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The Much-Awaited End to the One-Size-Fits-All Economy

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INTRODUCTION

To understand how data can increase variety and affordability while reducing waste, take a look at Too Good To Go, a company founded in Denmark in 2015 to allow consumers to purchase unsold food from restaurants and stores at significantly discounted prices.[1] Since then, the company has expanded to more than 20 countries, including the U.S. and, most recently, Japan.[2]

Users can purchase "surprise bags" for pickup at the end of the day, filled with varying selections of leftover goods that would have otherwise been thrown out. Too Good To Go sets surprise bag pricing based on time and previous sales data, helping businesses to further reduce waste by making sure more leftover food is sold.[3] Meanwhile, buyers with the flexibility to place orders closer to pick up get lower prices, increasing affordability for budget-constrained consumers.

Companies like Too Good to Go show how variety, availability, and affordability can be expanded by algorithmic pricing, and its close cousin, algorithmic innovation — using data to create products and services that meet the real needs of consumers. More convenience and less waste are potential benefits of increased use of data.

Still, algorithmic pricing has encountered opposition because of fears that businesses will take advantage of consumers. Moreover, many people have the feeling that it's unfair to charge different people different prices. "When New Yorkers place an order online or go to the grocery store, they should be able to trust that they are seeing the same prices as everyone else," said New York Attorney General Letitia James.[4]

Conversely, excessively tight restrictions on algorithmic pricing and innovation would move us towards a "one-size-fits-all" economy, where everyone would pay the same price, and everyone would have access to the same limited selection of goods and services. Businesses would produce for the median consumer. People whose tastes are near the norm would do well, while people with different preferences and capabilities would feel like a square peg shoved into a round hole.

That balance suggests a need to set guardrails on acceptable practices, without going too far. One model is Maryland's recently enacted Protection from Predatory Pricing Act, which provides the state's consumers with thoughtful protections against exploitative practices while preserving the flexibility to use tools like promotional discounts, loyalty programs, and demand-responsive pricing that can help consumers access an expanded range of goods at lower prices.[5]

Algorithmic Pricing and Innovation

The broader context is that businesses have more information available to them than ever before, enabled by the increased sophistication of digital systems and the rapidly falling cost of AI-generated software. As a result, they understand their customers better than ever before, too. This data can take a wide variety of forms: buyers' shopping histories, prior sales data, information about competitors' offerings, and current conditions that might change what consumers want, just to name a few.

The problem is that the U.S. is not using the full potential of its private and public sectors to provide Americans with flexible and customized goods and services. Despite enormous variability in tastes and preferences, the dominant economic model in many industries still involves mass production of goods in giant factories in other countries, shipped to the US on container ships. This long supply chain reduces opportunities for customization. Or we see standardized services—like doctor offices with limited and inconvenient hours--that don't take account of the realities of what consumers actually want and need. Economies of scale rule.

But gradually that's changing. In the ridesharing space, for example, companies like Uber are able to offer riders more choices of priority and vehicle, at different prices. In healthcare, the combination of telehealth and at-home tests for flu and RSV means that more people can be cared for without having to take off costly full days from work.

A doctor's office might stay open later hours once a week to meet the particular needs of the patient population. In ecommerce, consumers now have access to a wide variety of goods shopping from home, even if they live in rural areas or in poor areas without many local stores.

Grocery store coupons are another example. Today, grocery stores are increasingly using algorithms to send their customers a customized selection of coupons based on data like time of year or past purchases.[6, 7] In effect, they are creating custom bundles of lower-priced goods. Lower income buyers, more sensitive to changes in price, might be willing to dedicate time and effort to reviewing these coupons and altering their purchases to take advantage of deals. Higher income buyers, less sensitive to the price of their groceries, are less likely to

make the effort to review the coupons in order to save what they consider a negligible amount of money.

Some public transit systems are being applauded for offering lower fares to some riders, using existing government data to automatically identify people who belong to low-income households.[8] In effect, this is an application of algorithmic pricing. In San Francisco, the Clipper START card provides half off discounts on trips for low-income riders, using algorithmic means-testing to determine eligibility.[9] Philadelphia has just renewed its "Zero Fare" pilot program, which uses automatic enrollment.[10]

Looking a bit further into the future, algorithmic pricing and algorithmic innovation can help encourage a more flexible and competitive domestic manufacturing sector, along with new jobs. It's clear that the future of American manufacturing lies in customized products, aimed toward particular markets that are currently underserved. For example, workers who are standing on their feet all day would benefit from reasonably-priced footwear that is both custom-fitted and durable — a combination that is in short supply these days.

Such a focused market requires flexible and customized pricing as well. By contrast, a mass production, "one-size-fits-all" world will inevitably gravitate towards the biggest scale producers and the biggest group of consumers, which is likely to include Chinese manufacturers and the Chinese middle class.

The Power of Variety

The one-size-fits-all economy does not fit the real world. Recent economic research suggests that consumer welfare gains from access to an increased variety of products and services can be enormous.[11] Indeed, part of the importance of international trade is that it leads to a greater variety of goods and services being available. Rather than just the local products, consumers can buy all the different alternatives made in different countries. One estimate is that import variety growth between 1972 and 2001 generated welfare gains equivalent to 2.6% of U.S. GDP.[12] The implication is that protectionism and tariffs will not just increase prices, but will hurt people by reducing the variety of products available.

Low-income and rural households, especially, may benefit from an increased variety of choices. One recent study addressed the important question of why low-cost households face a high cost if they want to buy healthy food.[13] The research found that 'price differences only explain a small portion of the gap between the grocery costs perceived by high- and low-income households." Instead, most of the higher cost for low-income households was explained by differences in the product assortment offered by chains that operate in different geographic areas.

REGULATING ALGORITHMIC PRICING AND INNOVATION

In the right situations, algorithmic pricing and innovation can deliver benefits to consumers, like lowering prices, improving choice, and making sure buyers can get what they need most. The task for policymakers is not to take sweeping action to ban or restrict algorithmic pricing, but rather to understand and foster the conditions where it can be beneficial while still limiting harms.

What kind of harms? First, many people feel that it's unfair to charge different people different prices for the same good or service. That's a bit odd because the economy today is full of examples of differential pricing. When you fly on an airplane, the person sitting in front of you is going to the same destination at the same time, and subject to the same turbulence, but may be paying a very different price. Similarly, if you are sitting in a college classroom, the student sitting next to you may be paying a very different tuition rate, while listening to the exact same lecture. Such practices may prompt complicated discussions about perceived fairness, but they clearly are part of today's economy.

Second, and more important, are fears that businesses will use algorithmic pricing and innovation to take advantage of vulnerable consumers. One major area where people are wary of algorithmic analysis is household necessities. When dealing with housing, food, or medical care – markets where consumers are likely to have fewer options – algorithmic pricing can feel as if it is going over the line.

In response, several states have proposed and/or enacted very broad and likely counterproductive restrictions on the use of some types of personal data in setting prices. For example, legislation under consideration in New York state, called *The One Fair Price Act*, if enacted, would state that "No entity shall set the price of a specific good or service using personalized algorithmic pricing" where personal data includes "any data that identifies or could reasonably be linked, directly or indirectly, with a specific consumer or device." The bill includes a long list of vague exceptions, such as "Bona fide discounts provided to larger groups of consumers, including but not limited to bona fide discounts for military veterans, seniors, teachers, or active duty personnel."[14] Apparently, the use of personal data to benefit particular groups is acceptable.

As mentioned earlier, a better approach is Maryland's Protection from Predatory Pricing Act. Tools like promotional discounts, loyalty programs, and demand-responsive pricing can help consumers access an expanded range of goods at lower prices. But when surveillance pricing is used to take advantage of vulnerable buyers, it can hurt consumers. The Protection from Predatory Pricing Act preserves these beneficial practices, while regulating harmful ones. For groceries and other essential foods, large retailers and delivery platforms are barred from using personal data to charge individuals higher prices or discriminate based on protected class data. Meanwhile, merchants can continue to provide customized discounts, targeted coupons, and loyalty programs, benefiting price-sensitive shoppers, including many low-income individuals.

With affordability top of mind for Americans today, encouraging pro-consumer innovation matters more than ever. Moving away from the "one-size-fits-all" economy acknowledges that households have different tastes and needs, and are not necessarily served well by a focus on a single price.

ABOUT THE AUTHOR

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