



Analysis of Value-added Products and Market Opportunities in the Seafood Industry

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1. Definition and Types of Value-Added Seafood Products (1)

Products that undergo processing, reformulation, or functional enhancement beyond basic harvesting/filleting to:

1. Extend shelf life (e.g., freezing, canning).
2. Improve convenience (e.g., ready-to-eat meals).
3. Enhance nutritional/functional properties (e.g., omega-3 fortification).
4. Utilize byproducts (e.g., fish collagen from skins).
5. Command premium pricing via certifications (e.g., ASC/MSC) or artisanal branding.



1. Definition and Types of Value-Added Seafood Products (2)

Types of Value-Added Seafood Products:

- Processed & Convenience Products

Category	Examples	Market Driver
Ready-to-Eat	Pre-cooked shrimp, sushi kits	Urban lifestyles (+12% CAGR)
Ready-to-Cook	Marinated salmon, stuffed mussels	Home cooking trends
Frozen Entrées	Breaded fish fillets, seafood paella	Shelf stability & global trade

- Nutritionally Enhanced Products

Type	Examples	Benefit
Fortified Foods	Omega-3-enriched fish oils, protein bars	Health-conscious consumers
Functional Foods	Collagen supplements from fish scales	Beauty/wellness markets
Low-Sodium/Low-Fat	Reduced-salt canned tuna	Heart-healthy positioning



1. Definition and Types of Value-Added Seafood Products (3)

Types of Value-Added Seafood Products:

- Byproducts Valorization

Source	Value-Added Product	Application
Fish Skins	Leather (e.g., TômTex’s plant-based leather)	Fashion, accessories
Bones/Heads	Fish broth, calcium supplements	Gourmet soups, nutraceuticals
Shells/Scales	Chitosan (antimicrobial agent)	Cosmetics, water purification

- Premium & Artisanal Products

Category	Examples	Niche Appeal
Smoked/Cured	Oak-smoked salmon, gravlax	Gourmet, traditional methods
Fermented	Fish sauce (nuoc mam), shrimp paste	Ethnic cuisine demand
Dry-Aged	Dry-aged tuna, salt-cured cod	Luxury dining segments



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2. Market Opportunities and Consumer Trends⁽¹⁾

The value-added seafood sector is transforming rapidly, driven by shifting consumer demands, technological innovation, and sustainability imperatives.

a. Market Growth Drivers:

- Global Expansion: The seafood market is projected to reach \$387B by 2026 (CAGR: 10.2%), fueled by health consciousness, rising disposable incomes, and aquaculture innovation.
- Premiumization: Consumers pay 5–15% premiums for products like dry-aged fish, MSC-certified tuna, and ready-to-eat gourmet meals.
- E-commerce Surge: Online seafood sales grew 12% YoY, with meal kits and DTC models (e.g., Trident Seafood's salmon boxes) gaining traction [\[1\]](#).

b. Dominant Consumer Trends

- Convenience Revolution
 - Ready-to-Eat/Cook Products: Pre-marinated fillets, microwaveable shrimp meals, and seafood salads dominate 35% of the market. Sales of frozen entrées (e.g., salmon burgers) rose 12% due to minimal prep time.
 - Snackification: Seafood jerky and smoked fish bites cater to health-focused, on-the-go consumers.
- Health & Sustainability
 - Nutritional Demand: 65% of millennials prioritize omega-3-rich options (e.g., wild Alaska pollock) for lean protein.
 - Eco-Certifications: 57% of consumers choose MSC/ASC-labeled products; sustainable claims boost sales by 5–15% [\[2\]](#).



2. Market Opportunities and Consumer Trends(2)

c. Regional Market Opportunities

Region	Key Trends	Growth Avenues
North America	- Demand for traceable sushi-grade salmon	Blockchain-tracked tuna; meal kits
	- Plant-based alternatives (e.g., algae tuna)	
Asia-Pacific	- Live seafood (crabs, groupers) in urban centers	Marinated products; halal certifications
	- Ready-to-eat Thai meals (+11% exports)	
Europe	- ASC-certified smoked salmon	Luxury caviar; circular economy models
	- Fermented seafood (fish sauce)	

d. Generational Shifts in Consumption

Consumer Group	Key Behaviors	Impact on Value-Added Products
Millennials/Gen Z	- Eat seafood 2× more than Boomers	Demand for skinless fillets; TikTok-inspired meal kits
	- Prioritize convenience (e.g., Emily Mariko’s salmon bowls)	
Baby Boomers	- Avoid whole fish (repelled by eyes/shells)	Niche for premium frozen platters
	- Prefer traditional formats (crab boils)	
	- Occasional consumption	

2. Market Opportunities and Consumer Trends⁽³⁾

e. Challenges & Mitigation

- **Supply Chain Fragility:** Climate-related collapses (e.g., Alaska snow crab) require species diversification (e.g., Dungeness crab).
- **Economic Barriers:** High certification costs exclude small fishers; group ASC/MSC certifications lower fees.
- **Consumer Skepticism:** 40% distrust frozen seafood quality; retailer demos on nutrient retention can shift perceptions.

f. Future Outlook & Strategy

- **Capture Gen Z via Digital Channels:** Partner with influencers (e.g., TikTok chefs) to promote ready-to-eat poke bowls and tinned fish.
- **Expand Circular Economies:** Scale fish waste-to-biofuels projects; align with blue carbon initiatives (mangrove conservation).
- **Regionalize Product Development:** Introduce halal/kosher lines in Asia; fermented fish sauce in Europe.
- **Policy Advocacy:** Lobby for subsidies to offset RAS setup costs (\$10M–\$15M) for smallholders



3. Economic Benefits of Value Addition (1)

The economic benefits of value addition in seafood stem from transforming raw products into higher-value goods through processing, innovation, and market alignment. This enhances revenue, creates jobs, reduces waste, and strengthens trade competitiveness.

1. Enhanced Revenue Streams & Profitability
2. Employment and Rural Development
3. Trade Competitiveness & Import Substitution
4. Resource Efficiency & Waste Reduction
5. Market Expansion & Consumer Trends



3. Economic Benefits of Value Addition(2)

a. Enhanced Revenue Streams & Profitability

- **Premium Pricing:** Value-added products (e.g., ready-to-eat meals, marinated fillets, fish burgers) command 5–15% higher prices than raw seafood due to convenience and quality.
- **Export Growth:** Vietnam increased seafood exports to \$8.4 billion (2020) by diversifying into processed shrimp and pangasius products, leveraging trade agreements like the EVFTA (European Union – Vietnam Free Trade Agreement).
- **Waste Valorization:** By converting trimmings into fish oil, collagen, or leather (e.g., TômTex), producers unlock new revenue streams from previously discarded materials [3].

Product Category	Market Share	Revenue Boost	Key Examples
Ready-to-Eat Meals	35%	10–12% price premium	Microwaveable fish curry, sushi kits
Byproducts	<5%	20–30% cost recovery	Fish leather, chitosan supplements
Certified Sustainable	25%	5–15% export premium	MSC-certified tuna, ASC shrimp



3. Economic Benefits of Value Addition⁽³⁾

b. Employment and Rural Development

- **Skill-Based Jobs:** Processing facilities create roles in filleting, packaging, quality control, and R&D. Vietnam's fishery sector supports millions of rural workers through small-scale processing units.
- **Gender Inclusivity:** Women-led seaweed cooperatives in Indonesia boosted incomes by 40% while promoting ecosystem restoration.
- **Economic Multipliers:** U.S. aquaculture generates \$4 billion annually and supports 22,000+ jobs, with downstream impacts in logistics and retail [4].

c. Trade Competitiveness & Import Substitution

- **Reduced Import Dependency:**
 - India uses undervalued species (e.g., carp) for fish powder and surimi, cutting reliance on expensive imports.
 - U.S. aquaculture meets 20% of domestic demand, reducing a \$17.3 billion seafood trade deficit [4].
- **Export Diversification:** Thailand's shrimp farms increased yields by 25% using insect-based feeds, capturing EU and North American markets.



3. Economic Benefits of Value Addition⁽⁴⁾

d. Resource Efficiency & Waste Reduction

- **Circular Economy Models:**
 - Integrated Multi-Trophic Aquaculture (IMTA) recycles nutrients (e.g., fish-seaweed systems), reducing feed costs by 30%.
 - Fish processing byproducts (scales, bones) supply collagen for nutraceuticals (\$4.6B market).
- **Cold Chain Innovations:** Solar-powered refrigeration cuts spoilage losses by 20% in developing regions [3].

e. Market Expansion & Consumer Trends

- **Ethnic & Premium Niches:**
 - Fermented fish sauce (nuoc mam) exports from Vietnam thrive in EU markets post-EVFTA.
 - Luxury products (dry-aged tuna, caviar) attract high-income consumers.
- **Convenience-Driven Demand:** Frozen entrées and snackable seafood (e.g., fish jerky) grew 12% YoY in the U.S., targeting millennials [3].



4. Global and Niche Market Expansion

The value-added seafood sector is transforming rapidly, driven by health consciousness, sustainability imperatives, and technological innovation. With the global seafood market projected to reach \$837.2 billion by 2032 (CAGR: 10.14%), strategic expansion into global and niche markets offers unprecedented opportunities.

1. Global Market Dynamics & Growth Drivers
2. Consumer Trends Reshaping Demand
3. High-Potential Global Markets
4. Niche Market Opportunities
5. Expansion Challenges & Mitigation
6. Strategic Pathways for Success



Global Seafood Market

OPPORTUNITIES AND FORECAST,
2020-2027

Global Seafood Market is
expected to reach
\$193,913.6 million by 2027.

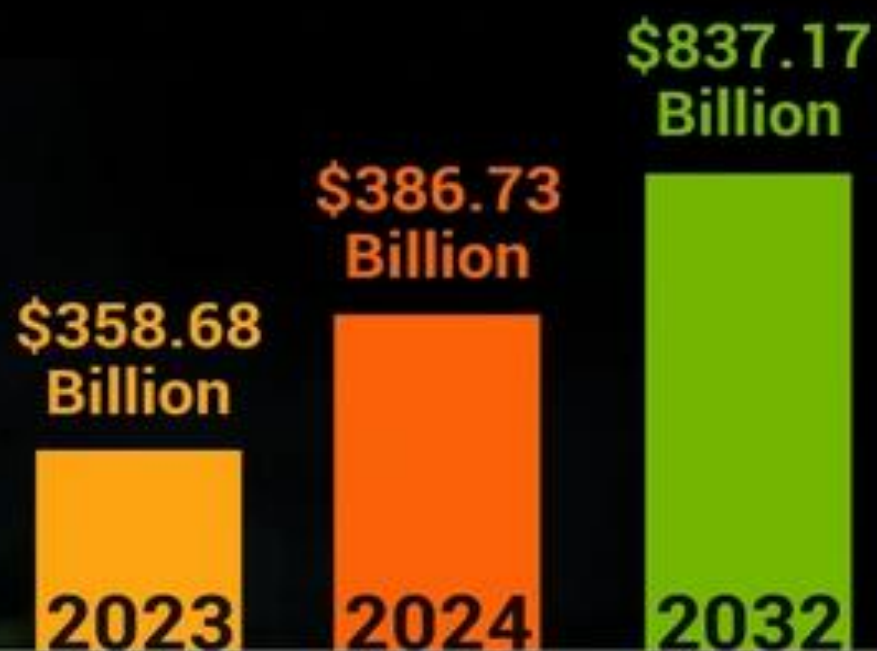
Growing at a **CAGR of 2.5%**
(2020-2027)





SEAFOOD MARKET

Seafood Market to grow at **10.14% CAGR** during 2024-2032



BY DISTRIBUTION CHANNEL

Supermarkets/Hypermarkets
Convenience Stores & Specialty Stores
Online Sales Channel | Others

JAPAN, BY TYPE

Fish : 48.71%

Crustaceans | Molluscs | Others



ASIA PACIFIC

\$144.69 Billion
2022

\$156.6 Billion
2023



Europe | Middle East & Africa
South America | Asia Pacific

TRENDS

Market Value to Rise Due to Increase in Purchase of Premium Products



DRIVERS

Market Share to Rise Due to Increasing Demand for Processed/Ready-to-Cook Seafoods



BY FORM

Fresh | Processed

Market Growth to be Driven by Rising Inclination Toward Adoption of Pescetarianism

INDUSTRY DEVELOPMENT

Nueva Pescanova, announced the submission of their proposal of building a new commercial octopus, in Puerto Las Palmas, Spain. The firm has been intensively working toward developing a method of octopus farming, & lately, announced its successful raising, hatching, & incubation of *O. vulgaris* octopus' five generations in a test facility.

a . Global Market Dynamics & Growth Drivers

- **Explosive Market Growth:**
 - The global seafood market will surge from \$358.7 billion (2023) to \$837.2 billion by 2032, fueled by rising disposable incomes and pescetarian diets. Asia-Pacific dominates (43.7% share), followed by Europe and North America.
 - Value-added segments (ready-to-eat meals, premium products) grow fastest: Frozen seafood holds 42.5% market share, while processed seafood accelerates at 2% CAGR [2].
- **Trade Imbalances as Catalyst:** The U.S. faces a \$17.3 billion seafood trade deficit, with 65–90% of consumption reliant on imports. This gap creates opportunities for domestic value-added production (e.g., traceable salmon burgers, ASC-certified shrimp).
- **Aquaculture Dominance:** Aquaculture supplies >50% of global seafood, rising to 47% of production in 2020. Innovations like Recirculating Aquaculture Systems (RAS) boost efficiency (99% water reuse).



Global Seafood Market Projections (2024–2032)

Region	Market Size (2032)	Key Growth Driver
Asia-Pacific	\$365.8B	Urbanization, health trends
North America	\$112.3B	E-commerce, premiumization
Europe	\$142.5B	Sustainability certifications (ASC/MSC)
Africa	Emerging	Aquaculture expansion (e.g., Nigeria)

b. Consumer Trends Reshaping Demand

- **Health & Convenience Convergence:**
 - 65% of millennials prioritize omega-3-rich seafood (e.g., wild Alaska pollock) for cardiovascular benefits. Ready-to-eat meals (e.g., sushi kits, microwavable shrimp) grew 12% YoY.
 - Gen Z-driven niches: Viral "tinned fish date nights" (TikTok) revived canned seafood sales (+15%), while Emily Mariko's salmon bowls exemplify demand for 5-minute gourmet meals.
- **Sustainability as Non-Negotiable:** 57% of consumers pay 5–15% premiums for MSC/ASC-certified products. Blockchain traceability (e.g., IBM Food Trust) combats IUU fishing and builds trust.
- **Ethnic & Premium Preferences:**
 - Asia-Pacific: Live crabs/groupers in Vietnam; ready-to-eat Thai meals (+11% exports).
 - Europe: Dry-aged tuna, sturgeon caviar, and fermented fish sauce (*nuoc mam*)

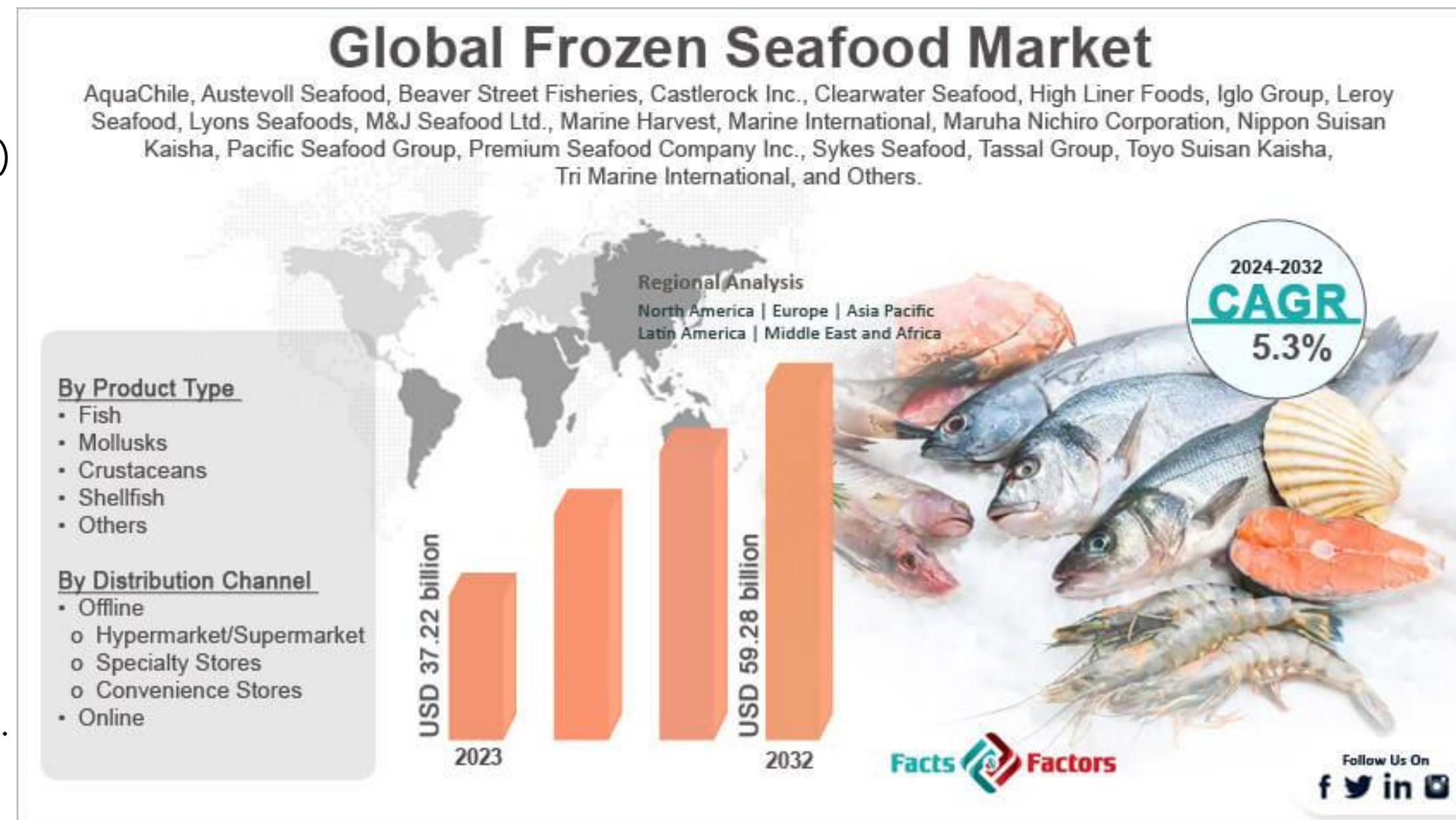


'Tinned fish date night' - washingtonpost.com



c . High-Potential Global Markets

- **Asia-Pacific:**
 - China: Seafood market exceeds \$100B, driven by luxury imports (lobster, salmon) and e-commerce. Halal certifications unlock Muslim-majority niches.
 - Thailand: Shrimp farms using insect-based feeds increased yields by 25%, capturing EU markets.
- **North America:** Online DTC models: E-commerce seafood sales grew 12% (e.g., Trident Seafood's salmon boxes). Plant-based alternatives (e.g., algae tuna) target flexitarians.
- **Africa:** Nigeria: Leads with 70% market share via aquaculture (e.g., catfish, tilapia). Floodplain farming lifted 2 million from poverty [5].



d . Niche Market Opportunities

- **Byproduct Valorization:** Fish leather (TômTex's shrimp-shell material) and collagen supplements convert waste into high-margin products (\$4.6B nutraceutical market).
- **Functional Seafood:** Omega-3 fortified products reach \$10.6B by 2034 (CAGR: 5.4%). Examples: Protein-rich fish jerky, vitamin-enriched shrimp.
- **Blue Carbon Initiatives:** Vietnam's mangrove-shrimp farms generate carbon credits while increasing yields 30%.
- **Cell-Cultured & Hybrid Products:** Lab-grown shrimp (Shiok Meats) and plant-based "tuna" cater to eco-conscious consumers, reducing wild-catch pressure [6].

e . Expansion Challenges & Mitigation

- **Economic Barriers:** High RAS setup costs (\$10M–\$15M) exclude smallholders. Solution: Group ASC/MSC certifications (e.g., Aceh fishers) and EU Horizon 2020 grants.
- **Supply Chain Fragility:** Climate change disrupts species (e.g., Alaska snow crab collapse). Solution: Diversify species (e.g., Dungeness crab) and adopt solar-powered cold chains.
 - **Regulatory Hurdles:** Tariffs (e.g., U.S.–China trade war) inflate prices. Solution: Leverage FTAs (e.g., EVFTA boosted Vietnam's shrimp exports 25%).

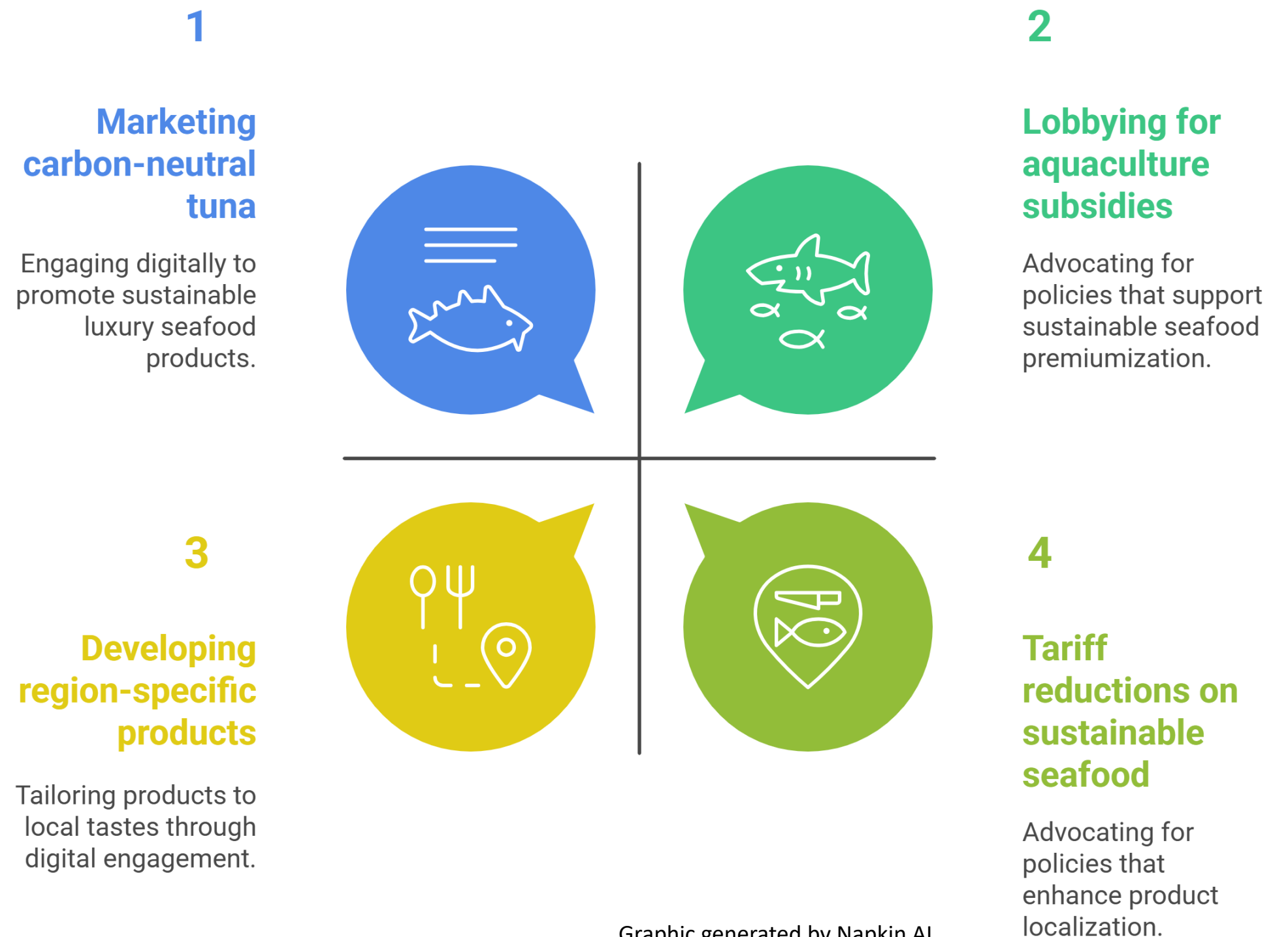


f. Strategic Pathways for Success

- **Digital-First Engagement:** Partner with influencers (e.g., TikTok chefs) to promote ready-to-eat poke bowls. Use blockchain for traceability (e.g., Pacific tuna fisheries).
- **Product Localization:** Develop region-specific products: Fermented fish sauce for Europe, spicy marinated shrimp for Latin America.
- **Sustainable Premiumization:** Market dry-aged wild fish or bluefin tuna sashimi with "carbon-neutral" certifications to luxury segments.
- **Policy Advocacy:** Lobby for aquaculture subsidies (e.g., U.S. JOBS Act) and tariff reductions on sustainable seafood.



Strategic Initiatives for Seafood Market Expansion



Further Reading

01

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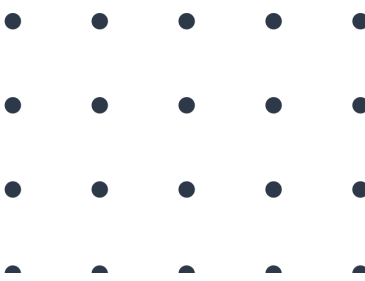
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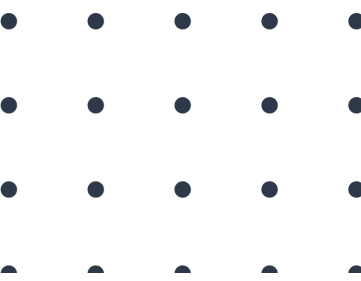
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THANK YOU

Farid K Muzaki / ITS

 +6281217762277

 faridmuzaki@gmail.com
rm_faridkm@bio.its.ac.id



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