Data-Centric Development Life Cycle



The driving force behind successful Data Lake, Big Data, BI/Analytics, MDM and Data Warehouse projects

In today's digital age, data is the potential powerhouse of every business. But despite a growing investment in data development projects and resources, three in four businesses are failing to extract real value for competitive advantage.*

That's why First San Francisco Partners created the **Data-Centric Development Life Cycle (DCLC)**, a new project development methodology that leverages the shift from process to information – and addresses the unique needs of data-centric development projects such as **Data Warehouse**, **Data Lake**, **Master Data Management (MDM)**, **BI/Analytics** and **Big Data**.

THE DCLC Methodology

- Overcomes the challenges and limitations of a traditional Systems
 Development Life Cycle
 (SDLC) approach
- Emphasizes learning as much about the Source
 Data as quickly as possible
- Allows for iterative refinement of your project's information requirements
- Increases efficiency driven by clarity for the project team to know what they have to do around data, and how the different roles work together
- Reduces risk of project delays and avoids rework by surfacing issues right at the start, rather than after outputs are built
- Ensures the right artifacts are created

Simplified Data-Centric Development Life Cycle (DCLC)

The Data-Centric Development Life Cycle is an iterative methodology that brings data problems and opportunities to the forefront before development begins — rather than during testing or after Production implementation.



* "Seizing the Information Advantage," report from Pricewaterhouse Coopers (PwC) and Iron Mountain, 2015

When you consider how unique data-centric projects are, it's understandable why so many of them run into difficulties when the Systems Development Life Cycle approach is used. The Data-Centric Development Life Cycle is uniquely designed to overcome them.



Systems Development Life Cycle (SDLC)

Data-Centric Development Life Cycle (DCLC)

Oriented to automating an unautomated process

Oriented to getting value out of existing Production data

Users are able to articulate processes reasonably well for requirements

Users typically do not know the details of the Source Data, and may not even know where it is or if it exists

Cycles of iteration are not easily accommodated

Cycles of iteration are recognized and accommodated to refine information requirements

Testing focuses on whether the functionality matches requirements

Testing focuses on data quality of Source Data and data produced by transformations, calculations, etc.

No testing artifacts are carried over into Production

Data quality (DQ) rules developed in testing are put into Production for continuous DQ monitoring

Knowledge gained during the project is used only for development activities within the project

Knowledge gained during the project is part of what is delivered and is used later for developing reports after Production implementation

Only users who "own" the processes participate in the project

Users who provide the information requirements participate (e.g., Operations), but so too can stakeholders who wish to use the data in the future (e.g., data scientists)

Our DCLC Consulting Includes

- Readiness Assessment Training in the DCLC Process descriptions Roles/responsibility descriptions Artifact templates
 - RACIs Project methodology audits Integration with metadata strategy and knowledge management strategy

Who Benefits From DCLC

Any enterprise with development projects for:

- Data Lakes
 Big Data
 BI/Analytics
 Master Data Management (MDM)
 Data Warehouses
- IT, PMO and Data Governance units who need to standardize data-centric development methodology, e.g., to meet compliance needs