Digitize Your Supply Chain to Stay Ahead of Consumer Expectations

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Agenda

- What is GS1?
- Discuss Target's Approach to Using Stores as Hubs
- COVID Learnings
- Optimizing Fulfillment
- Review recent survey findings on Supply Chain Digitization

Meet the Speakers

Jo Anna Stewart
Sr. Director, Commercialization
GS1 US

Craig Peroutka
Senior Director, Enterprise Item
Center of Excellence
Target Corporation

Brian Gibson, PhD.
Professor of Supply Chain,
Auburn University

CSCMP Board Chair

The Global Language of Business

GS1 Standards make it possible to **identify**, **capture**, and **share** information automatically and accurately about products, business locations, and more. This way anyone who wants that information can understand it, no matter who or where they are.

Identify

Capture

Share

Who We Are

- Neutral and not-for-profit
- User-driven and governed
- Global and local
- Inclusive and collaborative

We bring communities together.

More than 6 billion
GS1 barcodes are scanned every day.

25 million
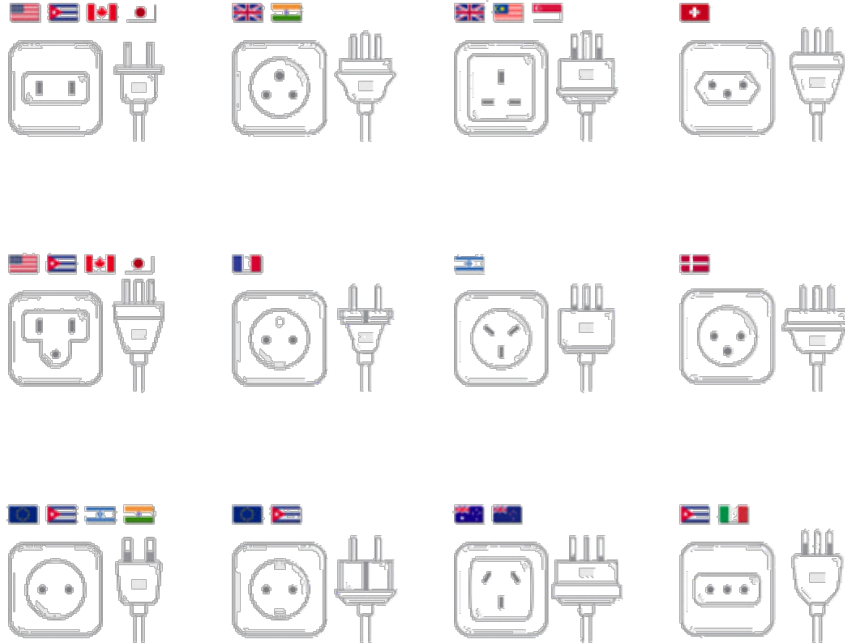products are assigned U.P.C.s in the GS1 US Data Hub | Product tool.

1.5 million
companies around the world use GS1 Standards.

More than 30 million
products are registered by brand owners in the GS1 Global Data Synchronization Network™ (GDSN®).

One Common Language

The only way businesses big or small can move forward is to work together. They need to be able to **understand each other** anywhere in the world.

Business requires a common language, and we make that possible.

Target – Stores as Hubs

Order Pickup

Drive Up

Same Day
SHIPT

Delivery From Store

GS1 US

COVID Learnings

Fresh Grocery Pickup

Adult Beverage

GS1 Standards were the foundation

Chasing Product

Product Visibility

Optimized Fulfillment: Improving Profitability

Most

Least

In Store
Labor is saved when the customer travels the last mile and does the picking

Buy Online, Pick Up In Store (BOPIS) Buy
Opportunity to add to the basket in store
- Target: Orders picked up at the store cost about **90 percent less** on average than fulfilling orders from a warehouse.

Curbside
Limits opportunities to add to the basket, but eliminates last-mile cost
- Walmart: Walmart loses money on delivery orders (amount not disclosed). However, for curbside pickup, on a $100 order there is $3 in profit.

Delivery
Last-mile burden rests with the retailer, therefore it is the most expensive
- Microfulfillment and dark stores are helping turn the tide on negative delivery margin
- Memberships: Walmart and Ahold are the latest grocers to add subscription models to increase revenue, frequency of purchase, and lock in loyalty. Other membership examples include Shipt, Instacart, and PrimeNow.

Source: Autonomous Retail White Paper

The Path Forward

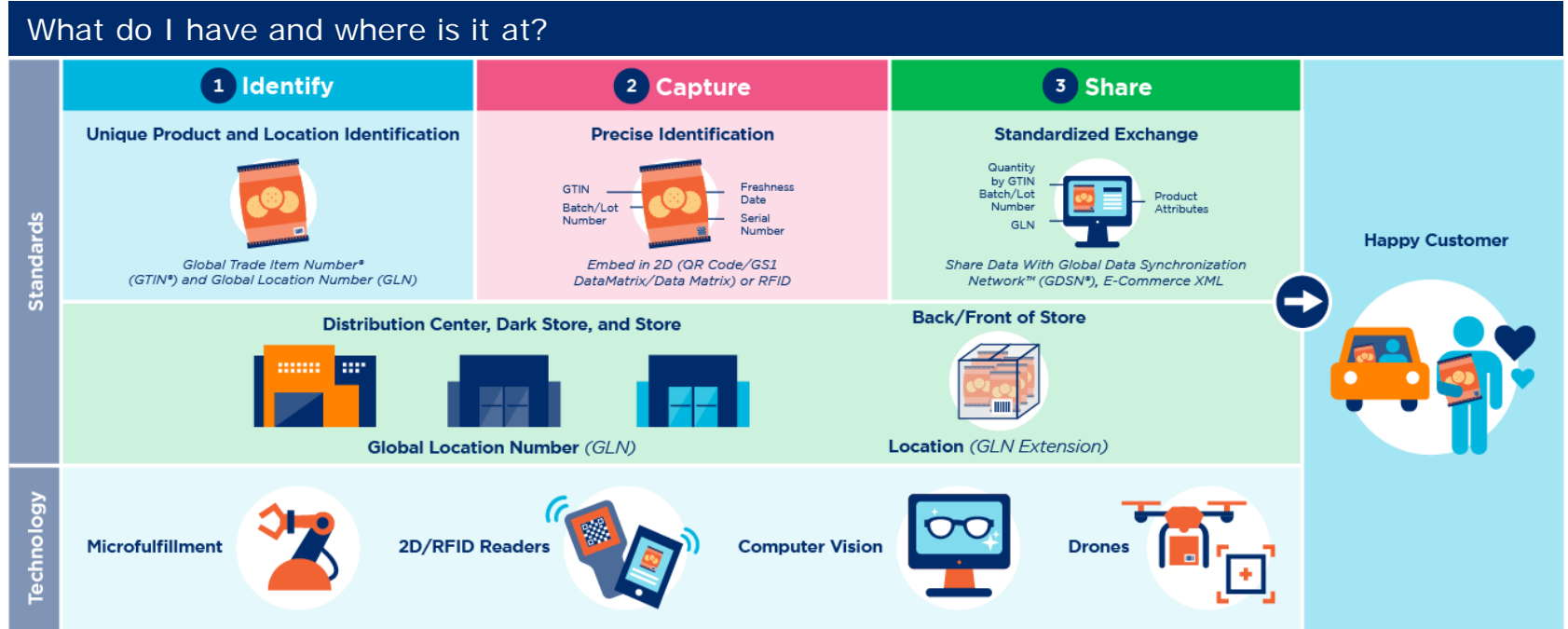

Video

Retail Shifts Accelerated by COVID-19

The "future store" is happening now

- Retail has pivoted online

- Customers expect a seamless path to purchase and fulfillment

- Supply chains must handle disruption across almost every aspect of structure and performance

- Visibility has become the number one topic of interest

Omnichannel Complexity Is on the Rise	Pre-COVID-19	Post-COVID-19
Right time	Days	Within hours
Right place	DCs	Consumers (stores becoming DCs)
Right price	Important	Greater willingness to pay for convenience/speed
Right product	Limited assortment in bulk quantities optimized for large-scale logistics	Endless aisle, late-stage configuration, and a customer "n" of 1
Right quantity	Pallets	Eaches
Right customer	Primarily B2B	D2C
Right condition	Important	Perfect; no tolerance

Source: Autonomous Retail White Paper

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Standards + Technology

What do I have and where is it at?

1 Identify	2 Capture	3 Share	
Unique Product and Location Identification	**Precise Identification**	**Standardized Exchange**	**Happy Customer**
Global Trade Item Number® (GTIN®) and Global Location Number (GLN)	GTIN, Batch/Lot Number, Freshness Date, Serial Number — Embed in 2D (QR Code/GS1 DataMatrix/Data Matrix) or RFID	Quantity by GTIN, Batch/Lot Number, GLN, Product Attributes — Share Data With Global Data Synchronization Network™ (GDSN®), E-Commerce XML	

Standards

Distribution Center, Dark Store, and Store	Back/Front of Store
Global Location Number (GLN)	Location (GLN Extension)

Technology

Microfulfillment	2D/RFID Readers	Computer Vision	Drones

Challenges of Inventory Visibility
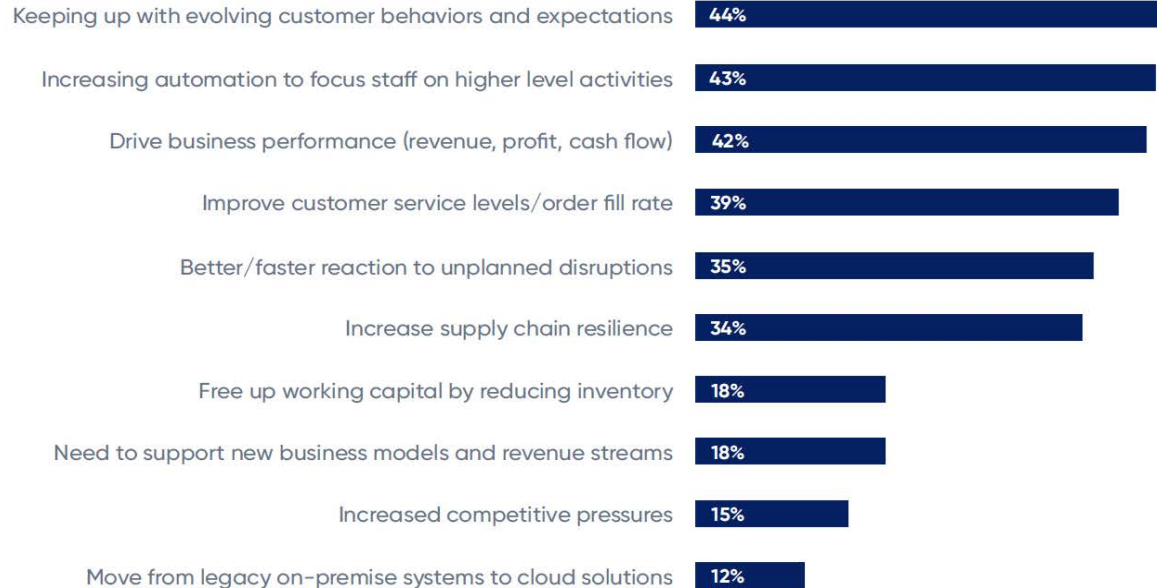
Challenges

- End-to-end visibility
- Real-time inventory data
- Data quality
- Correct information
- Vendor shortages

Impacts

- Product delays
- Inaccurate fulfillment
- Retailer switching
- Slow activation of new suppliers

Source: Autonomous Retail White Paper

What are the Key Drivers of Digital Transformation?

Driver	Percentage
Keeping up with evolving customer behaviors and expectations	44%
Increasing automation to focus staff on higher level activities	43%
Drive business performance (revenue, profit, cash flow)	42%
Improve customer service levels/order fill rate	39%
Better/faster reaction to unplanned disruptions	35%
Increase supply chain resilience	34%
Free up working capital by reducing inventory	18%
Need to support new business models and revenue streams	18%
Increased competitive pressures	15%
Move from legacy on-premise systems to cloud solutions	12%

Figures add to more than 100% due to multiple responses.

Source: Digital Transformation in Supply Chain Planning: 2021, presented by CSCMP and ToolsGroup

Auburn Survey Results/Discussion

The State of Supply Chain Digitization

16%
in active
deployment

5%
nothing

26%
in planning
phase

53%
in early
discussions

"Having a profound knowledge of your business and then using it to take friction out of the experience between your customer and your business."

Auburn Survey Results/Discussion

Supply Chain Digitization Priorities

"We want our supply chain to have the ability to use demand management and allocation tools to read individual store demand and adjust inventory, recognize online and retail demand needs, and solve for what will deliver the greatest yield."
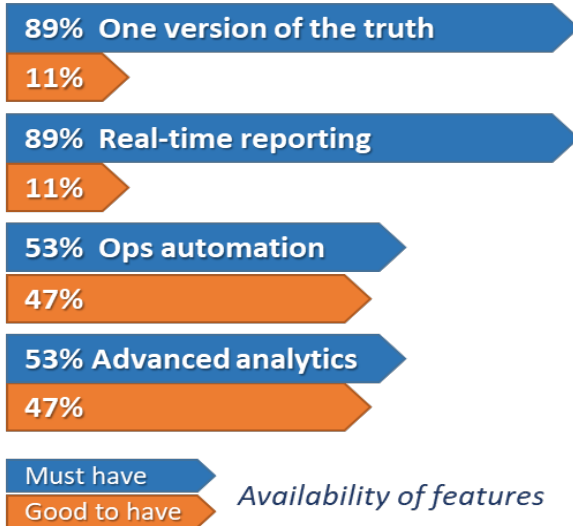
SCM digitization should lead to...

1 Data-driven decisions

2 Enhanced customer service

3 Reduced SC costs

4 Increased service speed

Auburn Survey Results/Discussion

Supply Chain Digitization Capabilities

What do you expect from digitization tools?

89%	One version of the truth
11%	

89%	Real-time reporting
11%	

53%	Ops automation
47%	

53%	Advanced analytics
47%	

Must have
Good to have

Availability of features

"Digitization knits together a better end-to-end world in which we are using data with artificial intelligence and predictive analytics capabilities to better manage our processes."

What's Standing in the Way?

People/skills deficits	41%
Data quality/lack of data	34%
COVID-related uncertainty	28%
Rigid technology infrastructure	28%
Fear of change/risk aversion	28%
Lack of investment/digital transformation is viewed as a cost and not an investment	27%
Lack of digital transformation roadmap	27%
Disconnect between IT and the business	19%
Nothing is holding our organization back	19%
No sense of urgency	17%
Cannot prove the business case (ROI)	12%
Lack of executive buy-in	10%

Figures add to more than 100% due to multiple responses.

The Global Language of Business

How Has COVID-19 Influenced Your Supply Chain Digitization Strategy?

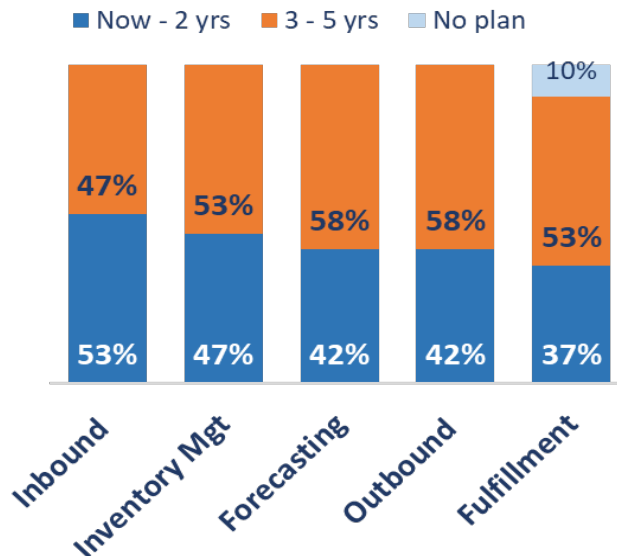|	
Accelerated our supply chain digital transformation	42%
No effect on our supply chain digital transformation	26%
Shifted digitization priorities	17%
Significantly delayed our supply chain digital transformation	8%
Put our transformation plans on hold temporarily	8%

Source: Digital Transformation in Supply Chain Planning: 2021, presented by CSCMP and ToolsGroup

Auburn Survey Results/Discussion

Supply Chain Digitization Timeline

"In pockets of the company, we are digitizing functions. But it's got to be an end-to-end ecosystem and we have a long way to go."

When will you deploy digitization tools?

■ Now - 2 yrs　■ 3 - 5 yrs　□ No plan

	Inbound	Inventory Mgt	Forecasting	Outbound	Fulfillment
No plan					10%
3 - 5 yrs	47%	53%	58%	58%	53%
Now - 2 yrs	53%	47%	42%	42%	37%

"Companies start a digital transformation, but it's never truly over. A true digital transformation is a state of mind for a company to continually evolve and adopt new digital solutions."

Blake Morgan, Forbes.com

Key Takeaways...

❖ **Target's success enabled by all of their fulfillment capabilities – everything is centered around their guest**

❖ **GS1 US documented how retail has pivoted online with higher customer expectations & where product visibility has become the #1 topic of interest**

❖ **Validated by Auburn's survey where 95% have done something toward supply chain digitization**

Questions

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Additional Resources

Resources

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