PMQ (Performance Measurement Questionnaire), EVA (Economic Value Added), and CVA (Customer Value Analysis) for cold chain supply chains (dairy, meat, frozen food, bakery, beverages), mapped to ISO 22000:2018 and FSSC 22000 clause relevance.

Dimension	PMQ (Performance Measurement Questionnaire)	EVA (Economic Value Added)	CVA (Customer Value Analysis)	ISO 22000:2018 / FSSC 22000 Link
Purpose	Evaluate internal process alignment, ownership, and performance management	Assess financial performance beyond accounting profit	Assess customer perception vs actual delivery on value	Clause 5.2, 6.2, 9.1.2, 10.3
Primary Users	QA, Operations, FSMS Managers, Audit Teams	Finance, Strategy, Investors	Sales, Marketing, QA, Customer Service	5.3, 7.1.5
Focus Area in Cold Chain	Process performance (e.g., reefer uptime, traceability, SOP adherence)	Cost control, asset utilization, returns from cold chain investments (e.g., reefer fleet, IoT)	How end customers perceive freshness, reliability, safety, and value of chilled products	8.5.4.2, 9.1.2
Key Metrics	KPI definitions, ownership, monitoring, training, and corrective	Net Operating Profit After Taxes – Cost of Capital	Customer- perceived value – Cost to deliver that value	9.1.3, 10.2

	action rate			
Format	Questionnaire (subjective + semi- quantitative)	Financial metric (₹ or %)	Survey or VOC-based scoring (1–5 scale)	7.5 (documented info), 7.4 (communica- tion)
When Used	Internal FSMS health checks, before ISO/ FSSC audits	Strategic reviews, investment justifications (e.g., reefer upgrades)	Customer feedback cycles, innovation validation	9.2 (internal audit), 10.3 (improvement)
Example Cold Chain KPI	% on-time delivery with temp compliance, % trained handlers	₹ EVA for cold chain category, ROCE of TMS investment	"Is the cream cheese always delivered chilled & intact?" score = 4.1/5	8.9 (product release), 9.1.2 (feedback)
Use in ISO 22000/FSSC	Supports internal audit, risk assessment, management review inputs	Shows long- term viability of FSMS- related investments	Used in customer satisfaction evaluation, validation of PRP outcomes	9.1, 9.3, FSSC Add. Req. 2.5.1, 2.5.7
Outcome	Heatmap of process gaps and training needs	₹ value created over cost of capital in cold chain ops	Prioritized customer values for cold chain (e.g., freshness > price)	6.1 (risk/ opportunity), 10.3 (continual improvement)