Structuring Data Engineering Circle

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Data Engineering

Our Journey in blinks

Achieve together

Support each other

Clarity & Feedback

Standardization & Factory Model

Own your path

Stabilization & Strategy

Transparency

Seamless Integration & Assessment

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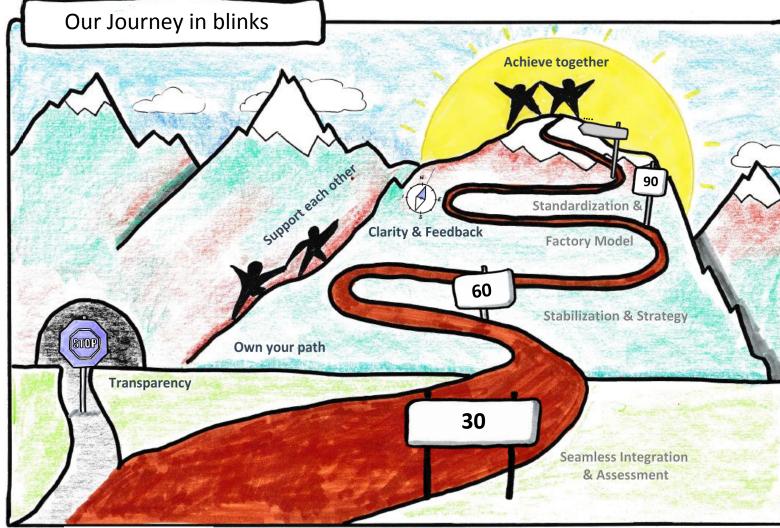1. Start optimization and standardization of Services
2. Start implementation of strategy and manifesto components
3. Start empowering analytics with APIs, Catalogue, Portal
4. Fully operating data engineering team

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1. Stabilization of services (Pipelines/Infra)
2. Focus on identifying skill gap & onboard talents
3. Align / Agree / communicate Strategy and Manifesto
4. Define roles and cascade accountabilities + performance metrics

30
1. Transition and deliver data engi. services (business as usual)
2. Current state assessment (3P)
3. Brainstorm on manifesto
4. Data Engineering Strategy (Blueprint)

START
1. company, culture, vision
2. capabilities and operations
3. Stakeholder meet & map

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Personal Development Plan

Process:
1. Create Awareness
2. Set short and long term objectives (at least 2)
3. Focus on development (education, certification, roles etc)
4. Devise an action plan.
5. Review and Record progress.
6. Recommend changes to action plan.

Tracking:
Periodic 1:1s (Formal and Informal)

Challenges:
Personal
- Empathise
- give some space or involve more depending on person/situation

Professional
- workload management
- revisit objective
- trainings to narrow gap
- attend/host meetups
- learning management

Feedback

For desired output within minimal trial, you need clear feedback (reminds me every time control systems ☺).

Listen rather than defend. (conv with your loved one)

Good Feedback :

1. Honest and Clear
2. Focused on solution rather than people/personality
3. Helps the cause, instils confidence and creates trust

Bad Feedback:

1. Fluffy and sandwiched
2. Focused on problem / blame game
3. Declines confidence and self esteem

Data Engineering Circle

Factory Stream: holistic view of data engineering

Goal: Deliver re-usable, standardized, optimal data components that is easily available for all data consumers (internal and external) and constantly evolving to fit both business needs and tech. innovation

Functional/Feature stream: business delivery focussed

Goal: Deliver high performance, scalable, reliable, cost effective, secure data management platform and related data engineering services to enable business solutions. Vertical focussed if possible.

Senior

Framework
Templates
APIs
Portal
Catalogue

Lead

Analysis
Modelling
Integration
Transformation
Cleansing

Junior

Adopting design patterns
Prototyping
Technology advancement
Benchmarking
Optimization

Intern

Opportunities
Demand
Strategy
Architecture
Standardization
Rationalization

Mid/Senior

Infrastructure
Deployment
Operations
Automation
Acceptance
Self Service

Data Science Team   **Product Team**   **BI Team**

Collaboration & Tools

Weekly or Bi-Weekly Team meeting
  Agenda:

      Communication / Down briefs
      Objective and Status (OKR)
      Round Robin: Deliverable Status, Issues,
      Support, etc

Weekly Data Engineering Governance
  Agenda:

      Impact on Data Model (status and changes)
      Impact Data landscape (status and changes)
      Standard Information Base
      Requirements for new Solution Compo

Bi-Weekly Brown bag Session
  Agenda:

      Talk about the last sprint/deliverables
      No presentations

Sharepoint or Confluence or Google Drive:
      - Knowledge Repository

Git:
  - Deliverable/Solution Repository

Trello / JIRA / Planner / Any Kanboard:
  - Deliverables tracking
    -   OKR tracking

Blogs:
One blink per deliverable

Engineering Principles

Thinking Democracy: Open Data & Services for all

Empower colleague: Self Service of Infrastructure and APIs

Governance: Freedom with responsibility

Innovation: not just technology but simplicity

Understand Context: Question everything with what before How?