



Senior partners of Novum LLC designed and wrote this framework as the approach for certain business problems related to data structuring, based on personal experience to provide overview, and benefits of data structuring. The authors do not intend to illustrate particular situation in any institution or company. This publication may not be transmitted, photocopied, digitized, applied in workplace with used details from content or otherwise reproduced in any form or by any means without the permission of the copyright holder. To order copies or request permission to reproduce materials, contact Novum LLC. info@novum.tech

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NOVUM DATA AUDIT FRAMEWORK

NDAF

Introduction

The methodology presented here recommends specific structure and guidance on how to perform audit with the focus on data structure. The NDAF is direct response to the current evolving market demand with a need in detailed analytics and visual reporting. The proper structure of data enables deep analytics in terms of performance tracking and enhanced reporting for stakeholders. NDAF enables organizations to find out what data they hold, where it is located, who is responsible for it and other detailed information with an aim of audit to offer proper structure and business tools¹ for managing this information and sharing it in a controlled environment.

Why we need it?

In a modern organization data gathering and management is a vital part of its performance and other aspects. To efficiently manage data and fully realize its potential an organization must be aware of its structure, location, condition, and value of its asset. Conducting an audit will enhance the knowledge on this matter and raise awareness on all required points to improve overall strategy and benefit for stakeholders. It is vital for an organization to understand inadequacies in data creation and curation practices with relevant suggestions on further structuring. Especially, useful for holding companies to consolidate data from multiple ERP or reporting sources and prepare report & analysis for stakeholders. An organization that is knowledgeable of its data can maximize the value out of it, if properly handled and aligned with organizational goals and objectives.

Framework

NDAF is designed to perform on business level and functional level equally for the purpose of corporate level. The framework collects required data and its related procedures in order to identify key points that are only related with data origin, transfer/streamlining method, type(qualitative/quantitative), form(paper/digital), format(SQL, structured...), certain key data

¹ Management Tools can be defined as advanced level dashboards and reports with visual interaction.

specific criteria and etc., for more detailed definition please refer to Appendix 1. Certain business specific or function specific criteria(pre-determined) can be added before conducting audit in order to enhance the overview. Digital map of data flow will be prepared and visual dashboard structured to emphasize key parameters.

Parameters of Dashboard:

- I. ERP Integration Level
- II. ERP Utilization Level
- III. Data Organization Level
- IV. Data Availability Level
- V. Data Origination

Organization familiar with this information can make changes to existing process and data structuring to improve data management and increase utilization of data.

Objectives & Outcome

The main objective of NDAF is to bring broad overview of current data structure as described above, enhance understanding of currently possible metrics and reports that could be structured according to current state, in addition propose recommendations for proper structuring and reorganization of data structure. Please see detailed description below.

Final Report It will be based on:

- what is the current state of data structure (what type of data currently company has with all parameters, and detailed description based on NDAF)
- which data(Additionally) is possible to obtain within your current work process, software resources and equipment (manufacturing specific). (utilization of current situation – May be company can gather more data)
- Recommendations on obtaining any other useful data by calculating new measure and driving out new parameters based on currently available data
- Recommendations on obtaining new data gathering method if it is required.(recommendations on implementing additional software or applications for gathering additional data)
- Description of future possible visual reports based on Power BI with current/modified data structure

Values of NDAF

All described below leads to profit maximization and transparency of business process, increases collaboration and understanding between employees, customers and business owners.

- I. Maximizing the value of data through continues use and development of different measures for monitoring the process
- II. Enhancing collaboration for stakeholders, shareholders and company
- III. Ability to manage risks and fraud that are related with business
- IV. Realizing the value of data through enhanced use to improve business process and operation of business units
- V. Understand the reliability of data source

Appendix 1

NDAF consists from the following core elements:

Data Type – determine whether the data is qualitative or quantitative and what kind of parameters are involved in terms of description of it.

Data Source – what are the sources of the data, ERP, spreadsheets or any other related platform

Data Storage – what are the storage methods are used for particular data(Server, paper..etc)

Data Format – what are the formats that data is stored and gathered

Data Gathering Method – how data is collected, manually or automatically fed in to the system

Control of Data – who control the data, which department, who is responsible for origination

Duration of Data – how long it can be stored, for which period is data available as the process requires.

Manufacturing specific criteria:

All available parameters of manufactured products will be examined, hence equipment specific output parameters and method will be reviewed for current and potential data gathering.