

Digital Price Tags and Watching Eyes: Retail Tech's Impact on Your Wallet and Privacy

Authors: AG Studies Staff and Policy Fellows

Imagine walking down a grocery store aisle and seeing the price of milk change right before your eyes. This isn't science fiction; it's becoming possible with Electronic Shelf Labels (ESLs) – small digital screens replacing paper price tags. Retailers like Walmart and Kroger are rolling out this technology, touting benefits like efficiency and accuracy. However, ESLs also open the door to "dynamic pricing," where costs can fluctuate instantly based on demand or other factors. When combined with increasingly sophisticated AI-powered surveillance in stores, these technologies raise significant concerns about fair pricing, transparency, and your privacy – issues that State Attorneys General (AGs) are beginning to scrutinize.

Digital Price Tags Are Coming (ESLs Explained)

Electronic Shelf Labels are essentially small digital screens attached to store shelves where paper tags used to be. They connect wirelessly to a central system, allowing a retailer to update prices across thousands of items instantly and remotely. Major chains like Walmart and Kroger are already installing ESLs in thousands of stores.

Retailers highlight several advantages:

- <u>Efficiency</u>: Employees no longer need to manually change paper tags, freeing them up for other tasks.
- <u>Accuracy</u>: Digital tags reduce the chance of pricing errors between the shelf and the checkout scanner.
- <u>Reduced Waste:</u> Eliminates the need for paper tags and labels.
- <u>Quick Markdowns:</u> Allows for faster price reductions on items nearing expiration.

Prices That Change on the Fly (The Dynamic Pricing Dilemma)

While the benefits sound good, the core capability of ESLs is enabling dynamic pricing – the practice of adjusting prices in real-time based on factors like demand, time of day, competitor pricing, or potentially even data about individual shoppers. Think of "surge pricing" for ride-sharing services, but applied to groceries or other essential goods.

Although major retailers currently deny plans to implement widespread dynamic pricing through ESLs, the technology makes it feasible. This possibility has raised alarms among consumer advocates and lawmakers, including Senators Elizabeth Warren and Bob Casey. Concerns

include:

- <u>Potential Price Gouging:</u> Could prices for essential items spike during emergencies or peak shopping times?
- <u>Lack of Transparency</u>: How will consumers know if the price they see is fair or if it just changed? Will pricing decisions be clear and understandable?
- <u>Discriminatory Pricing</u>: Could prices be adjusted based on assumptions about a shopper's profile, derived from tracking data?

These worries arise as regulators, like the Federal Trade Commission (FTC), are already scrutinizing the grocery industry for potentially anti-competitive behavior.

Are You Being Watched While You Shop? (AI Surveillance Concerns)

The concerns about ESLs and dynamic pricing intensify when considered alongside the growth of AI-powered surveillance in retail stores. Beyond security cameras, some stores are experimenting with or implementing technology that can:

- <u>Track Shopping Patterns:</u> Analyze how you move through the store, what shelves you linger at, and what products you pick up and put back.
- <u>Analyze Facial Expressions:</u> Attempt to gauge emotional responses to products or displays.
- <u>Facial Recognition:</u> Identify repeat customers or link anonymous shoppers to online profiles (though some retailers claim to have stopped or limited pilot programs).

This surveillance data could potentially be linked to loyalty programs or even used anonymously to build shopper profiles. The fear is that this data could fuel dynamic pricing algorithms, leading to personalized price adjustments without the shopper's knowledge or consent. Furthermore, the collection and potential sale of this detailed behavioral data raise significant privacy questions, especially as there's currently no federal law requiring stores to disclose their surveillance practices or get explicit consent. This trend threatens the anonymity many people expect when shopping in public spaces.

Why This Matters to You

The combination of ESLs and AI surveillance could fundamentally change your shopping experience. You might face fluctuating prices that are hard to predict or understand. You could unknowingly pay more than the person next to you based on a profile you didn't know existed. And your movements, behaviors, and even perceived emotions could be tracked, analyzed, and potentially monetized, all without your explicit permission.

How State Attorneys General Can Protect Shoppers

State Attorneys General serve as the primary consumer protection officials in their states and have tools to address these emerging challenges. They can:

- <u>Investigate Unfair or Deceptive Practices:</u> Scrutinize retailers' pricing strategies and surveillance techniques to ensure they comply with state laws.
- <u>Demand Transparency</u>: Push for clear disclosure from retailers about how prices are set and what surveillance technologies are in use.
- <u>Enforce Antitrust Laws:</u> Monitor for collusive or anti-competitive pricing behavior enabled by shared pricing algorithms or data.
- <u>Protect Consumer Privacy:</u> Utilize state privacy laws (where available) to ensure consumers have control over their personal data collected in stores.
- <u>Advocate for Consumers:</u> Raise public awareness and potentially advocate for new legislation or regulations if existing laws are insufficient.

Navigating the Future of Retail

Technology offers retailers powerful new tools, but innovation should not come at the expense of fair prices and consumer privacy. As digital price tags and AI surveillance become more common, vigilance from consumers and proactive oversight from State Attorneys General are crucial to ensure a fair, transparent, and rights-respecting marketplace for everyone.

Sources and Additional Reading

Ann Larson, Automation in Retail Is Even Worse Than You Thought, The Nation (Jan. 22, 2025), https://www.thenation.com/article/society/retail-grocery-automation-esl-kroger/
Sara Ruberg, Kroger and Walmart Deny 'Surge Pricing' After Adopting Digital Price Tags, N.Y. Times (Oct. 23, 2024), https://www.nytimes.com/2024/10/23/business/kroger-walmart-facial-recognition-prices.html

- Press Release, Senator Elizabeth Warren, Warren, Casey Investigate Kroger's Use of Digital Price Tags, Warn of Grocery Giant's "Surge Pricing" Causing Price Gouging and Hurting Consumers (Aug. 7, 2024), https://www.warren.senate.gov/newsroom/press-releases/warren-casey-investigate-krogers-use-of-digital-price-tags-warn-of-grocery-giants-surge-pricing-causing-price-gouging-and-hurting-consumers

- Lola Murti, A supermarket trip may soon look different, thanks to electronic shelf labels, npr (June 19, 2024), https://www.npr.org/2024/06/17/nx-s1-5009271/electronic-shelf-labels-prices-walmart-grocery-store