IS INVENTORY SILENTLY KILLING SMALL BUSINESS PROFITS?

THE HIDDEN COST OF BAD INVENTORY DECISIONS

3-4 BILLION \$

6-11%

10H/WEEK

missed yearly sales in U.S. due to stockouts and overstock

revenue drained each year by inventory inefficiencies

number of hours small retailers spend manually on inventory tasks



SHELFSMART

One platform. Zero guesswork. Smarter stores.

MEET OUR

TEAM MEMBERS

We're a passionate team of innovators, engineers, and problem-solvers working together to bring data-driven solutions to local businesses.



Divya DadiFull Stack Developer
Rice University, MCS '24



Simon LiuFull Stack Developer
Rice University, MCS '25



Jiamin Wang Full Stack Developer Rice University, MDS '25



Patrick Magno Sponsor Rice University, MEML '26

HOW EXISTING WORKS



Why Existing Solutions Fail?

Built for enterprises

Not designed for small business owners

2 One-size-fits-all approach
Ignores local & industry-specific needs

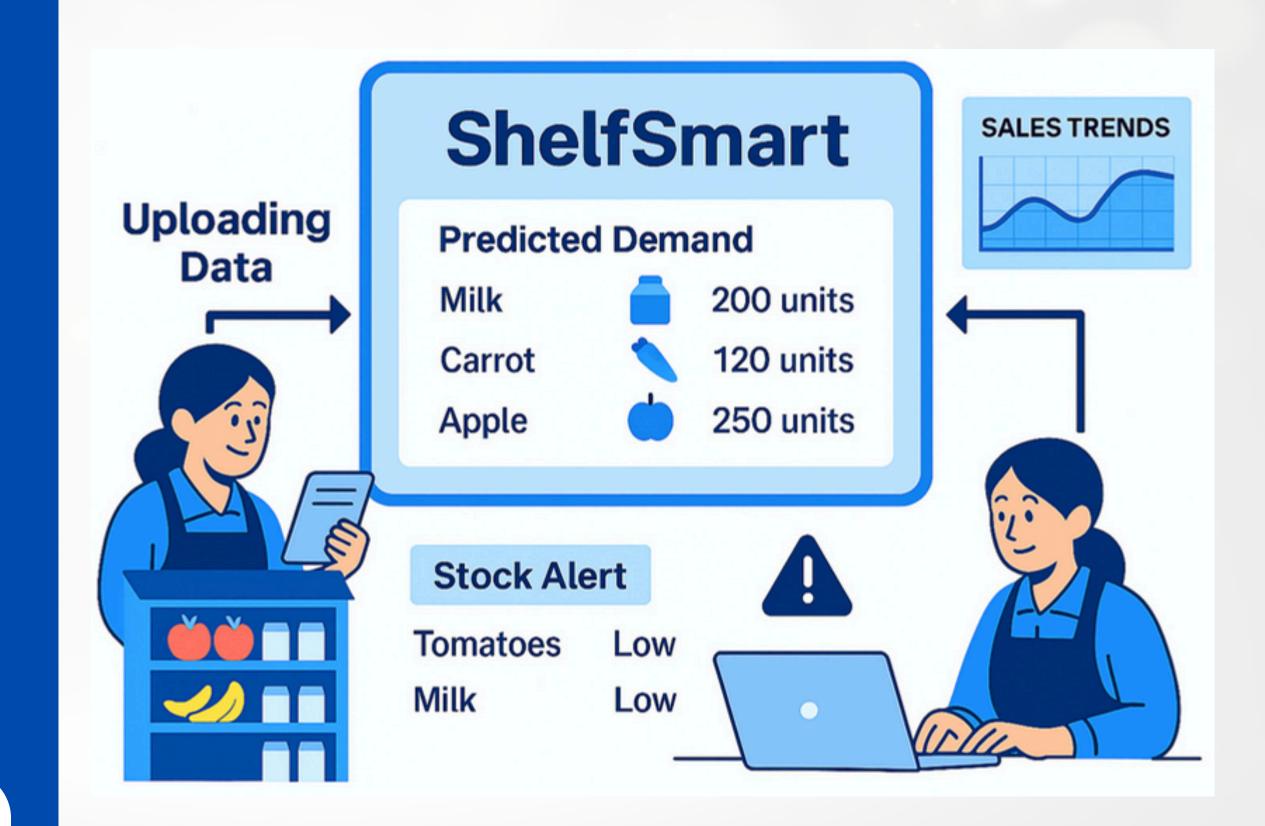


Every single day, small businesses are falling behind.

OUR SOLUTION

Key Features:

- Forecast demand with AI
- Smart low-stock alerts
- Easy CSV upload or POS sync
- Personalized
 assistant to answer
 business questions

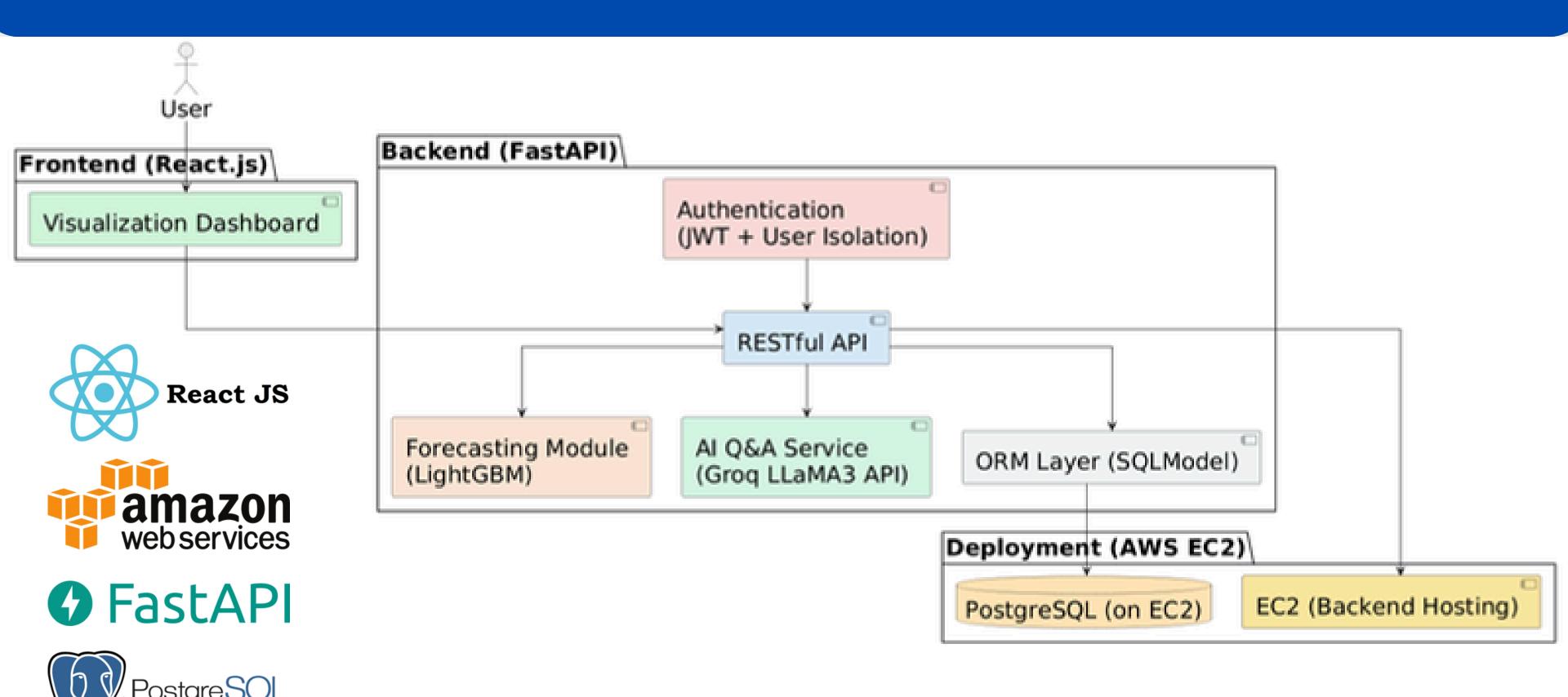


HOW SHELFSMART WORKS...



From Sales Data to Smart Decisions in 4 Steps

TECHNICAL ARCHITECTURE



BUSINESS IMPACT WITH SHELFSMART

30%

20-40%

10-15%

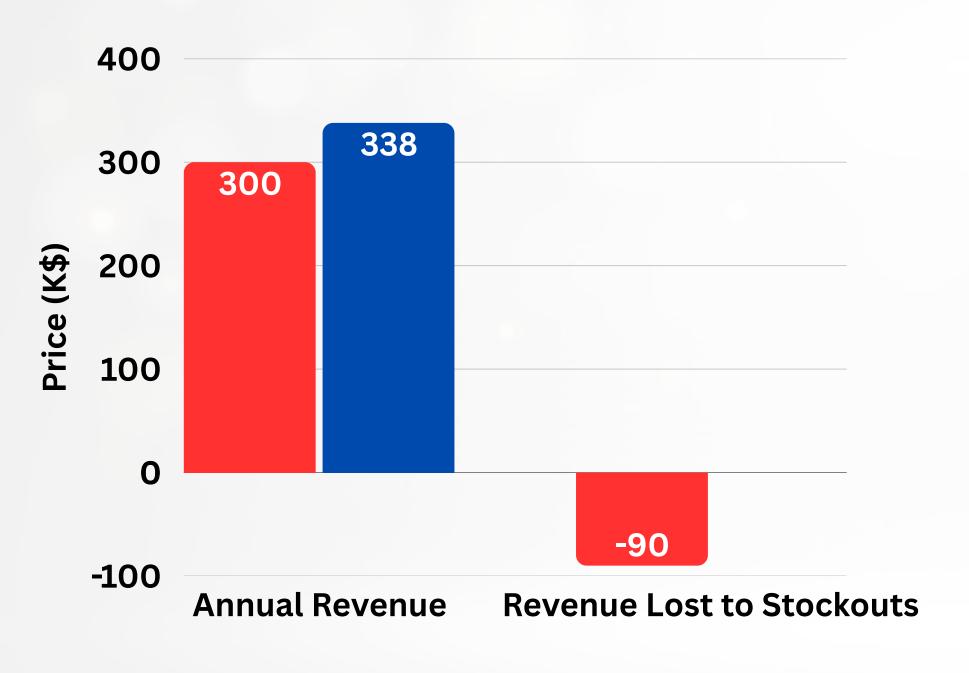
8-10H/W

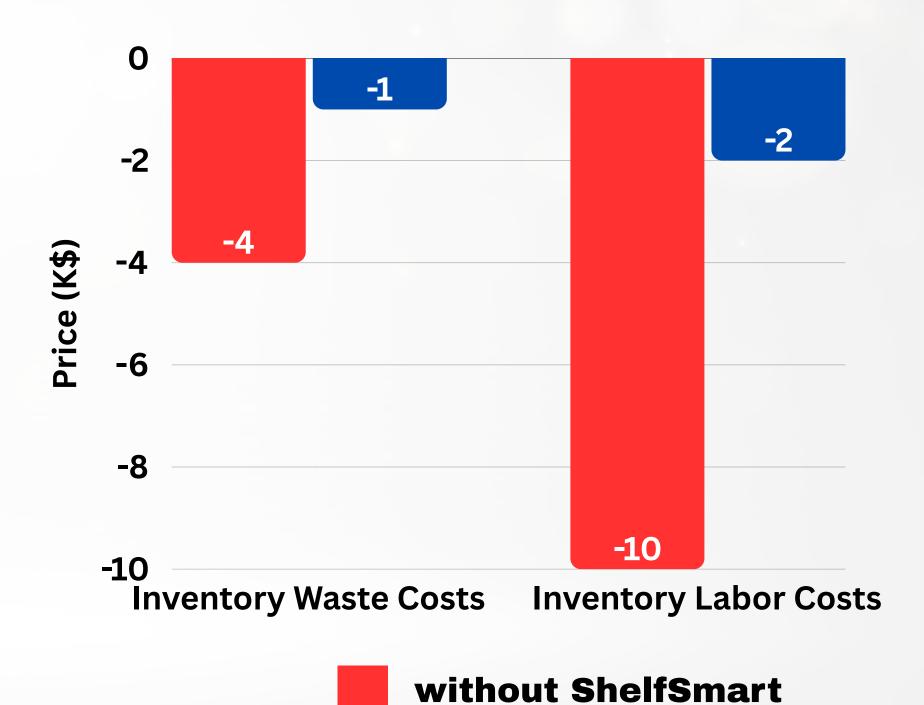
Reduction in Stockouts

Less Inventory Wastage Increase in Revenue

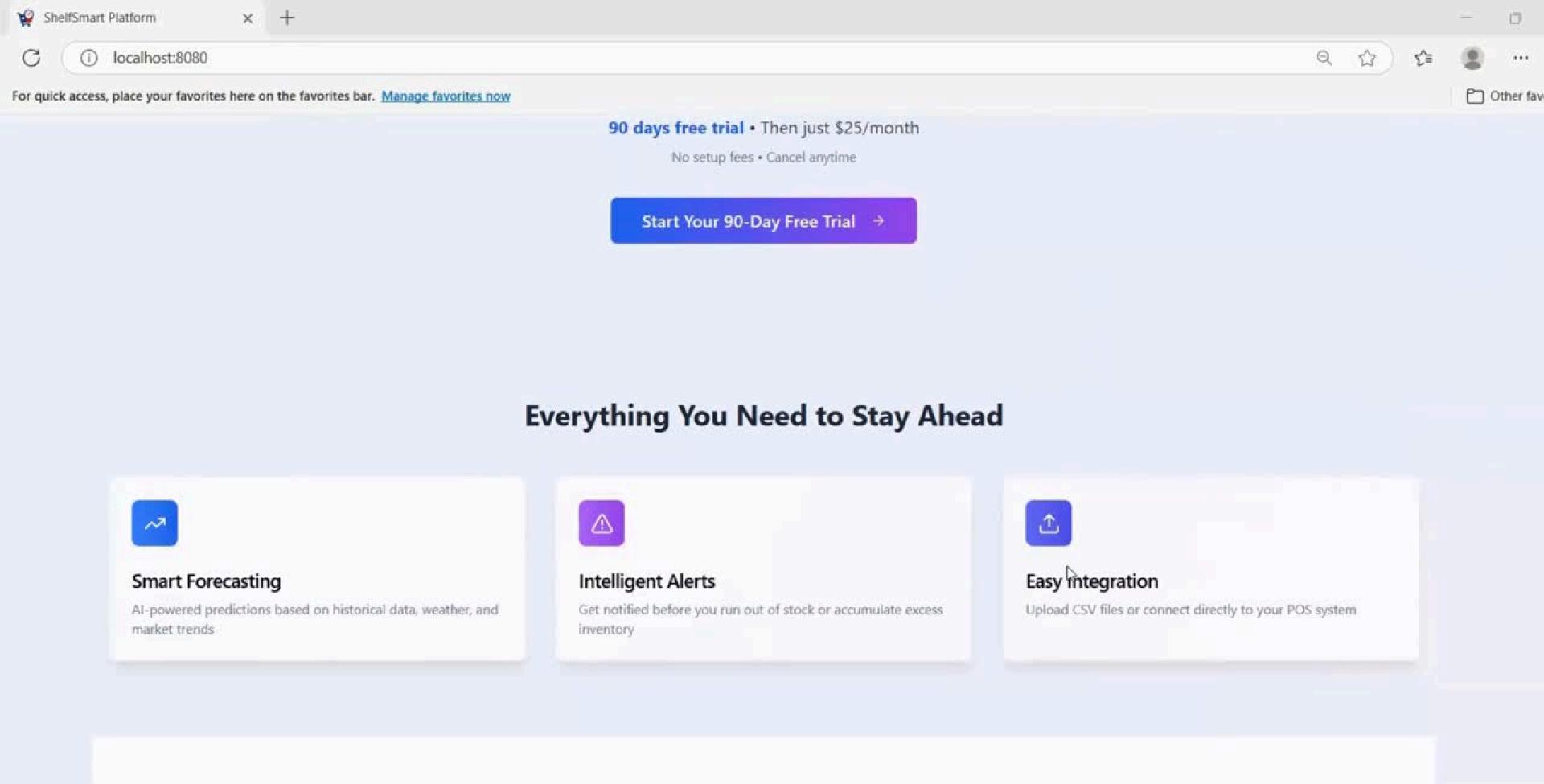
Number of hours customers can save

Typical Small Business: \$300K Annual Sales





with ShelfSmart



FUTURE WORK...



1.POS integrations (Square, Lightspeed)

- 2. Multi-language support for local businesses
 - 3. Auto-reorder feature integration

WHY SHELFSMART MATTERS

- Forecast demand accurately using Al-driven insights
- Reclaim 8–10 hours/week by automating manual inventory tracking
- Reduce spoilage losses by up to 30% with real-time stock alerts
- Optimize storage space and reduce overstock by 25%
- Cut inventory labor costs through smart automation
- Make faster decisions with our built-in business assistant chatbot





SHELFSMART

THANKYOU





Divya Dadi: dd80@rice.edu

Simon Liu: sl282@rice.edu

Jiamin Wang: jw233@rice.edu