DOCUMENT 1: PROJECT PROPOSAL

Project Title: Zhailau – Integrated Digital Ecosystem for Livestock & Veterinary Commerce

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1. Executive Summary & Market Relevance

The livestock sector in Kazakhstan is expanding rapidly, with horse and cattle populations growing by over 5-8% annually. However, the industry remains technologically fragmented. While government initiatives like "TortTulik" exist for basic inventory, the commercial sector relies on unstructured platforms (e.g., OLX, WhatsApp groups) that lack verification, security, and integration.

Zhailau proposes a "Vertical Marketplace" architecture. Unlike generic classifieds, it integrates **commercial trading**, **statutory traceability** (Digital Passports), and **telemedicine** into a single cohesive ecosystem. This aligns with the "Farm-to-Fork" strategy, ensuring transparency and health safety in the supply chain.

2. Competitive Landscape Analysis

We analyzed three tiers of competitors to position Zhailau effectively:

Competitor Tier	Examples	Critical Weaknesses (The "Zhailau" Opportunity)
Tier 1: Horizontal Marketplaces	*OLX.kz, Satu.kz*	**High Fraud Risk:** No verification of animal health or ownership. **Lack of Specialization:** No support for livestock logistics, pedigree tracking, or bulk feed calculation.
Tier 2: Government Registers	*TortTulik, ISZH (Identified Farm Animals DB)*	**Zero Commerce:** Purely for regulatory reporting; users cannot buy/sell or book services. **Poor UX:** Rigid interfaces not designed for daily commercial use.

Competitor Tier	Examples	Critical Weaknesses (The "Zhailau" Opportunity)
Tier 3: Global Benchmarks	*SellMyLivestock (UK)*	**Market Incompatibility:** Designed for Western markets (GBP payments, UK laws). **Gap:** Zhailau replicates their "Auction" and "Haulage" logic but adapts it for Central Asian geography.

3. Detailed Functional Modules

A. The Livestock Trading Engine (E-Commerce)

- **Logic:** A specialized B2B/B2C marketplace for high-value assets (horses, pedigree cattle).
- **Key Feature:** "Smart Filtering" based on genetic markers, breed lineage, and yield potential (e.g., milk yield vs. meat yield), not just price.
- **Verification:** Integration of seller "Trust Scores" based on successful transaction history.

B. Digital Animal Passport (ISO 11784/11785 Compliant)

- **Problem:** Paper veterinary passports are easily forged or lost.
- **Solution:** A digital ledger that tracks the animal's lifecycle.
- **Data Points:**
    - **RFID/Microchip ID:** 15-digit unique ISO code.
    - **Vaccination Log:** Immutable records of FMD (Foot and Mouth Disease) and Anthrax shots.
    - **Lineage Tree:** Recursive parent-child relationships for breeding tracking.

C. Veterinary Telehealth (Real-Time Module)

- **Market Context:** Global veterinary telehealth is growing at 16.8% CAGR.
- **Function:** Low-latency video/text consultation for remote areas where physical vet access is difficult.
- **Integration:** Vets can pull up the "Digital Passport" instantly during a call to see medical history.

4. Monetization & Business Model

1. **Commission Fees:** Flat % on successful livestock sales (Escrow model).
2. **SaaS Subscription:** Premium tools for breeders (e.g., "Herd Management Analytics").
3. **Telehealth Fees:** Platform fee per consultation minute.