**Risk Management Analysis**

#### **Scenario 1: Hedging Market Risk**

**Risk**: Coffee prices expected to rise due to weather shocks.

**Strategy 1**: Long Feature Contracts

1. Identify coffee futures with appropriate expiry dates
2. Enter long futures contracts to lock in current prices
3. Monitor margin requirements and Profit & Loss (P&L) statement daily.
4. Roll over contracts if needed before expiration

**Advantages**:

1. Direct hedge against rising prices
2. Highly liquid and standardized
3. Transparent pricing via exchanges

**Disadvantages:**

1. Requires margin and daily mark to market
2. No flexibility if price overshoots or stabilizes
3. Can be over-hedged if volume estimates are off

**Strategy 2**: Call Options on Coffee Futures

1. Purchase call options on coffee at strike near current prices.
2. Choose appropriate maturity to match exposure.
3. Monitor implied volatility and time decay.
4. Exercise or sell if coffee prices spike.

**Advantages:**

1. Limited downside (premium paid).
2. Unlimited upside potential.
3. No margin calls.

**Disadvantages:**

1. Premium cost may be high.
2. Time decay (theta) reduces value over time.
3. May expire worthless if prices stay stable.

**Strategy 3:** Long Term Physical Supply Contracts

1. Negotiate long-term fixed-price contracts with suppliers.
2. Build in clauses for weather-based supply disruption.
3. Lock quantities to match forecasted demand.
4. Monitor counterparty risk regularly.

**Advantages**:

1. Secures supply at today's lower cost.
2. Avoids financial instrument complexity.
3. Good for operational planning.

**Disadvantages**:

1. Tied to one supplier; lacks flexibility.
2. Long-term commitment in volatile markets.
3. Potential renegotiation risk if markets shift.

#### **Scenario 2: Credit Risk with a New Supplier**

#### **Risk:** Counterparty risk due to economic instability.

**Strategy 1**: Require Letters of Credit (LC)

1. Ask the supplier to secure a letter of credit from a trusted bank.
2. Structure payment terms around LC activation.
3. Confirm bank ratings and expiry dates.
4. Review LC terms before contract signing.

**Advantages**:

1. Reduces default risk significantly.
2. Bank intermediation provides oversight.
3. Customizable to contract terms.

**Disadvantages:**

1. Administrative and legal costs.
2. May deter small suppliers without access to LC.
3. Adds delays in execution.

**Strategy 2**: Trade Credit Insurance

1. Assess supplier region’s risk via credit insurers.
2. Purchase credit insurance for invoice protection.
3. Include payment terms based on insurance guidelines.
4. File claims in case of payment default.

**Advantages**:

1. Covers non-payment due to economic or political events.
2. Flexible across multiple suppliers.
3. Supports confident contract expansion.

**Disadvantages**:

1. Premiums can be high in volatile markets.
2. Claims processing can be slow or contested.
3. Does not prevent default, only compensates for it.

**Strategy 3:** Use Escrow Payment Structure

1. Set up third-party escrow account for transaction handling.
2. Deposit payment upon shipment confirmation.
3. Release funds only upon verified delivery.
4. Reconcile disputes through escrow contract.

**Advantages**:

1. Lowers trust requirements with new partners.
2. Neutral third party reduces fraud risk.
3. Improves transaction transparency.

**Disadvantages**

1. Slower execution time.
2. Fees for escrow services.
3. Can complicate logistics coordination.

#### **Scenario 3: Operational Risk in Trade Execution**

**Risk:** Increased manual errors and inefficiencies.

**Strategy 1**: Implement Straight-Through Processing (STP)

1. Automate trade order routing from front to back office.
2. Integrate risk checks and trade matching engines.
3. Eliminate manual data entry points.
4. Monitor system performance regularly.

**Advantages**

1. Reduces error rates and operational delays.
2. Increases trade processing speed.
3. Scalable for high-volume trading.

**Disadvantages**

1. High initial tech investment.
2. Requires full system integration.
3. Ongoing maintenance and updates needed

**Strategy 2:** Introduce Trade Execution Checklists

1. Define checklist steps for each trade action.
2. Train teams on mandatory use before confirmation.
3. Embed into workflow software or ticketing system.
4. Review and audit checklist use monthly.

**Advantages**:

1. Improves accountability and compliance.
2. Low-cost and easy to implement.
3. Reduces human errors in standard tasks.

**Disadvantages:**

1. Not foolproof against complex errors.
2. May slow down execution during fast markets.
3. Relies on user discipline.

**Strategy 3:** Role Segregation and Dual Approval

1. Separate trading, booking, and reconciliation roles.
2. Enforce dual-approval before high-value trades.
3. Use audit trails to track who approves what.
4. Review overrides and escalations weekly.

Advantages

1. Prevents fraud and unauthorized trades.
2. Encourages team accountability.
3. Helps meet regulatory best practices.

Disadvantages

1. Slower trade processing.
2. Needs strong governance and staffing.
3. Potential friction between teams.