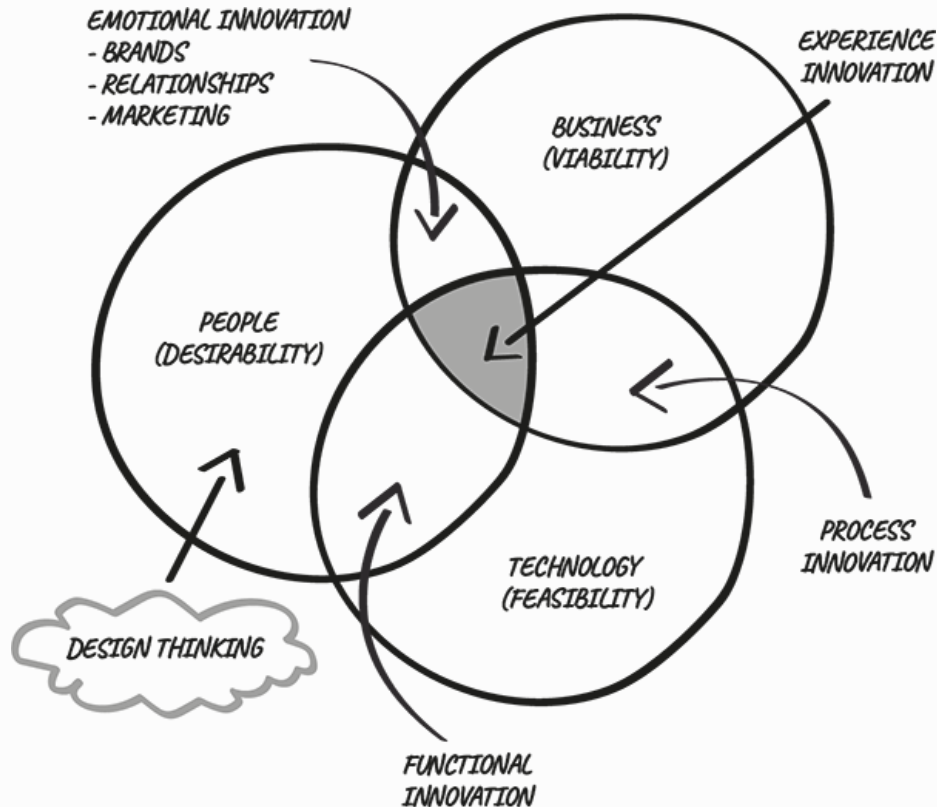# Projects

- we are targeting an appropriate combination of innovation drivers (feasibility, desirability, viability) under given time constraints
- this will help us to find the product-market fit

Pipeline of Work

- a pipeline of work (project, programme, initiative, action, etc.) with machine learning functionalities that introduces change into organisation and solves business problems
- the objective is to reach business goals by collaborating on solving product requirements of new and current development projects across the organisation
- the Idea Backlog helps to identify candidates for pipeline of work according to their stage of product development and prioritise for execution (if successful)

strategic initiatives

- broadly focused projects to solve long-term challenges

business	project	type	description	current state	last update
Fund Valuation Oversight	NAV3-POC	POC	POC of Data-Driven processes for NAV validation	finishing the project	20 Aug 2021

tactical initiatives

- narrowly focused projects to solve immediate challenges

business	project	type	description	current state	last update

Client Onboarding	ALPHA	Ad Hoc	revisiting a Data Mapping solution by ALPHA project	Alpha solution is now completely hosted on our side	08 Sep 2021
Auto-Clearance?					
FVC?					

Product Innovation Framework

project	POC (Proof of Concept)	Prototype	MVP (Minimum Viable Product)	Production
purpose	*to describe an innovative product and show whether it can be developed*	*to show how a feasible, innovative product can be developed*	*to build a usable innovative product for early adopters*	*to engineer a production-grade innovative product for public release*
requirement	- team of business and technology development SMEs (Subject Matter Experts) that can collaborate on making detailed & accurate observations - collaborative client (or user) interested in innovation and early adoption - computational environment for data analysis - production data	- defined product (POC) - product requirements (prototypes) - team of business and technology development SMEs - collaborative client (or user) interested in innovation and early adoption - computational environment for ML prototyping - production data	- developed product (prototypes) - product requirements (MVP) - team of business and technology development SMEs - computational environment for development of ML products - product differentiation - qualified prospects - production data	- developed product (MVP) - product requirements (commercial product) - team of business and technology development SMEs - computational environment for productionalisation of ML products - business model - signed up customers (or letter of intent) - production data

deliverable	1. **business development (strategic partnership)**
	  a. client enrolment
	  b. production data approval
	  c. market sizing (bottom-up analysis)
	2. **computational environment (data analysis)**
	  a. data analysis workflow
	  b. data governance
	3. **product ideation (research hypothesis)**
	  a. idea creation: brainstorming innovative product features
	  b. hypothesis development: creating a set of hypothesis statements for innovative product features
	  c. hypothesis validation: attaching a commercial statement to each hypothesis statement
	  d. hypothesis prioritisation: prioritising each hypothesis for experiments by commercial (immediacy and value), research, and execution objectives
	4. **product requirements (prototypes)**
	  a. experiment requirements: describing experiments for each hypothesis by identifying phenomena, observations, data, and approaches and forming a good user stories with acceptance criteria and concrete examples from this
	  b. applied research perfromance: reviewing ML literature for each experiment requirement
	  c. data analysis: analysing the quality of production data for each experiment requirement
	5. **product feasibility**
	  • results of hypothesis validation
	  • results of experiment requirements
	  • results of applied research perfromance
	  • results of data analysis
		1. **business development (strategic partnership)**
		  a. client enrolment
		  b. production data approval
		  c. competitor analysis: product differentiation
		  d. sales pipeline: qualified prospects
		2. **computational environment (prototyping)**
		3. **product development (prototypes)**
		  a. development: prototyping experimental ML models
		  b. testing: user desirability of experimental ML models
		4. **product requirements (MVP)**
		  • definition of product purpose, features, functionality, and behaviour
		  • product acceptance criteria
		5. **product desirability (value proposition)**
			1. **business development**
			  a. client enrolment
			  b. production data approval
			  c. business model
			  d. sales pipeline: customer sign up
			2. **computational environment (MVP)**
			3. **product development (MVP)**
			  a. development
			  b. testing (UAT, etc.)
			  c. deployment
			4. **product requirements (commercial product)**
			  • definition of product purpose, features, functionality, and behaviour
			  • product acceptance criteria
			5. **product viability (business model)**
			6. **product release (early adopters)**
				1. **sales development**
				2. **computational environment (production)**
				3. **product development**
				  a. development
				  b. testing
				  c. deployment
				4. **product release (public)**

outcome	**definition of feasible innovative product**	**desirable and feasible innovative product**	**viable, desirable, and feasible innovative product**	**commercial innovative product**

Best Practice

- **product requirements - modern software development**
  - each product functionality (or feature) should to be described with the below 3 criteria in order to be developed
    1. **user story**: a narrative description of a need that serves as a "placeholder for a conversation"
       - example - https://www.atlassian.com/agile/project-management/user-stories
    2. **acceptance criteria**: a fine-grained description of a required behaviour of the system
       - example - https://agileforgrowth.com/blog/acceptance-criteria-checklist/
    3. **concrete example**: a single combination of *context-action-outcome* that clarifies how each acceptance criterium should behave
       - Behaviour-Driven Development (BDD) - https://cucumber.io/blog/bdd/better-requirements-by-harnessing-the-power-of-exa/
  - please fell free to read more about this approach and make suggestions (some initial examples are listed in the above links)
- **business development - product rollout**
  - clients may not be upgrading our products often (maybe once few years)
  - this makes the integration of new product features into pControl challenging

- qualified prospects should be identified at the Prototype stage to make sure the product (MVP and Production) is adopted right away when it is developed
- **product development - plan for product development (vendor VS in-house decision)**
  - making informed decisions between building own solution in-house or going with vendors is challenging
  - it requires to assess if the business is ready for product development activities and estimate the accurate prices & time quotes (not coming up with the solution)
    1. business readiness
    2. product requirements
    3. engagement plan (process, system, data, communication approaches)
  - this is preferably done without spending time on a full-fledge RFP (Request For Proposal) unless required
  - we can ensure that we are setup and ready for a product development (in-house or vendor) if we do a POC project for this beforehand