Product Feasibility

- (ii)
- ... evaluating the initial technical feasibility of innovative product to understand whether it can be developed, i.e. defining the below 3 criteria for each experiment on research hypothesis
 - Experiment Definition Can we define a machine learning experiment for a given hypothesis statement?
 - Applied Research Performance Is there enough evidence from the machine learning research that the hypothesis statement can be solved?
 - Data Analysis Are there enough data and in an appropriate quality to conduct a machine learning experiment?

| priority | hypothesis statement | topic | phenomenon | experiment definition | applied research performance | data analysis |
|----------|---|---|---|-----------------------|------------------------------|------------------|
| 1 | fund risk factors | market uncertainty | market instability in market sectors | ? | • | ? |
| | | | market instability in local markets | • | • | ? |
| | | | market instability in global market | • | • | ? |
| | | challenging holdings | difficult holdings to value | • | • | ? |
| | | | new instrument type | • | • | ? |
| | | | new general ledger accounts | ? | • | ? |
| | | | securities with stale prices | ? | • | ? |
| | | | fair value securities | • | • | ? |
| | | | large amount of securities | ? | ? | ? |
| | | | corporate actions on holdings | ? | ? | ? |
| | | | single source securities | ? | • | ? |
| | | manual entries | funds with manual entries in the system | ? | • | ? |
| | | | system parameters | ? | ? | ? |
| | | | user commentary on exceptions | ? | ? | ? |
| | | fund outliers | fund component (bottom-level) | ? | ? | ? |
| | | | fund asset category (middle-level) | ? | ? | ? |
| | | | fund group (top-level) | ? | ? | ? |
| 2 | drivers of fund valuation uncertainty | fund valuation uncertainty | impact of risk factors on fund | ? | ? | ? |
| 3 | fund valuation confidence | fund and market behaviour | identification of fund valuation and market behaviour issues | ? | ? | ? |
| | | | impact of fund valuation and market behaviour issues to fund operations | ? | • | ? |
| 4 | dynamic tolerances for fund oversight validations | correlation of fund valuation to market behaviour | asset price movement (bottom level) | ? | ? | ? |
| | | | category level tolerance (middle level) | ? | ? | ? |
| | | | NAV price vs benchmark (top level) | ? | ? | ? |
| 5 | fund oversight fact-check | fact checking | verification of price rate and source | ? | ? | ? |
| | | | verification of price and trade time | • | • | ? |
| | | | verification of investor and fund actions | ? | • | ? |
| | | | identification of contradictory signals | ? | ? | ? |
| 6 | synthetic fund benchmark | fund performance | synthetic benchmark | ? | ? | ? |

| 7 | validation-onboarding match for fund oversight | data mapping to system configuration | correlation of raw data to fund oversight validations | ? | ? | ? |
|----|---|--|---|----------|----------|----------|
| 8 | automated fund narratives | automated commentary | explainability of NAV movement | • | ? | ? |
| | | | explainability of news relevancy to funds | ? | ? | ? |
| 9 | exception categories for pre-fund oversight | data quality | analysis of upstream and system data | ? | • | ? |
| | | | analysis of source data | ? | ? | ? |
| | | | analysis of data delivery | ? | ? | ? |
| 10 | exception management time | exception management | estimation of manual effort | ? | ? | ? |
| 11 | fund pre-oversight confidence | data confidence factor | operational data complexity and combination | ? | • | ? |
| | | | fund static data complexity and combination | ? | • | ? |
| | | fund check confidence factor | fund check completion | ? | ? | ? |
| | | | fund check optimisation | ? | ? | ? |
| 12 | cognitive oversight of fund | autonomous oversight of fund valuation | virtual assistant | • | • | ? |
| 13 | fund oversight reporting | reporting & analytics | management information dashboard | ? | 0 | ? |
| 14 | fund calendar | market and operational events for funds | interactive fund calendar | ? | ? | ? |