

Navigating Supply Chain Disruption: An Analysis of AB

Challenges, Risks, and Opportunities



Executive MBA Program Μάθημα:Διοίκηση Παραγωγής Καθηγητής:Δημήτριος Ζήσης



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OVERVIEW

Navigating Supply Chain Disruption: An Analysis of AB

- o Introduction to AB Basilopoulos
- o Supply Chain Overview
- o Disruption Landscape
- o Challenges and Risks
- o Strategic Responses
- o Opportunities Ahead
- o TEAM



Navigating Supply Chain Disruption: An Analysis of AB

INTRODUCTION TO AB BASILOPOULOS

TIMELINE

FOOD MALION STOP&SHOP

GIANT Groupony & Giant

On Albert Heljn

ENA FOOD



The Vassilopoulos brothers, Gerasimos and Charalambos, buy a small grocery store at 29 Voulis Street. They turn it into a grocery store. This store, with the famous sign "Vasilopoulos Brothers", will mark the beginning of a journey.

The company AB Vassilopoulos Ltd. is founded, and the first self-service store opens in Paleo Faliro. There, the slogan «Και του πουλιού το γάλα" will be used for the first time, which will become synonymous with the brand.

The company's first store is inaugurated in Faros

Psychiko, one of the most modern in Europe

AB has been established as the most innovative Supe Market chain in Greece . Until 1991 The company is listed on the Stock Exchange and in the same year the MEGA HELLINIKOU store opens, which is awarded in 1991 by the INTERNATIONAL RETAIL TRADE ORGANIZATION (A.I.D.A.) as the best and most complete store in Europe. Also, the first privately

me Give our Best, to make a A Difference in People's Lives*

				10
1939	As part of its development program, AB is advancing its collaboration with the large Belgian retail company DELHAIZE, which it has been a part of since July 1992.	1992	AB is acquiring the discount chain PLUS HELLAS, acquiring 29 retail stores and a state-of-the-art warehouse in Sindos. Thus, it is significantly strengthening its presence in Northern Greece. Ov 2009 AB acquired the KORYFI S.A. chain. It also inaugurates new fresh and perishable food warehouses in	2008-9
1967	AB is the first Super Market chain to replace conventional cash registers with scanning machines. It is also moving forward with the creation of a range of private label products and is	1994-95	Inofyta, Viotia, in brand new and state-of-the-art facilities, with the aim of centralizing all its fresh and perishable products.	
	opening a modern storage and distribution center in Mandra, Attica, covering an area of 89,000 sq m.		The company's development and expansion activities continue, despite the difficult economic situation in the country, and it opens 65 new corporate stores while also	2011- 15
1970	AB's organic expansion continues with the creation of new stores in Central Greece, the Peloponnese and Macedonia. On 2000, AB acquired the companies TROFO and ENA Cash &		renovates 100 of the old stores In 2016, AB Vassilopoulos became a member of the Ahold	
	Carry, thus creating the second largest chain in Greek retail. Since 2002, the franchising system has been introduced, with AB's franchise network being integrated into the organic growth of the company and expanding throughout Greece at a rapid pace.	1996- 2003	Delhaize Group. At the same time, it continued to expand its network with 36 renovations and 32 new stores. AB is investing dynamically in the Franchise network and in strengthening entrepreneurship with the new proposal for AB Shop & Go	2016- 17
1971-91				
	AB is expanding its range, especially private label products, and improving its quality-price ratio by adjusting prices for 700 basic category codes. With social responsibility remaining a		AB Vasilopoulos further developed its electronic store, AB E-shop. The new replenishment and distribution center for	2017-

Company Overview - AB Basilopoulos

Industry, Market Position, and Size



Industry: Retail, specifically food and grocery retail



Market Position: One of the top three supermarket chains in Greece. Known for its quality products, customer service, and operational excellence



Operates under multiple store formats: AB Basilopoulos, AB City, AB Shop & Go, AB Food Market



Size (as of recent years):Over 500 stores across Greece More than 14,000 employees

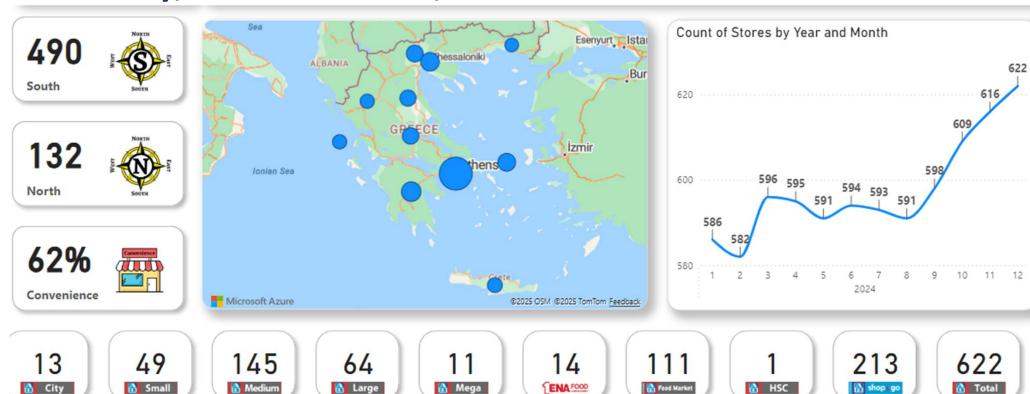


Part of a multinational retail group with global sourcing and logistics capabilities





Industry, Market Position, and Size



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Company Overview – AB Basilopoulos

Role in Greek & European Retail



Leader in quality, reliability, and innovation

Supports food security & crisis response

Committed to sustainability & CSR

Benefits from Ahold Delhaize's international scale Access to global logistics, digital tools, and best practices





Navigating Supply Chain Disruption: An Analysis of AB

Supply Chain Overview

supply chain







Sourcing

- Mix of domestic and international suppliers
- Heavy focus on local Greek producers for fresh food (dairy, meat,
- Imports for non-local products (e.g., packaged goods, exotic fruits, beverages) via Ahold Delhaize's global procurement system

Logistics

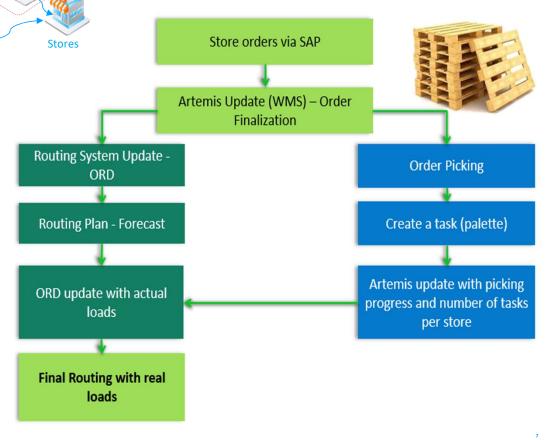
- Coordinated centrally through regional distribution centers (DCs)
- Operates an advanced transportation planning system
- Includes third-party logistics partners (3PLs) and in-house fleet for last-mile delivery

Warehousing

- Multiple strategically located distribution centers in Greece
- Specialized facilities for cold storage, dry goods, and frozen products
- Equipped with automated systems for inventory tracking, FIFO, and replenishment

Distribution

- Serves 500+ stores across urban and rural areas
- Tailored delivery schedules depending on store format (e.g., AB City stores get smaller, more frequent deliveries)
- Ensures store-level inventory accuracy using centralized IT systems



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WHs Network & Load Profile

13 Network & Load Profile





Mandra

Established 199640k sq.mtDry food

Magoula

Established201620k sq.mtDry non food

Inofyta





Established 200835k sq.mtDry, CC, FR,

F&V SF Navigating Supply Chain Disruption: An Analysis of AB

What:



DO to Stores/ Votable per DO							
Туре	%	Annual cases (k cases)	AB	%	FR	%	
Mandra	39%	35.099	25.518	73%	9.581	27%	
Magoula	13%	11.967	9.813	82%	2.154	18%	
Inofyta	34%	30.929	24.921	81%	6.007	19%	
Sindos	14%	12.913	11.116	86%	1.797	14%	
	100%	90.908	71.368	79%	19.539	21%	

DC to Stores/Volume per Product Type

DC to Stores/Volume per DC

Туре	%	Annual cases (k cases)	АВ	%	FR	%
Dry	59,3%	53.912	41.103	76%	12.809	24%
CC	16,9%	15.365	12.406	81%	2.959	19%
F&V	15,6%	14.138	11.497	81%	2.641	19%
S.Fresh	5,3%	4.814	4.128	86%	685	14%
		2.679				
	100%	90.908	71.368	79%	19.539	21%

How:

Labor (May '25)

-AB: 765 -3PL: ≈766

Shifts

-Dry, CC, FR:

2-3 depending on WH, 6-7d/wk

-F&V, SF:

1 extended shift (12h), 6d/wk

Picking method

- Dry, CC, FR: By Store – pallet, case, pc

-F&V, SF: By Line

Technology:

-WMS Artemis

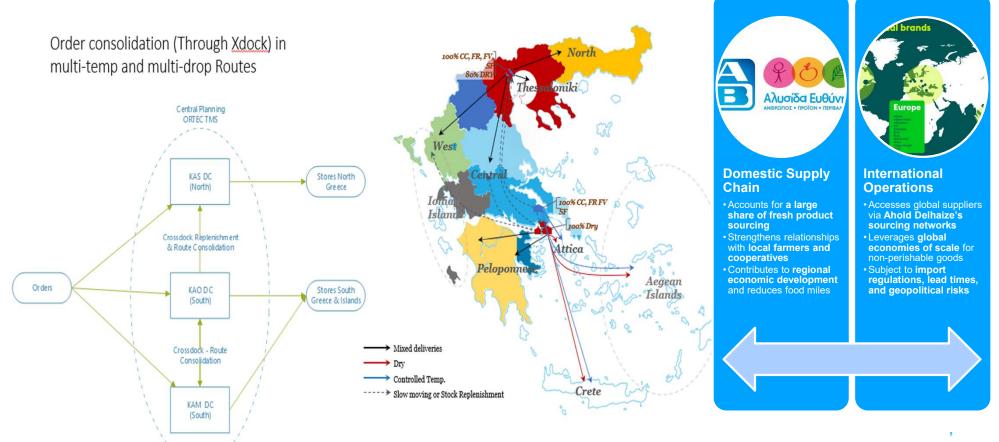
-Voice picking

- Radio shuttle (high density storage)

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Distribution review



How the Supply Chain Functioned Pre-Disruption

Demand 62 pieces

Presentation stock

Safety stock

Confidence Level
Variance of the fam

O pieces

Open orders

23 pieces

Forecast for "tomorrow"

24 pieces

Stock at store "tomorrow"
(Stock of today 47 – fcst for today 23)

1. Demand calculation

2. Order calculation



- Well-coordinated supply chain through regional distribution centers
- Reliable inventory replenishment using demand forecasting models

Highly Efficient and Centralized



- Long-term partnerships with local Greek farmers and established global vendors
- Steady and predictable lead times

Stable Supplier Relationships



- Limited excess inventory to control costs
- Frequent deliveries to optimize shelf freshness and store space

Just-in-Time (JIT) Practices



- Products consistently in stock
- Strong emphasis on quality control and freshness, especially for perishables

High Customer Satisfaction



- Integrated ERP and logistics systems via Ahold Delhaize
- Strong real-time visibility over stock levels and delivery schedules

Technology & Integration







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Important KPI's



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Global & Regional Disruption Drivers

2022

2024

2021

2023

Geopolitical Tensions

- ❖ War in Ukraine → energy price surges, fuel cost inflation
- ❖ Sanctions, export restrictions → limited availability of key goods (e.g., grains, oils)

Inflation & Cost Surges

- Sharp increase in transportation, raw material, and packaging costs
- Passed through to food prices, squeezing retailer margins

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Covid 19 Pandemic

- ❖ Sudden lockdowns → labor shortages, closed borders, halted logistics
- ❖ Panic buying → demand spikes
- Supplier shutdowns across Europe and Asia

Supply Chain Fragmentation

- Container shortages, port congestion, shipping delays
- Reduced reliability of international suppliers

Specific Impact on AB Basilopoulos

Disruptions in imported product availability

Delays in restocking fast-moving consumer goods

Increased operational costs (fuel, electricity, logistics)

Strained relationships with international suppliers







Operational Disruptions



Product Shortages

- Stockouts of key imported goods (e.g., grains, canned foods, international brands)
- Irregular deliveries leading to empty shelves, especially in rural stores

Supply Delays

- Delivery timelines from both local and global suppliers became unreliable
- Disrupted planning cycles and forced emergency reordering

Warehouse Pressure

- Surges in demand strained storage capacity
- Cold chain logistics became more expensive and harder to maintain

Financial and Cost-Related Impacts



Rising Logistics Costs

- Higher fuel prices and external transportation costs
- More frequent, smaller deliveries increased per-unit expenses

Margin Pressure

- AB attempted to absorb cost increases to retain customer loyalty
- Temporary promotions paused or scaled back to maintain profitability

Internal Strain



Workforce Shortages

- Absenteeism due to illness/quarantine
- Difficulty hiring warehouse and logistics personnel during peak disruption periods

Increased Customer Complaints

- Dissatisfaction due to unavailability of products and substitutions
- Damage to reputation and customer trust in the short term



Supplier

Raw Materials



Manufacturer

Distributer





Customer

Retailer



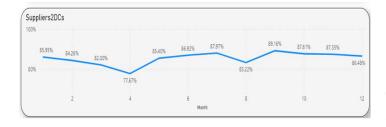
Navigating Supply Chain Discuption: An A



Operational Disruptions



2020 Service Level –Supplier to DC



Financial and Cost-Related Impacts



2020 vs 2021 & 2020 vs 2023





Total km 390K







119K

Pallets 198K

2020 vs 2021 & 2020 vs 2023



136M

1.35 €

0.85€









Internal Strain



	Average uplift 19
	vs 20 weeks 11-12-45
H-HEALTH	96%
D-DAIRY INGREDIENTS	85%
X-FIRE MAKING PRODUCTS	61%
N-PAPER	54%
N-DETERGENTS, CLEANING & CHEMICALS	51%
H-BEAUTY	46%
G-GROCERY	44%
N-HOUSEHOLDS - GROCERY	39%
X-HOUSEHOLD ACCESSORIES	38%
D-CREAM	37%
D-FATS	36%
F-FROZEN VEGETABLES AND FRUITS	34%
M-PROCESSED MEAT	33%
F-FROZEN DELI & BAKERY	32%
D-CHEESE	28%
Grand Total	27%



Supplier

Distributer



Customer

Raw Materials



Manufacturer



Retailer



Risk Analysis - Why it was difficult to fix it

Inventory Management Instability

Difficulty predicting demand due to volatile consumer behavior Inability to maintain optimal stock levels without overstocking Shortages of high-turnover items and excess of low-demand products



Key Challenges

Logistics & Transportation Bottlenecks

Overburdened distribution centers due to inconsistent supply flow

Increased lead times, especially for international shipments

Inflexibility in last-mile delivery due to limited fleet scalability



Supplier Reliability & Fragmentation

Local and global suppliers affected by raw material and labor shortages Reduced availability of imported goods due to geopolitical and transport issues Lack of alternatives for some specialized

product lines

Cost Volatility

Sudden spikes in input costs (fuel, packaging, labor)

Difficulty forecasting and budgeting due to rapidly changing prices

Margins under pressure without compromising pricing for consumers

Workforce and Operational Constraints

Staff shortages in logistics and retail roles
Rising wage expectations in a tight labor market
Training gaps for using digital systems or adapting
to new supply models

Risk Analysis



Risk Type	Likelihood	Impact	Priority
Supply Disruption	High	High	Critical
Cost Inflation	High	Medium	High
Labor Shortage	Medium	High	High
Logistics Delays	High	Medium	High
Reputational Loss	Medium	High	Medium



- Disruption in raw material availability (e.g., grains, oils, packaging)
- Supplier bankruptcy or inability to meet demand
- Geopolitical instability (e.g., Ukraine war) affecting trade routes

Supply Risks



- Port congestion, shipping delays, and container shortages
- •Inflexible transportation networks
- Fuel price volatility impacting delivery cost

Logistics Risks



- •Warehouse inefficiencies due to stock surges or delays
- •Labor shortages or strikes in logistics or retail
- •Inadequate digital readiness to manage disruptions in real time

Operational Risks



- Rising input and operational costs reducing profit margins
- Currency exchange fluctuations for international procurement
- Reduced consumer spending in a high-inflation environment

Financial Risks



- Product unavailability damaging brand trust
- Declining customer satisfaction due to inconsistency or price increases
- •Social media amplifying negative consumer feedback

Reputation Risks











1Supplier Diversification

Reduced reliance on a few international suppliers

Increased partnerships with **local producers** to shorten the supply chain

Broadened supplier network for critical products (e.g., grains, packaging)

2Inventory Strategy Adjustments

Shifted away from strict Just-in-Time (JIT) to Justin-Case (JIC) in key product categories

Built up buffer stock for high-demand items

Dynamic safety stock levels based on volatility and lead times

Logistics Flexibility

Collaborated with thirdparty logistics providers (3PLs) to boost delivery capacity

Optimized route planning and delivery schedules to reduce costs

Introduced more frequent deliveries for urban "AB City" stores

4Digital Transformation

Upgraded ERP and inventory management systems for better real-time tracking

Enhanced demand forecasting using machine learning models (via Ahold Delhaize infrastructure)

Implemented store-level visibility tools for faster decision-making

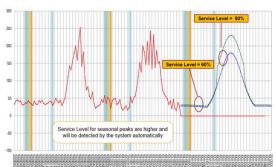


Supplier
Diversification





2 Inventory Strategy Adjustments

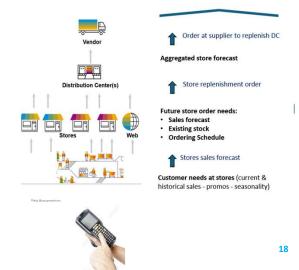


3
Logistics Flexibility





4Digital
Transformation





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Strengthened Local Sourcing & CSR

Increased sourcing from Greek farmers and cooperatives

Promoted "Buy Local" campaigns to boost resilience and sustainability

Invested in food waste reduction and energy-efficient warehousing

6

Scenario Planning & Risk Monitoring

Developed scenariobased forecasting models to anticipate potential disruption

Established a risk monitoring framework across the supply chain

Conducted supplier risk assessments and regular reviews of critical dependencies 7 Omnichannel Integration & E-commerce Fulfillment

Strengthened online grocery platform for home delivery and click & collect

Reorganized supply chain to support online order fulfillment

Introduced microfulfillment centers (MFCs) in urban areas for faster delivery 8

Strategic Collaboration with Industry & Government

Participated in joint initiatives with suppliers and logistics partners to coordinate emergency responses

Worked with Greek regulatory authorities to ensure food supply continuity

Engaged in cross-sector knowledge sharing through Ahold Delhaize's European network



Strengthened Local Sourcing & CSR



Scenario Planning & Risk Monitoring



Benefits & Disadvantages + 10% Less CO2 + 60% Less NOx

99% Less PM (Microparticles) + 50-75% Noise reduction (vs Diesel) + 19% Fuel saving (vs Diesel 2021 price

Only one Manufacturer (IVECO) Limited CNG stations (6) Extremely limited CO₂ stations (1) No tax benefit or government grant

Other Data 2021

Routes: 338 Working Days: 233 (1,45 routes per day) Consumption: 26Kg/100Km

7 Omnichannel Integration & E-commerce **Fulfillment**



AB fleet - Green Truck

- Type: Rigid Model : IVECO Eurocargo ATP/FRC Certified
- Capacity: 15 EURO pallets Cooling: Thermoking CT10 Spi Standard: EURO 6





- Telemetry (driving style, tempe



Strategic Collaboration with Industry & Government





Advanced Demand Forecasting

- Adopted machine learning models for more accurate demand predictions
- Reduced stockouts and overstocking by analyzing historical and real-time sales data
- Allowed for adaptive inventory management during volatile periods

Automated Replenishment

- Introduced algorithms to trigger auto-replenishment for fast-moving items
- Reduced manual order errors and improved store-level availability
- Integrated with POS data to dynamically adjust orders based on sales trends

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Real-Time Inventory & Visibility Systems

- Implemented upgraded ERP and WMS (Warehouse Management Systems)
- Enabled real-time tracking of inventory across warehouses and stores
- Improved visibility into inbound shipments, allowing for better scheduling

IoT & Smart Logistics

- Piloted IoT sensors in cold chain logistics for temperature monitoring
- Improved product quality assurance for perishable goods during transport
- Monitored delivery fleet status for real-time ETA tracking

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From Disruption to Transformation

- 1. Resilient Supply Chain as a Competitive Advantage
- Building a more agile and localized supply chain creates differentiation
- Faster recovery and response time = better customer experience during future crises
- Improved forecasting and replenishment leads to greater efficiency and cost control
- 2. Growth in E-commerce & Omnichannel Logistics
- Rising customer demand for online grocery shopping and click & collect
- Opportunity to expand digital sales channels with greater fulfillment precision
- · Invest in dark stores or hybrid retail models for better scalability
- 3. Sustainability & Local Sourcing
- Consumers increasingly favor locally produced and ethically sourced goods
- Opportunity to strengthen AB's local supplier network, supporting Greek agriculture
- Reduced carbon footprint through shorter transport chains and greener logistics
- 4. Data-Driven Decision Making
- Leveraging AI, predictive analytics, and real-time dashboards to enhance agility
- Better planning = lower waste, higher stock accuracy, and cost efficiency
- Enables personalized customer engagement through deeper insights
- 5. Strategic Partnerships & Ecosystem Expansion
- Opportunity to co-innovate with suppliers, tech firms, and logistics startups
- Participation in European supply chain forums or initiatives
- Potential to shape industry-wide standards for future resilience





THE TEAM

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Γεώργιος Σπυρόπουλος



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Σωκράτης Ζαβάκος



A

Γιώργος Δεληγιάννης



Γιάννης Παναγούλης



Εύη Αγγελίδου





Thank you