

SMARTSHELF

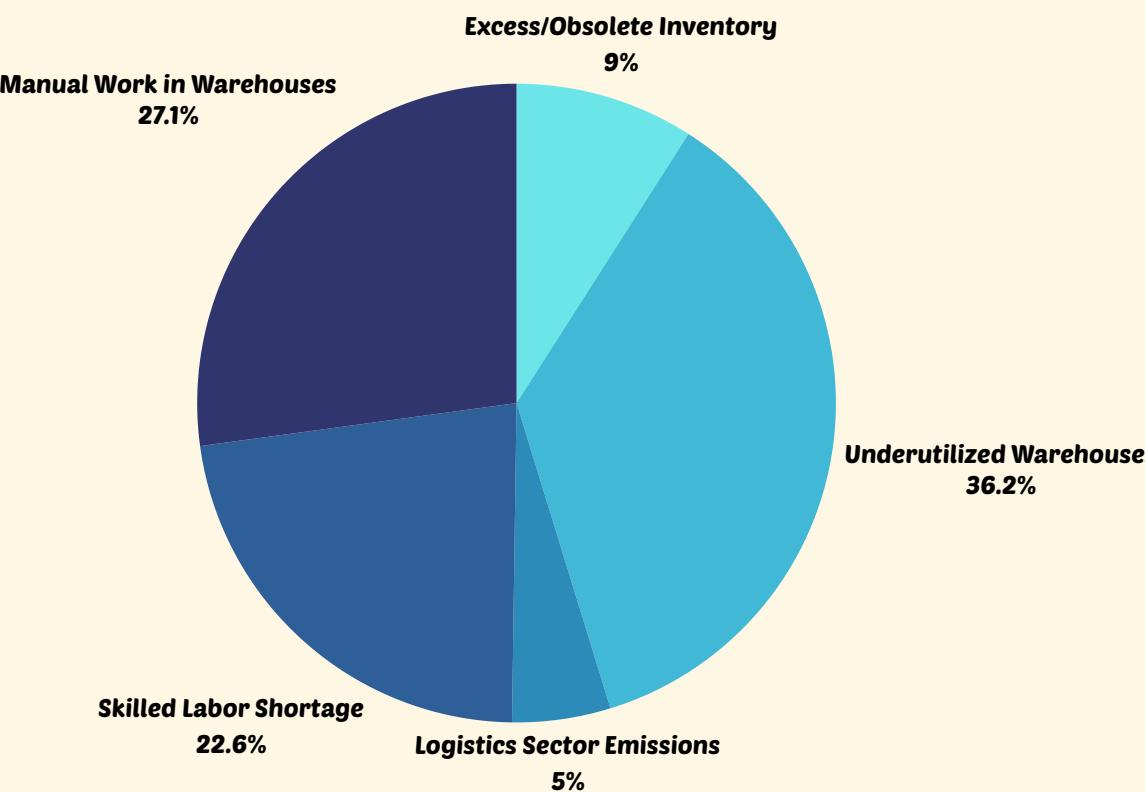
AI Enhanced Logistics Optimization



Presented by: TECHGIGS

Problem statement

- 75% of businesses, particularly SMEs, face significant revenue drops due to supply chain inefficiencies.
- Poor inventory management results in a \$1.1 trillion annual loss for global businesses, severely impacting SMEs.
- Inefficient supply chains drive up operational costs by 20-30%, causing financial instability for businesses.
- The ongoing supply chain crisis is projected to reduce global GDP by 1.2%.



The collage includes the following elements:

- SupplyChainDIVE**: Headline: "Pitney Bowes' e-commerce unit shutting down". Subtext: "The company will assist Global Ecommerce shippers, alternative delivery options, interim CEO Lance Rosenzweig Thursday. [Read more](#)".
- CSA (Chamber of Supply Chain & Retail)**: Headline: "Study: Global retail losses due to inventory 'distortion' hit \$1.77 trillion". Author: Marianne Wilson. Date: 7/31/2023. Subtext: "Inventory distortion – the combined cost of overstocks and out-of-stocks – continues to challenge retailers, particularly in the U.S. The total cost to retailers for inventory distortion (combined cost of overstocks and out-of-stocks) amounts to \$349 billion in lost sales for U.S. and Canadian retailers in 2022. That's according to new research from analyst firm IHL Group, which said that disconnect between what consumers want to buy at their local stores and what they actually do buy continues to drive discontent.".
- Business Standard**: Headline: "TVS Supply Chain Solutions posts net loss of Rs 65 crore in first quarter". Subtext: "Expansion in existing engagements and new business development drive revenue growth. During the quarter, the company commenced a six-year transnational engagement with Centrica PLC".
- Auto News**: Headline: "Audi India Reports Weak Sales In Q2 2024, Citing Supply Chain Disruptions". Subtext: "Audi India reports a 6% sales drop in Q2 2024 due to supply chain issues, yet sees long-term growth.".
- Boeing**: Headline: "Let's connect the world in new ways". Subtext: "Experience pure speed".
- Siemens**: Headline: "DIP IN INDIA-BANGLADESH TRADE TOP 3 REASONS #1 DOLLAR SHORTAGE IN BANGLADESH". Subtext: "Veena Sikri On Bangladesh Crisis: Impact On Supply Chains, Trade".
- Other News Items**: "icici Direct STUDIO", "#1 DOLLAR SHORTAGE IN BANGLADESH", "BOEING Let's connect the world in new ways", "3 BHK Premium Apartments at Siruseri for ₹62 Lacs", "MORE FROM THE WEB", "Life Cover up to 99 years ago.", "Explore Wide Range Of Watches.", "Buy Now".

Proposed Solution

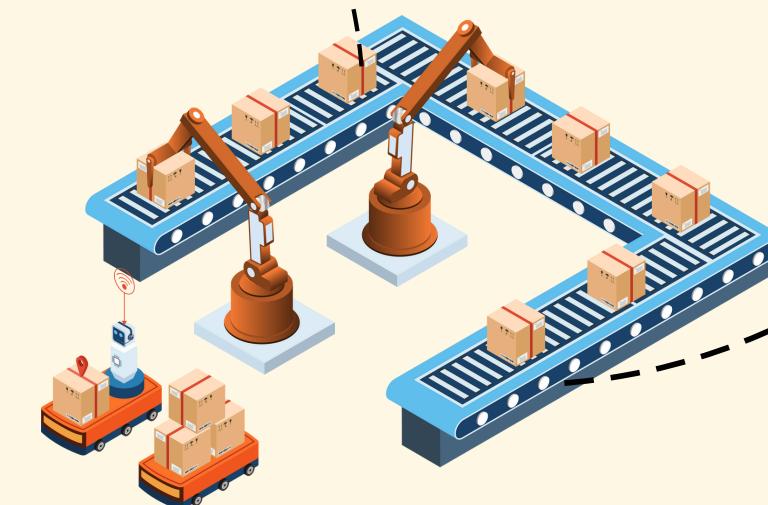


What's in SmartShelf ?

All in one DashBoard



SmartShelf Algorithm



Demand forecasting



Green footprint



Defective carboard prediction

Improved efficiency
& Reducing cost

Implementation

1.QR Code Scanning for Database Entry

Objective: Data entry by scanning QR codes.

Model Used: Computer Vision

Process:

Front End: React-based interface for scanning.

Database: Real-time updates in Firebase.

2.Number Plate Detection

Objective: vehicle identification.

Model Used: YoloV8 model

Process:

Image Capture: Real-time or uploaded images.

Processing: Model reads number plates

Storage: Metadata stored in Firebase.

3.Cardboard Defect Detection

Objective: Identify defects in packaging.

Model Used: Resnet34 Model

Process:

Data Input: Live camera feed.

Detection:Resenet34 identifies defects.

4.Demand Forecasting

Objective: future demand predictions of inventories

Model Used: ARIMA

Process:

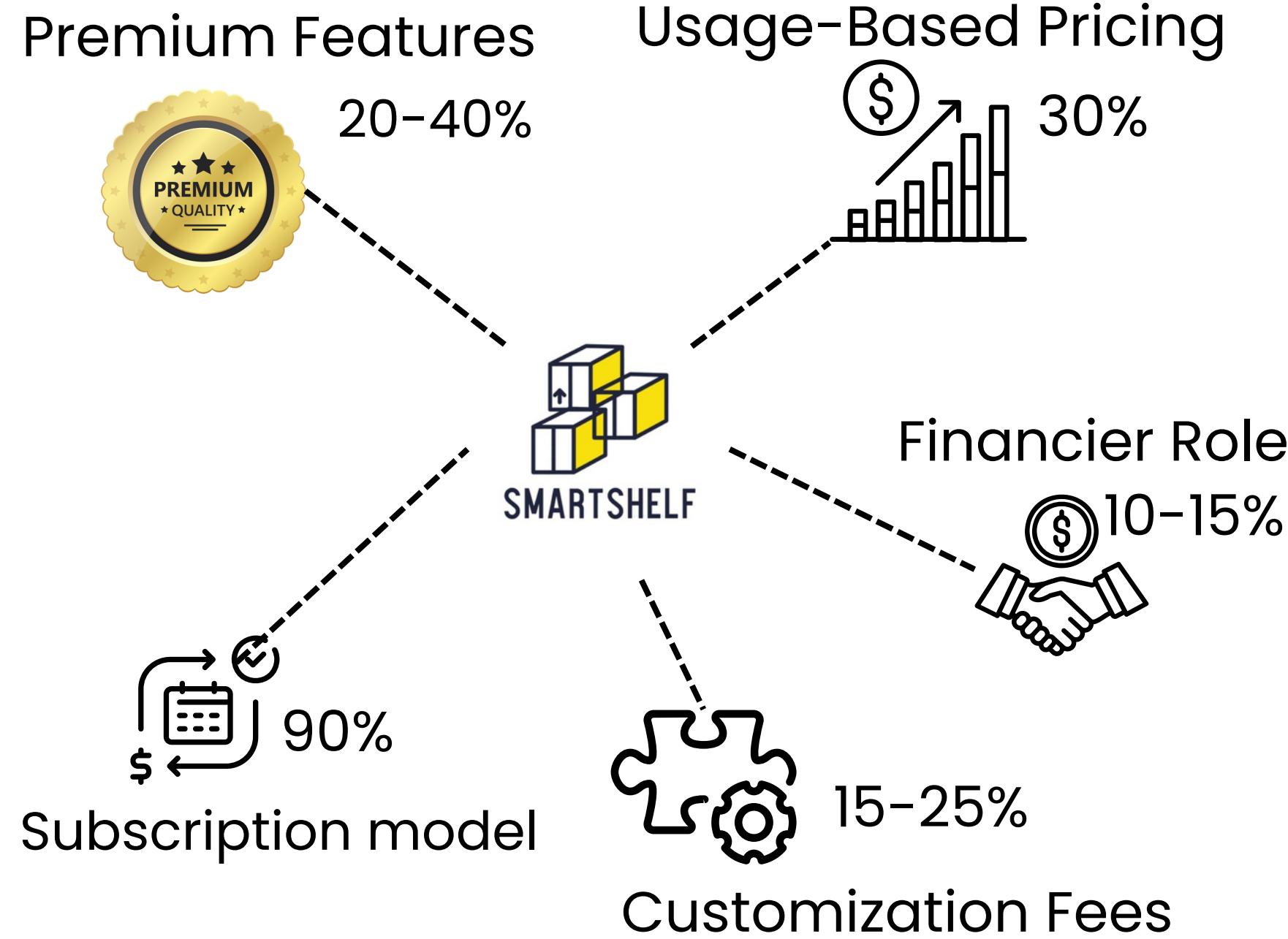
From the Past Model using these Formula:

$$P: Y_t = \phi_1 Y_{t-1} + \phi_2 Y_{t-2} + \dots + \phi_p Y_{t-p}$$

$$Q: \epsilon_t = \theta_1 \epsilon_{t-1} + \theta_2 \epsilon_{t-2} + \dots + \theta_q \epsilon_{t-q} + \epsilon_t$$

the top demand products will be predicted

Business Model



	Features	Pricing	Customization	SME Support
Zoho Inventory	Standard logistics tools	High	Limited	Minimal
Salesforce	Basic features	Moderate	Moderate	Limited
SmartShelf	AI-driven, predictive tools	Flexible & Scalable	Highly customizable	Strong focus on SMEs, including financing

**From unseen to unstoppable—
SmartShelf transforms
unidentified SMEs into industry
leaders.**

By **2028**, the smart warehouse market will grow **15%** annually. SmartShelf empowers over **500,000** SMEs, boosting efficiency by **30%**, helping them thrive and stay competitive.

Budget Plan

Service/Aspect	Your Charges (INR)	Efficiency/Cost Savings	Competitor	Competitor Charges (INR)	Competitor Efficiency/Cost Savings
Basic Subscription	₹1,000/month	More affordable entry-level access	Zoho Inventory	₹1,800/month	Higher cost for entry-level access
Standard Subscription	₹2,500/month	Lower cost for standard features	Zoho Inventory	₹3,600/month	Higher cost for standard features
Premium Features	₹2,000 - ₹5,000/month	Affordable access to advanced features	Salesforce	₹3,000 - ₹7,000/month	Higher cost for advanced features
Customization Fees	₹50,000 - ₹2,00,000/project	Competitive and more affordable	Oracle NetSuite	₹70,000 - ₹2,70,000/project	Higher cost for customization

Cut costs by up to **20%** with our **SmartShelf**—better value, top service, and savings

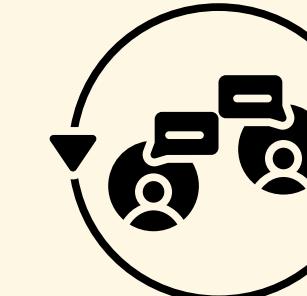
Click for Complete Budget Plan -

https://docs.google.com/document/d/1p_jJrYVkJZ1bpHELC3AQuG8S7qyn0BQPJETWYU9E36g/edit?usp=sharing

Future Enhancements



Unmanned Drone Delivery



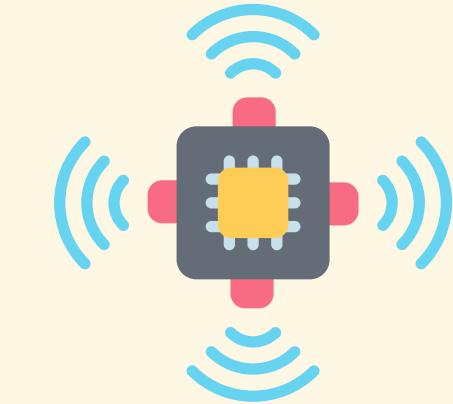
Customer Feedback Updates



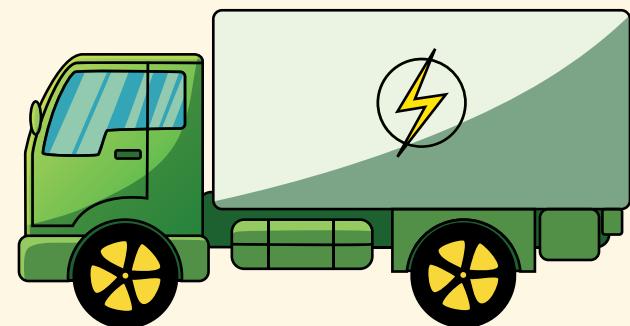
Blockchain for Enhanced Transparency



Fully Automated Robots



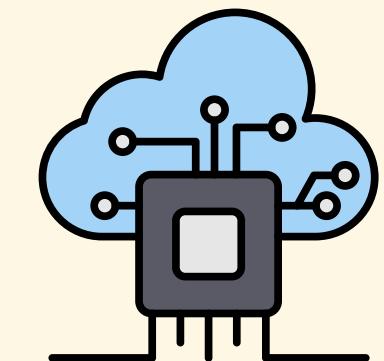
Smart Sensors for Real-Time Monitoring



Battery-Powered Vehicles



Offline Route Tracking



Cloud-Based Collaborative Platforms

Conclusion

What SmartShelf Achieved ?

Empowered over 500,000 SMEs



Created 1,000+ new jobs



Boosting India's GDP by 0.5%



Increased warehouse productivity by 50%



Reduced logistics costs by 30%



high customer satisfaction

local labor into world-class experts



Enhancing global supply chain efficiency .

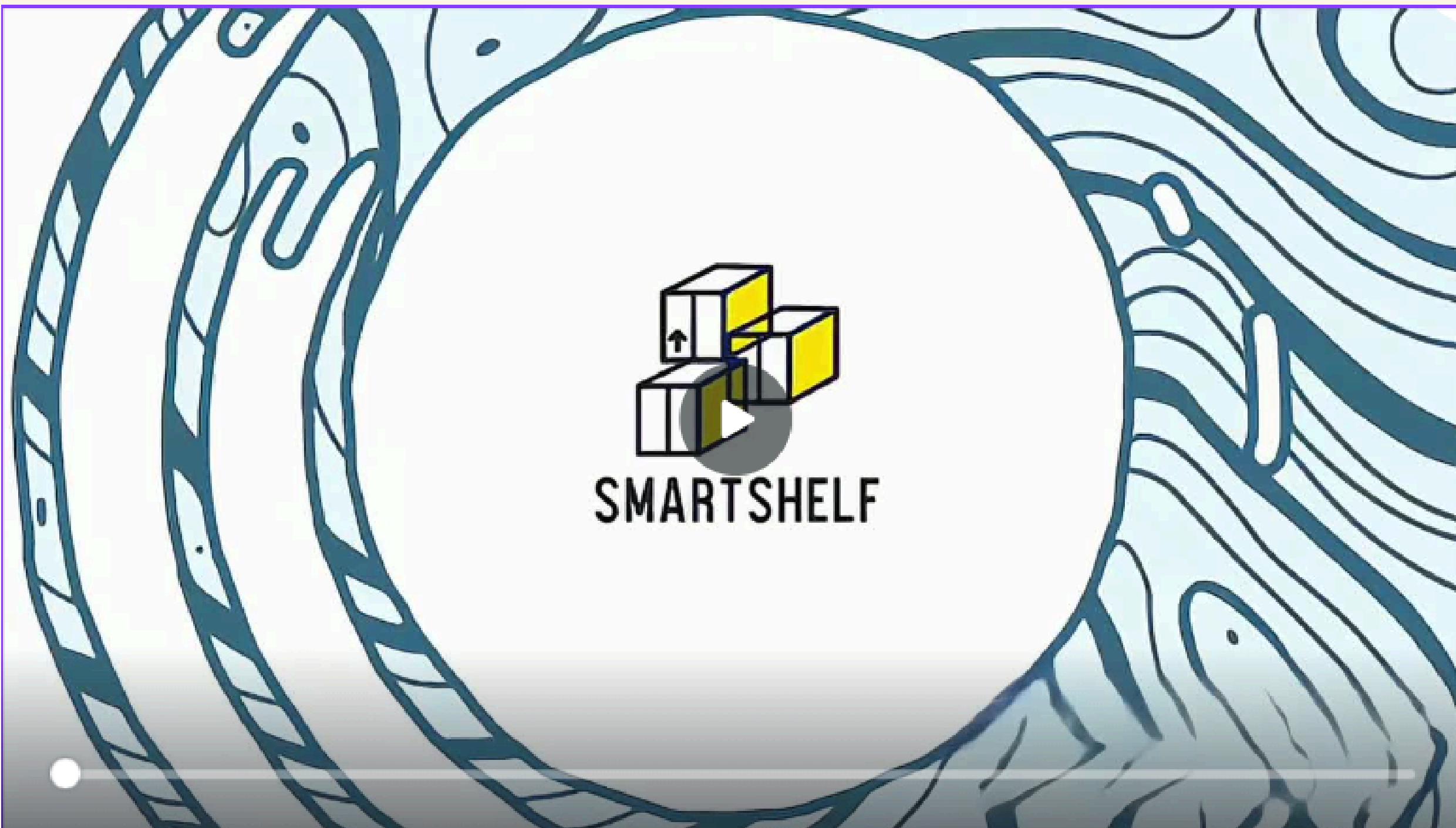


Set new industry standards



Transformed SMEs into global players.

How smartshelf makes live Easy?



video link - [https://drive.google.com/file/d/1aumW8-QSekZRltCci6iHhGf_4h7xMYkn/view?
usp=drive_link](https://drive.google.com/file/d/1aumW8-QSekZRltCci6iHhGf_4h7xMYkn/view?usp=drive_link)



Thank you

"Behind every happy smile, SmartShelf works all the while."

