***TLADS Step 3: Model Business Entities***

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| **Business Initiative:**  Improve user retention and personalised engagement strategies for Centralised Crypto Exchanges (CEXs - user retention, churn prediction and behavioural segmentation) to increase fee revenue. | | |
| **Business Entity:**  What is the business initiative’s key Business Entities (human or device/thing) and what insights would we want to know about each? | | |
| **Entity** | **Entity Description** | **Predictive Insights** |
| CEX Users | Humans that use the CEX via an account that can be associated with a wallet address on-chain. | Churn risk, retention likelihood, behavioural sentiment, staking frequency, bridging frequency, GIVEN DATA – WALLET ADDRESSES AS AN ENTITY SHOWS THIS |
| Wallet Addresses (on-chain proxies) | Wallets interacting with the CEX or with external protocols. | Public address, clustering/grouping, CEX feature use, churn risk, propensity to use DeFi tools, high lifetime-value forecast, early adopter detection, social/referral virality potential, asset migration risk (not full churn). |
| User segments | Groups of wallets with shared behavioural patterns. | Segment-level churn risk, product-usage propensity by segment, LTV prediction by segment, migration risk by segment, marketing conversion forecast, segment evolution prediction, segment health / growth forecast. |
| Bridging Devices / Tools (secondary entity) | Software agents (smart contracts, bridges, aggregators) users interact with to move assets on-chain. | Churn risk, bridge usage forecasting (protocol trends), CEX liquidity outflow risk modelling, cross-chain arbitrage indicator, emerging ecosystem identifier, user segment transition analysis, protocol dependence risk. |
| Reactivated Users | Previously churned users who have resumed activity (e.g., deposits, trades). | Reactivation trigger attribution, post-reactivation retention score, churn reactivation cycle modelling, reactivation source mapping (on-chain – CEX link), re-activated power users (hidden LTV), campaign response propensity, reactivation via peer influence. |

TO UNDERSTAND THE PREDICTIVE INSIGHTS BETTER AND HOW THEY RELATE TO THESE BUSINESS ENTITIES – USE AI TO RESEARCH AND UNDERSTAND THE DIFFERENT CONCEPTS, WHAT DATA IS USED AND HOW THEY CAN BE IMPLEMENTED IN TERMS OF ANALYTICS / MODELLING.