Starting a new SAS® project can be very stressful in the beginning, but there are SAS functions that you can use in the initial stage of a project to explore the data and the business processes.

Like many other consultants, I have developed a check-list that has become so vital to my personal onboarding. I routinely use it at the beginning of every project. In this paper, I share this check-list with you, along with functions I use myself, as well as a few examples to better demonstrate my process.

I hope they serve as an inspiration for other SAS consultants and programmers to improve their effectiveness and success as they embark on new journeys.
Master your Business Data

Abstract

Introduction

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Analytics, Insight & Implementation

Starting a New SAS Project with Effectiveness and Success

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Intro

• 1. Know your data source
• 2. Explore your data
• 3. Know all stakeholders:
  • Your Business person
  • Data provider
  • Your users
  • Your tech team
• 4. Learn the Business language
• 5. Set priorities and roadmap for yourself

Here are five things that you can do to help conquer this new challenge more effectively.

Objective

Key Data Elements

Workflow and Process (end-to-end)

Make a journey with your data

Output expected after by Business

Topic

Data

Users

End-to-end Workflow

High-level Picture
1. Know your data source:
If the database access is already available, and your SAS(R) has been installed, you can use the SAS data dictionary functions to have a quick overview of the database. Compare your data lists to the data workflow and identify your Critical Data Element (CDE). Once completed, map out data relationships between data tables. I used to run this query to get all data elements in my SAS database, so that I have a view of my data since Day 1.

```
proc sql;
select libname, memname, memtype, nobs from dictionary.tables;
```

2. Explore your data:
The second thing is to generate basic statistics based on the most granularity level of data, such as data volume and frequency. Aggregate these data according to Business process / workflow. Create a journey with your data from the input, via Extract/Transform/Load (ETL) transformation and calculation engine, to the output.

Critical Data Element
- Identify most frequent Data Elements
- Link tables with frequent Data Element
- Create a journey with most granular level of data and see how it is transformed from end-to-beginning
- Aggregate your data on different levels to get a ‘Business’ sense

SQL DICTIONARY Tables
- DICTIONARY.COLUMNS
- DICTIONARY.TABLES
- DICTIONARY.VARIABLES
- DICTIONARY_MACRO
- DICTIONARY.LIBRARY
3. Know Your User

If this is a project of SAS Solution with User Interface, you can query the user list and compare to the organizational chart to better understand how this new team/department is organized and who are active users. Through this exercise, you can become familiar with your users through their activities within the solution.

Who are your end users?
- Just by querying your SAS database, will you be able to know:
  - most active-frequent users
  - most useful modules or tables for them
  - your users’ profiles and their department
- By looking at your users, you already start to get to know them since Day 1 of your new project

Who are the main stakeholders in your new project?
- ‘Business’ definition and Business rules provider
- Business Data and Reference Data provider
- Solution and Data Users (power users, end-users)
- Technology team
- Senior management team and executives
Acronym/jargon

4. Learn the Business language: The fourth thing is to build up your acronym and jargon list during your project life, and use them in the new working environment. Reading through Solution detailed specification documents, implementation documents, user guide or business process/procedure is the fast way to build up and enrich your list.

There are so many things going on since the first day. I will never believe I have enough memory to remember everything, but I truly believe I can note down all new words (see below example) I met. All these new words will become my best friends in next few months.

Your immediate/end deliverables?

5. Set priorities and roadmap: Last thing is to have the project workplan and priority/timeline to understand where you fit and what are your deliverables. Through building out the roadmap, some additional opportunities may surface.

Final Deliverables examples:
- Powerpoint decks describing approach, methods, outputs, results, inferences, plan ahead
- Implementation plan and trackers
- Dashboards
- Process maps/ process documents
- Prototypes / Tools
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DID YOU FOLLOW THESE STEPS?

1. Know Your Data
2. Explore Your Data line up with Business
3. Know Your User
4. Learn Business Language
5. Set priorities and roadmap for yourself

Goal 1 – Provide Deliverables since Day 1
Goal 2 - Gain effective Working Experience
Goal 3 – Have a Big Picture Overview (Top-down Approach)

References

SAS(R) 9.3 SQL Procedure User's Guide, Accessing SAS System Information by Using DICTIONARY Tables
http://support.sas.com/documentation/cdl/en/sqlproc/63043/HTML/default/viewer.htm#n02s19g65nw08gn140bwfdh7spx7.htm

Work Plan Template
https://www.officetimeline.com/timeline-template/work-plan-download

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