E-BUSINESS STRATEGIES

PREPARED BY
Group 09

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SCENARIO

In Sri Lanka, farmers often find themselves at a significant disadvantage in the agricultural market, primarily due to the influence and actions of middlemen. These intermediaries act as a bridge between farmers and consumers, but unfortunately, they frequently exploit the farmers' lack of bargaining power. As a result, farmers are often forced to sell their produce at extremely low prices to these middlemen, leaving them with minimal profit or, in some cases, incurring losses. This situation is worsened by the fact that farmers typically have limited access to information about market prices and demand, which further restricts their ability to negotiate a fair deal.

The core of the problem lies in the unfair market dynamics created by the presence of these middlemen. After purchasing the produce at low prices, the middlemen sell the goods to consumers at a much higher price, pocketing the difference as their profit. This price markup can be substantial, making the produce significantly more expensive for the end consumer, while the farmer remains stuck with an inadequate payment for their labor and investment. This not only impacts the financial well-being of farmers but also reduces the overall efficiency and sustainability of the agricultural sector in Sri Lanka.

The negative consequences of this system extend beyond the farmers themselves, as it contributes to a lack of trust in the agricultural supply chain and hinders the overall growth of the economy. The exploitation of farmers by middlemen undermines the potential for equitable trade and healthy competition in the market. Farmers, often the backbone of the nation's economy, are left vulnerable and with limited options to improve their financial situation, ultimately leading to widespread poverty and food insecurity in rural areas.

To address this problem, we are proposing a mobile app as an e-business solution designed to break the cycle of exploitation by cutting out middlemen and connecting farmers directly with consumers or buyers. Through this mobile platform, farmers will gain access to real-time market information, enabling them to negotiate better prices and secure fairer compensation for their produce. The app will also provide consumers with greater transparency in pricing, ensuring that the cost of goods is more closely aligned with the actual value of the produce. By leveraging mobile technology, this solution will empower farmers and promote a more efficient and equitable agricultural market.

SWOT ANALYSIS

STRENGTHS

- **Direct Market Access**: Allows farmers to sell their produce directly to consumers or retailers, eliminating middlemen and ensuring better prices.
- **Increased Profit for Farmers**: Reduces reliance on intermediaries, helping farmers secure better profit margins and improve financial stability.
- **Fair Pricing Transparency**: Creates a transparent marketplace where both farmers and consumers know the fair market price, preventing price manipulation.
- **Convenience and Accessibility**: Easily accessible even in rural areas, enabling farmers to reach a broader customer base.
- **Data-Driven Insights**: Provides analytics on market trends, demand patterns, and pricing to help farmers make informed decisions.

WEAKNESSES

- **Technological Barriers**: Limited access to smartphones or the internet in rural areas could restrict the app's user base and adoption.
- **Digital Literacy**: Some farmers may not be tech-savvy, requiring training and support to use the app effectively.
- **Initial Costs and Development**: Developing and maintaining the app can be expensive, and its success depends on widespread user adoption.
- **Reliability of Delivery Infrastructure**: Logistics and delivery challenges, especially in remote areas, may impact the timely and safe delivery of goods.

OPPORTUNITIES

- **Partnerships with Retailers and Suppliers**: Collaborating with grocery chains, retailers, or wholesalers can expand the app's reach and create a stronger supply chain, benefiting both farmers and consumers.
- **Government Support and Policies**: If the Sri Lankan government supports technological solutions for farmers, incentives, funding, or policies could help drive the app's adoption.
- **Expansion into Other Markets**: The app has the potential to scale to other countries facing similar agricultural challenges, reducing dependency on middlemen.
- **Consumer Awareness and Demand**: As consumers become more conscious of the ethical and economic benefits of buying directly from farmers, demand for such a platform could increase.
- **Integration with Other Agricultural Services**: Adding value-added services like agricultural tips, weather forecasts, or financial management tools could enhance the app's usefulness and adoption.

THREATS

- **Competition from Traditional Middlemen:** Middlemen may push back by offering alternative incentives or creating barriers to prevent farmers from switching to the app.
- **Regulatory Challenges**: Legal or regulatory issues related to pricing, taxes, and trade policies could impact the app's business model and operations.
- **Market Adoption Resistance**: Farmers might be hesitant to adopt new technology, especially if they have long-standing relationships with middlemen.
- **Supply Chain and Logistics Challenges**: Competing with well-established logistics networks may be difficult, requiring significant investment to ensure reliable delivery.
- **Economic Instability**: Economic downturns or shifts in the agricultural sector could impact supply, demand, and the app's overall viability.

PORTER'S FIVE FORCES

THREAT OF NEW ENTRANTS (MODERATE)

- **Barriers to Entry:** Developing a similar app requires technical expertise, capital, and a reliable logistics network. However, technological advancements could make market entry easier for new players.
- **Brand Loyalty & Trust:** Farmers and consumers may be reluctant to switch to a new platform unless it provides substantial benefits, making it harder for new entrants to gain traction.
- **Regulatory & Compliance Challenges:** Government policies and agricultural regulations could either facilitate or obstruct new market entrants, depending on their alignment with national agricultural goals.

BARGAINING POWER OF SUPPLIERS (LOW TO MODERATE)

- **Increased Pricing Control:** Farmers gain more power by setting their own prices instead of relying on middlemen.
- **Reduced Exploitation:** Direct market access helps farmers earn fairer profits without price manipulation by intermediaries.
- **Risk of Large-Scale Domination:** If only a few large-scale farmers join, they may control pricing and reduce opportunities for small farmers.

BARGAINING POWER OF BUYERS (MODERATE TO HIGH)

- **Buyer Sensitivity to Price & Quality:** If buyers find lower prices or better quality elsewhere (e.g., supermarkets or traditional vendors), they may switch to alternative sources.
- **Availability of Alternatives:** Traditional markets remain an option for buyers, making it crucial for the app to offer convenience, fair pricing, and reliability to maintain user retention.
- **Potential Loyalty Programs & Discounts:** Introducing incentives such as loyalty points, discounts, or bulk purchase benefits can help attract and retain buyers.

THREAT OF SUBSTITUTES (HIGH)

- **Existing Market Practices:** Middlemen, wholesale markets, and local vendors still dominate the agricultural supply chain, offering farmers alternative selling channels.
- **Other Digital Platforms:** Competing e-commerce platforms or farmer cooperatives may offer similar services, providing alternative solutions to both buyers and sellers.
- **Consumer Preference for Traditional Shopping:** Many consumers prefer to inspect fresh produce physically before purchasing, which may reduce their willingness to adopt the app.

INDUSTRY RIVALRY (MODERATE TO HIGH)

- **Existing Competition:** Other agritech startups or e-commerce platforms offering similar solutions could increase competition and impact the app's market share.
- **Price Wars & Competitive Strategies:** Competitors might lower commission rates or offer better logistics to attract users. If the app doesn't differentiate itself, it could struggle to gain traction.
- **Differentiation & Brand Positioning:** To remain competitive, the app needs strong branding, user-friendly features, reliable logistics, and a seamless experience for both farmers and buyers.

PESTEL ANALYSIS

POLITICAL FACTORS

- **Government Policies:** The Sri Lankan government may support digital agriculture solutions, especially those that eliminate exploitation in the supply chain. Policies promoting e-commerce, rural development, and financial aid for farmers could benefit this project.
- **Regulations and Trade Laws:** There might be legal requirements related to digital transactions, agricultural trade, and consumer protection that the platform needs to comply with.
- **Corruption and Bureaucracy:** Some middlemen may have strong political connections, leading to resistance against regulatory changes that favor direct farmer-to-consumer trade.

ECONOMIC FACTORS

- **Farmer Income and Pricing:** The app helps farmers gain better control over pricing, reducing losses caused by middlemen. This could lead to improved financial stability for rural communities.
- **Consumer Prices:** By reducing unnecessary markups, the cost of agricultural products may decrease, making food more affordable for consumers.
- **Internet and Mobile Penetration:** Economic disparities in rural areas may limit smartphone access and internet connectivity, potentially slowing down adoption.

SOCIAL FACTORS

- **Farmer Awareness and Digital Literacy:** Many farmers, especially in rural areas, may not be familiar with digital tools, requiring training and awareness programs.
- **Consumer Trust and Buying Behavior:** Consumers may prefer traditional buying methods over digital transactions, so the platform must build trust and offer incentives.
- **Rural-to-Urban Migration:** If farmers receive better income through the app, it could reduce migration to urban areas in search of alternative jobs.

TECHNOLOGICAL FACTORS

- **Mobile and Internet Accessibility:** The success of the app depends on mobile network availability in rural areas, which can be a challenge in some regions.
- **Data Security and Payment Systems:** Secure online payment methods, such as mobile banking or digital wallets, must be integrated to ensure trust and seamless transactions**.**
- **Integration with Other Technologies:** The app could be enhanced with AI-based price prediction, weather forecasting, and supply chain tracking for better decision-making.

ENVIRONMENTAL FACTORS

- **Sustainable Farming Practices:** The app could promote environmentally friendly farming by connecting farmers with organic buyers and providing information on sustainable practices.
- **Climate Change Impact:** Weather conditions affect agricultural output, so the app could incorporate climate data to help farmers make informed decisions.
- **Reduced Wastage:** Direct farmer-to-consumer transactions could minimize food waste caused by delays in the traditional supply chain.

LEGAL FACTORS

- **E-Commerce and Digital Business Laws:** The app must comply with Sri Lanka’s digital business regulations, including online transactions and consumer protection laws.
- **Farmer Rights and Fair Trade:** Legal frameworks that protect farmer interests may support the platform's objectives and enhance its credibility.
- **Data Privacy Regulations:** The app must ensure the secure handling of farmer and consumer data, adhering to data protection laws.

STRATEGIES PROPOSED

- **Direct Market Access:** Establish a mobile app platform that connects farmers directly with consumers or retailers, eliminating middlemen and enabling farmers to set their own prices.
- **Differentiation and Brand Positioning:** The app should differentiate itself through strong branding, user-friendly interfaces, reliable logistics, and seamless user experiences for farmers and consumers.
- **Loyalty Programs and Incentives:** Introducing loyalty points, discounts, or bulk purchase benefits to attract and retain buyers .
- **Data-Driven Decision Making:** Providing analytics on market trends, demand patterns, and pricing to help farmers make informed decisions.
- **Integration with Other Agricultural Services:** Incorporating additional services such as agricultural tips, weather forecasts, or financial management tools to enhance value and adoption .
- **Government Partnerships and Regulatory Alignment:** Engaging with government entities for policy support, incentives, funding, and regulatory alignment to facilitate smoother market entry and operation .

E-BUSINESS MODELS PROPOSED

- **Direct-to-Consumer D2C Model:** Farmers sell their produce directly to end consumers through a mobile application platform, eliminating intermediaries .
- **Business-to-Business B2B Model:** Connecting farmers directly with retailers or institutional buyers through digital platforms for bulk transactions .
- **Online Marketplace Model:** Platforms aggregating multiple farmers' products to reach broader markets domestically or internationally.
- **Mobile Commerce (M-Commerce):** Utilizing mobile apps specifically designed for rural accessibility, providing real-time market information, digital payments, order tracking, and logistics management.

JUSTIFICATION OF PROPOSED STRATEGIES AND MODELS

Porter's Force	Justification for Strategies & eBusiness Models
Threat of New Entrants Moderate)	Direct-to-consumer models empower farmers by providing pricing control and reducing exploitation by intermediaries. This increases their bargaining power significantly compared to traditional markets dominated by middlemen.
Bargaining Power of Suppliers Farmers) Low to Moderate)	Direct-to-consumer models empower farmers by providing pricing control and reducing exploitation by intermediaries. This increases their bargaining power Significantly compared to traditional markets dominated by middlemen.
Bargaining Power of Buyers Moderate to High)	Offering loyalty programs, incentives, transparency in pricing, convenience in purchasing processes, and reliable logistics ensures buyer retention despite alternative options available in traditional markets. These strategies enhance consumer loyalty and reduce buyer bargaining power.
Threat of Substitutes High	Traditional markets and other digital platforms remain strong substitutes. Thus, differentiation through transparency in pricing, quality assurance via traceability technologies like blockchain, convenience through mobile-first commerce solutions, and added value services (agricultural tips or financial management tools) are crucial for retaining users .
Industry Rivalry Moderate to High)	Existing competition from agritech startups necessitates competitive differentiation. The proposed strategies such as loyalty programs, superior logistics solutions, data-driven insights for decision-making, government collaboration for favorable policies, and integration with smart agricultural technologies help maintain competitive advantage .

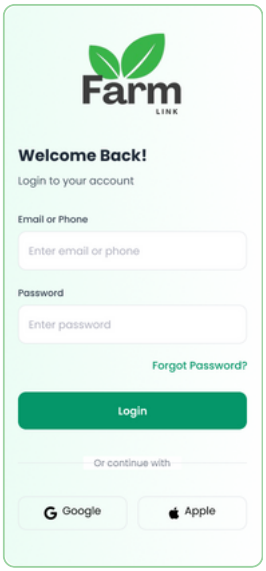
PROTOTYPE OF THE STRATEGIES PROPOSED AND INCORPORATED.

Prototype Link:-
https://www.figma.com/proto/M6XGDj2yweSGFZGuy37gy5/Farm-Link-e-buisness?node-id=7-77&t=OBbmRqQBRPy4oD5w-1&scaling=scale-down&content-scaling=fixed&page-id=0%3A1&starting-point-node-id=24%3A1216&show-proto-sidebar=1

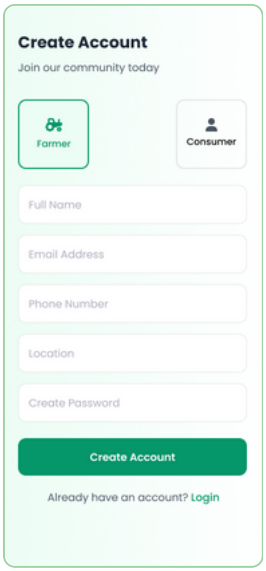
Onboarding and Authentication

Start

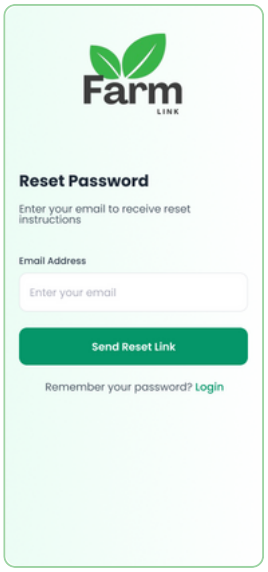
Login-home



Create Account



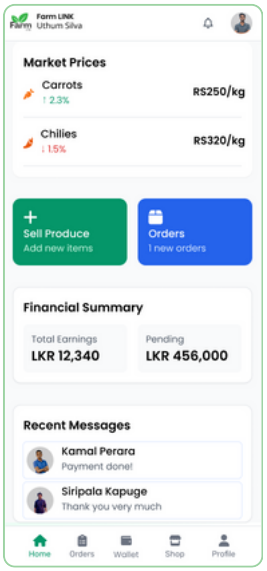
Login



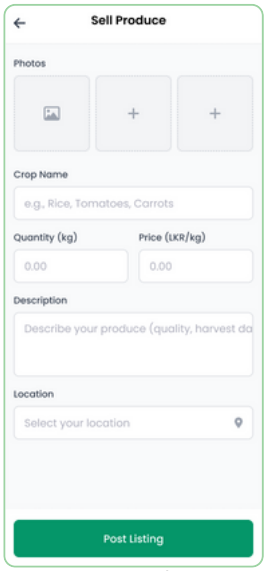
Reset Password

PROTOTYPE OF THE STRATEGIES PROPOSED AND INCORPORATED.

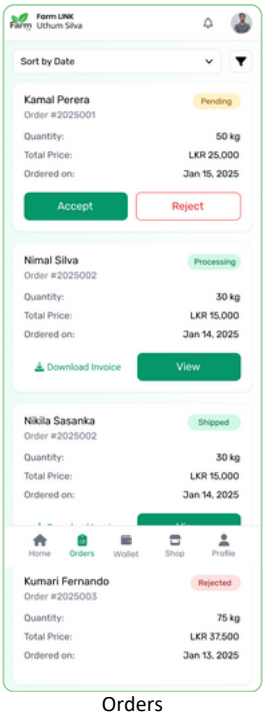
Farmer Dashboard and Functionalities



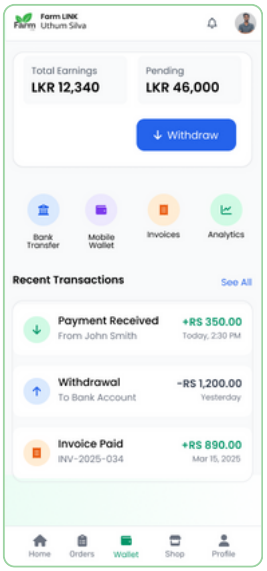
Farmer Dashboard



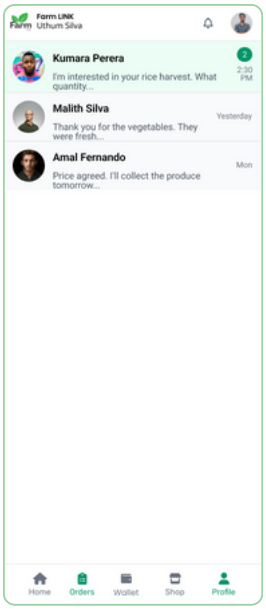
Add Products for Sale



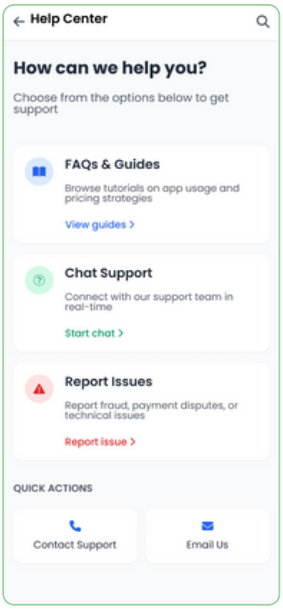
Orders



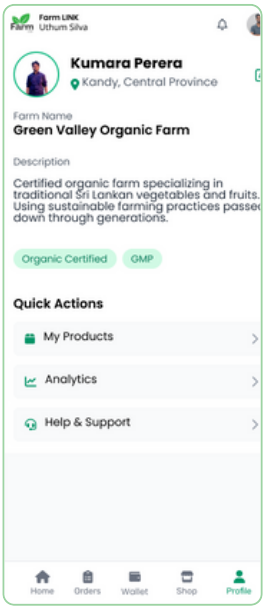
Payments



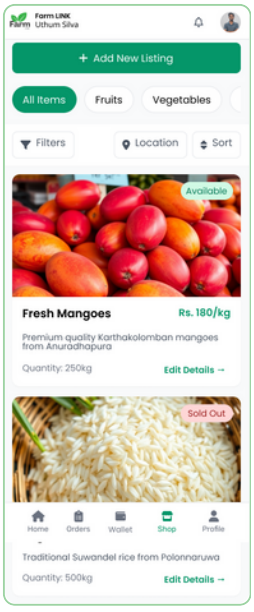
Messages



Help Center



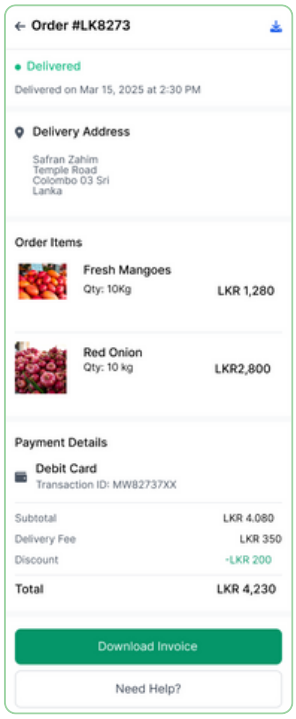
Profile



Product Catalog

PROTOTYPE OF THE STRATEGIES PROPOSED AND INCORPORATED.

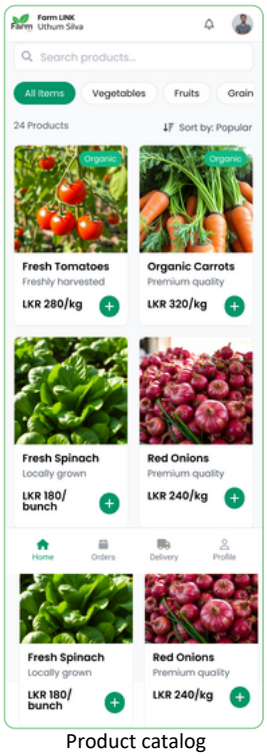
Farmer Dashboard and Functionalities



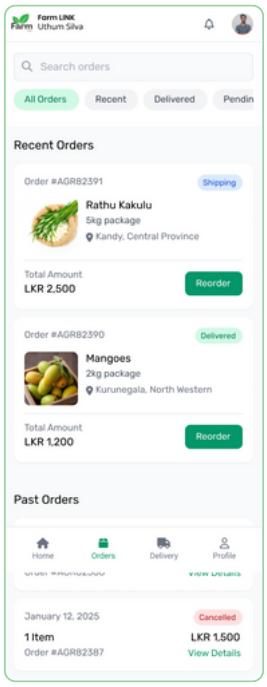
Order Details

PROTOTYPE OF THE STRATEGIES PROPOSED AND INCORPORATED.

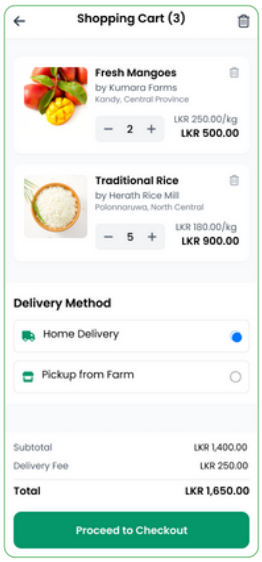
Seller Dashboard and Functionalities



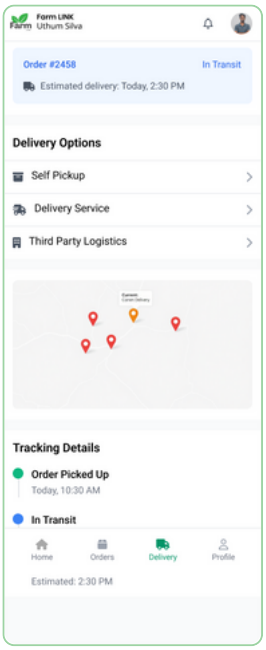
Product catalog



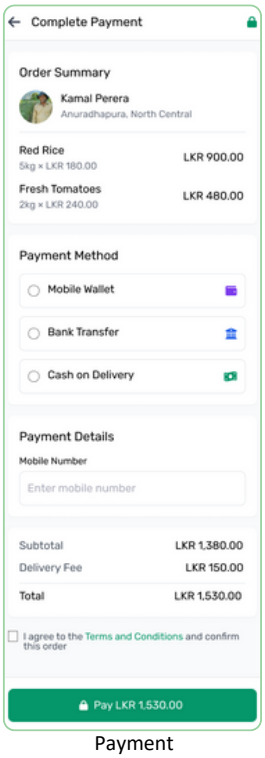
Order History



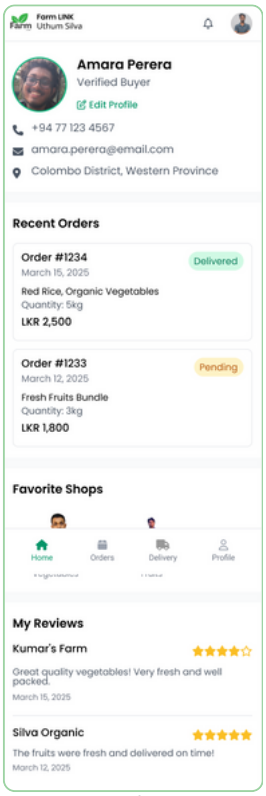
Shopping Cart



Delivery



Payment



Profile

7 E MODEL

1.ENVIRONMENTAL ANALYSIS

- **Political:** Government support for digital agriculture and e-commerce policies can facilitate adoption.
- **Economic:** Farmers suffer due to middlemen exploitation; your app can increase their profits while reducing consumer costs.
- **Social:** Low digital literacy among farmers and consumer trust in traditional buying could be challenges.
- **Technological**: Mobile penetration is rising, but internet accessibility in rural areas remains a concern.
- **Legal:** Compliance with Sri Lanka's e-commerce, digital trade, and data protection laws is necessary.
- **Environmental:** Sustainable agriculture and food waste reduction can be key selling points.

2. EBUSINESS GOALS/STRATEGIES

- **Goal:** Empower farmers by eliminating middlemen and providing direct access to buyers.

- **Strategy:** Develop a mobile-based marketplace for farmers and consumers.
  - Integrate AI-driven price prediction, secure payments, and real-time demand insights.
  - Offer training programs to help farmers adopt digital tools.
  - Partner with government bodies, NGOs, and agritech firms to boost credibility and adoption.

3. EREADINESS (INTERNAL/EXTERNAL)

- **Internal Readiness**:
  - App development using Flutter for cross-platform accessibility.
  - Secure database and cloud-based infrastructure to handle transactions.
  - Compliance with legal frameworks to ensure safe digital transactions.

- **External Readiness:**
  - Assessing farmer digital literacy and providing necessary training.
  - Ensuring internet and mobile network coverage in rural areas.
  - Consumer willingness to shift to digital purchases.

4. ETRANSFORMATION ROADMAP

- **Research & Feasibility Study** – Conduct market analysis, farmer interviews, and technical assessments.
- **App Prototype & Pilot Program** – Develop a beta version and test it in selected regions.
- **Partnerships & Funding** – Engage with government, NGOs, and investors to ensure scalability.
- **Launch & Adoption Drive** – Train farmers, run awareness campaigns, and offer early incentives.
- **Continuous Improvement** – Integrate AI, blockchain for secure transactions, and supply chain tracking.

5. ETRANSFORMATION METHODOLOGY

- **User-Centered Design:** Develop a simple UI with local language support.
- **Agile Development:** Implement in iterative phases, gathering feedback for improvement.
- **Training & Awareness**: Conduct workshops and online tutorials for farmers.
- **Data Security:** Ensure encrypted transactions and farmer data privacy.
- **Scalability Plan:** Expand the app beyond crops to include dairy, fisheries, and agro-services.

6. ESYSTEMS (ICT/BUSINESS MAINTENANCE)

- **Technology Stack:** Mobile App: Flutter for Android & iOS
  - **Backend:** Firebase or AWS cloud solutions
  - **Payments:** Mobile banking, digital wallets, UPI integration
  - **Security:** Encrypted transactions and blockchain-based record keeping

- **Business Maintenance:** Ongoing farmer support (via chatbots, customer service).
  - Regular system updates for security and new features.
  - Partnerships with logistics providers for farm-to-home delivery.

7. EVOLUTION – CHANGE MANAGEMENT

- **Behavioral Shifts**:
  - Encourage digital adoption among farmers and consumers.
  - Provide incentives for early adoption (discounts, promotional offers).
- **Regulatory Adaptation:**
  - Stay updated with evolving digital trade and consumer protection laws.
  - Work with government bodies to integrate subsidies and incentives.
- **Scalability & Expansion:**
  - Expand services to other agricultural products, farm equipment, and advisory services.
  - Integrate AI-based crop health monitoring and market demand forecasting.

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