it work?

2. How would you connect Porter's strategy to what you experienced in this week's experiments? Which behavioural principles best explain why passengers respond so strongly to relatively small gestures?

3. Warren Buffett said that if a capitalist had been present at Kitty Hawk, they should have shot the Wright brothers down. The airline industry has destroyed more capital than it has created over its history. Yet airlines keep being founded and funded. What does this tell us about the relationship between human desire and market rationality?

4. Porter's real business may not be the airline—it may be the airport infrastructure, the hotel, the retail. Is Porter an airline or a real estate company that happens to fly planes? What does this reframing reveal about where value is actually captured?

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