

Using Nesstar Publisher Tool and GSBPM in Dissemination Metadata for Census and Statistical Survey to Make it More Accessible for all Users

5th ISIBalo Young African Statisticians Conference (IYASC)
13-17 JUNE 2016
PRETORIA, South Africa

Prepared By
Waleed Ameen Abd Elkhalek Mohamed
statistician in National statistical office
(CAPMAS), Egypt



Outline

What IS Metadata ,GSBPM ?

Steps of building system for preservation and dissemination metadata for census

Importance Of using Nesstar Tools in documentation and dissemination metadata

Case study: about how to use Nesstar tools & GSBPM Model in preparing and publishing statistical survey



Introduction

The National Statistical Office in Egypt (CAPMAS) is committed towards different type of users with producing and dissemination the high quality and relevant statistical information following the principles of neutrality, objectivity, professional independence, rationality and confidentiality to help all users get what they need from statistics and use it in making decisions.

DATA ABOUT DATA





Metadata is "data about data". Provides documentation about data elements or attributes, (name, size, data type, etc), about records or data structures (length, fields, columns, etc), also about **data itself** (where it is located, how it is associated, ownership) including **descriptive information** about the context, quality and characteristics of the data (instructions for how data were collected, definitions for data items).



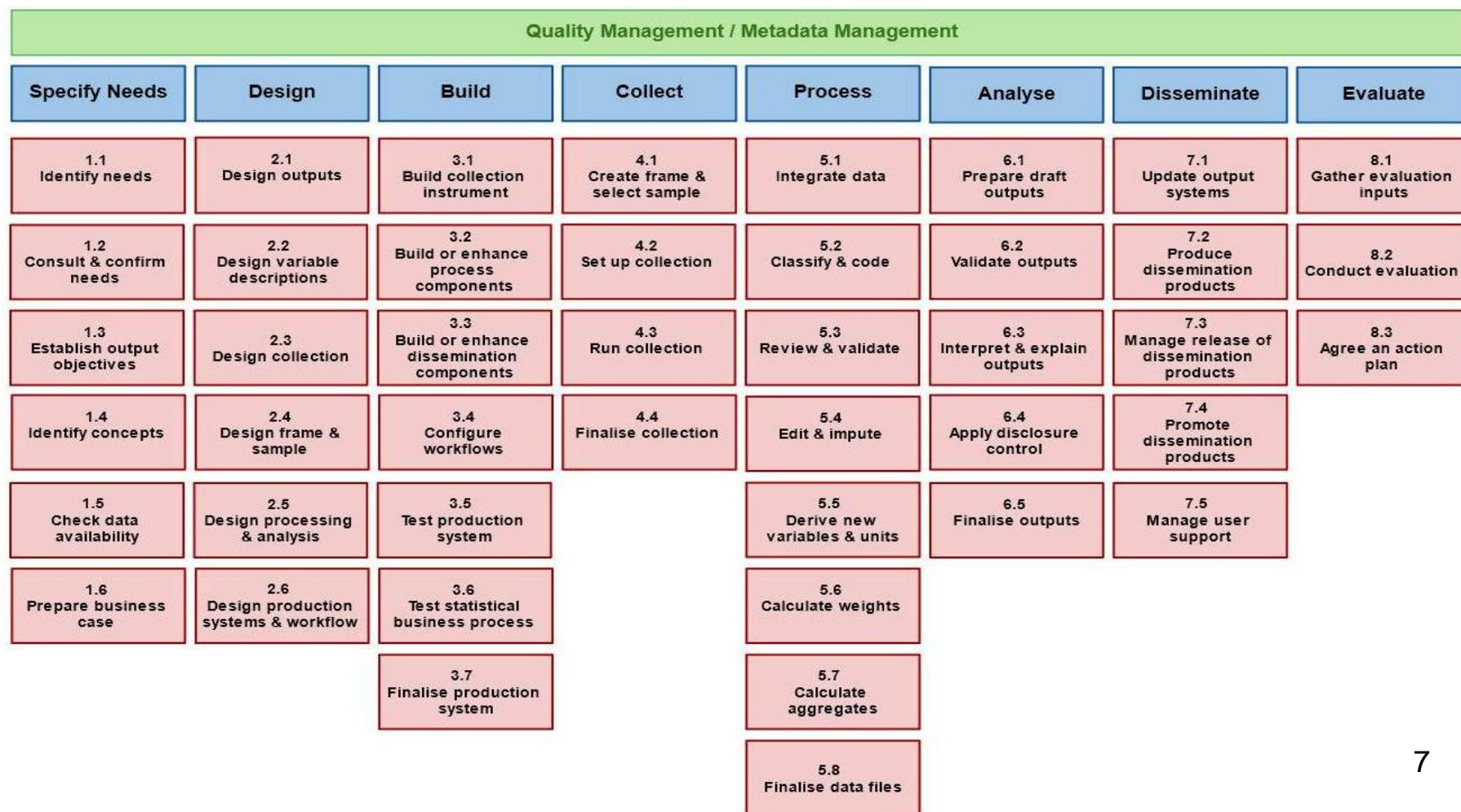
Generic Statistical Business Process Model (GSBPM)

the set of business processes needed to produce official statistics. It provides a standard framework and harmonized terminology to help statistical organizations to modernize their statistical production processes, as well as to share methods and components.

The GSBPM can also be used for integrating data and metadata standards, as a template for process documentation and to provide a framework for process quality assessment and improvement.

(UNECE Secretariat, Version 5.0, December 2013)^[1]

Figure (1) Generic Statistical Business Process Model Version 5.0



Nesstar Publisher Tools

The World Bank Data Group and International Household Survey Network (IHSN) developed some tools called Nesstar Tools which used to **in preservation, documentation and Dissemination** metadata for census and statistical survey. As well as to foster best practices by data producers in developing countries. and improve management and use of micro data.

Nesstar Publisher Tools contains two standards:

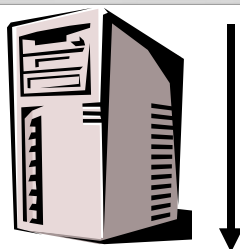
Data Documentation initiative



DDI

Survey Microdata

which contains the minimum required metadata that allow for users know about the survey, **the scope, the objectives and variables**



DCMI

Dublin Core Metadata Initiative

contains links to metadata in related resources (documents, manuals, maps, etc.)



Importance Of using Nesstar Tools in Documentation and Dissemination Metadata

1. Increase value of the data through new and innovative research with greater diversity and scope.
- 2- Improve methods of data collection and processing as a result of user feedback.
- 3- Reduce duplication of data collection activities.
- 4- Training junior researchers in the analysis of micro data.
- 5- Using international standards (DDI and DCMI) standards in documentation and dissemination metadata for census and statistical survey.

Case study: about how to use Nesstar tools & GSBPM Model in preparing and publishing statistical survey

3.1 background about Case Study

3.1.1 Purpose: Government in Egypt through the Ministry of education, want to review the country's educational policy at primary level in the public sector.

3.1.2 Project Work period: From 11th September to 17th of December 2015

3.1.3 Title: Household Survey of socio-economic effect on Education (HSEE)

3.2 Objectives

3.2.1 Provide information about current situation of education.

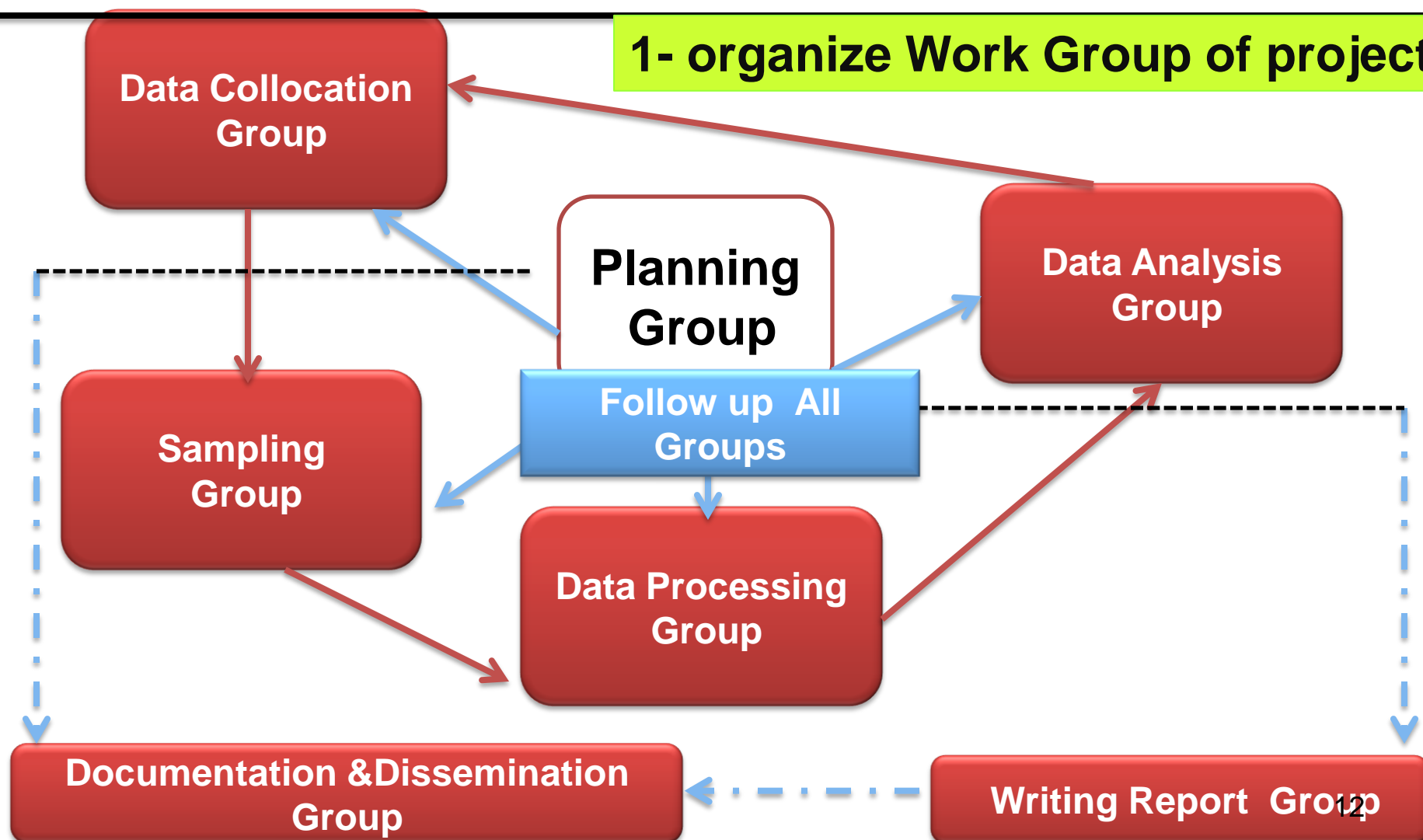
3.2.2 Study the effect of economic factors (economic classes and employment status) on education.

3.2.3 Study the effect of social factors (gender discrimination, government education, facilities) on education.

3.2.4 study the effect of geographical factors (urban and rural) on education

3.2.5 Provide information on access to education service.

1- organize Work Group of project



2- Build system for Dissemination (HSEE) using Nesstar Tools & GSBPM Model

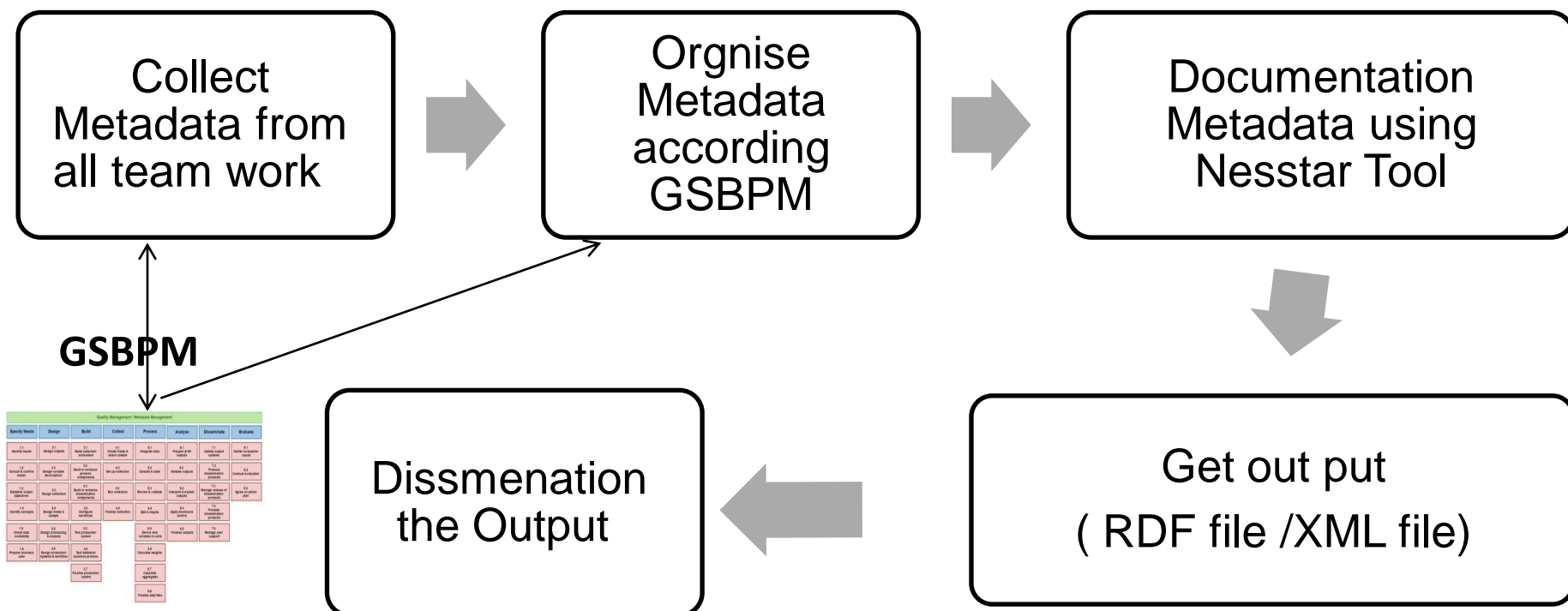


Figure (2) System for Dissemination (HSEE) using Nesstar Publisher v 4.09

System for Documentation



Metadata

1



2

Literature Review

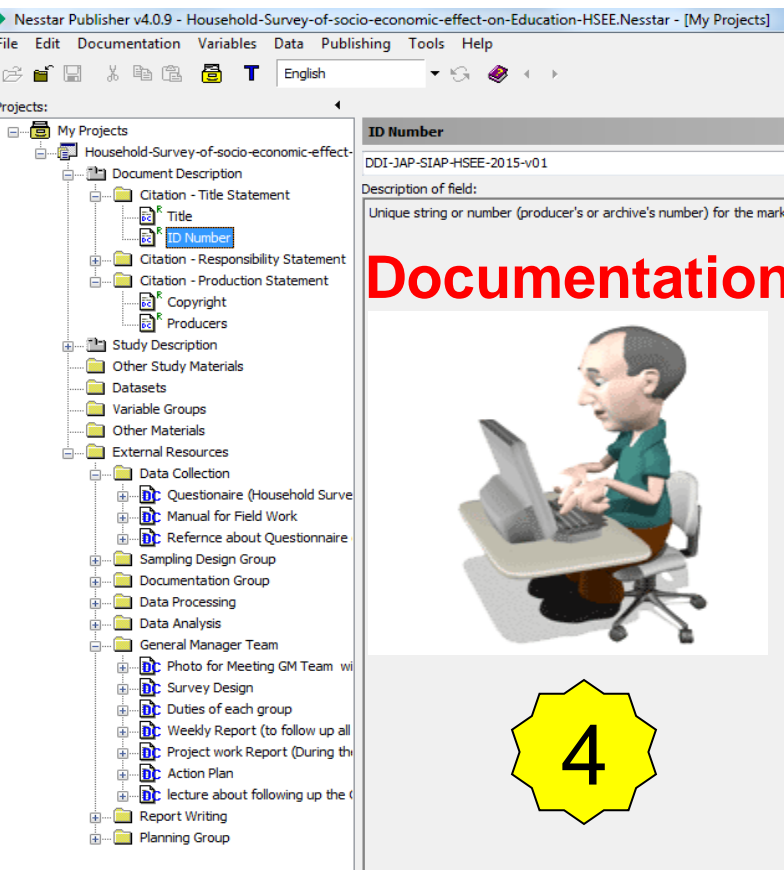
Tabulation and analysis plans

Manuals, Questionnaire, Photos - Maps

Sampling information ...etc.

Using Software nesstar

3



Documentation



4



DDI

Survey Microdata

Data Documentation Initiative (DDI)

- 1-Document Description.
- 2-Study Description
- 3-DATASETS
- 4-Variable Description

DCMI

Dublin Core Metadata Initiative



5

Out put

3- Organize dataset of the (HSEE) survey.

Nesstar Publisher v4.0.9 - Household-Survey-of-socio-economic-effect-on-Education-HSEE.Nesstar (final_ind_dataset) - [My Projects]

File Edit Documentation Variables Data Publishing Tools Help

Projects: My Projects

- BGD-MMR-4-2010-IPS-Vol-1-M
- Household-Survey-of-socio-economic-effect-
 - Document Description
 - Study Description
 - Other Study Materials
 - Datasets
 - final_HH_dataset
 - final_ind_dataset
 - File Description
 - Key Variables & Relations
 - Variables
 - Data Entry
- Variable Groups
- External Resources
- Data Collection
- Sampling Design Group
- Documentation Group
- Data Processing
- Data Analysis
- General Manager Team
- Report Writing
- Planning Group
- Mid term presentation for all group

Number	Name	Label	Width	StartCol	EndCol	Record	Decimals
v1	hh_id	hh_id	*	*	*	*	0
v2	ind_id	ind_id	*	*	*	*	0
v3	region	region	*	*	*	*	0
v4	ea	ea	*	*	*	*	0
v5	area	area	*	*	*	*	0
v6	hh_no	hh_no	*	*	*	*	0
v7	relation	relation	*	*	*	*	0
v8	sex	sex	*	*	*	*	0
v9	age	age	*	*	*	*	0
v10	marital	marital	*	*	*	*	0
v11	literacy	literacy	*	*	*	*	0
v12	attending	attending	*	*	*	*	0
v13	stop_attend	stop attending	*	*	*	*	0
v14	edu_jl	edu_jl	*	*	*	*	0
v15	curr_attend	current attending	*	*	*	*	0
v16	type_school	type school	*	*	*	*	0
v17	never_attend	never attending	*	*	*	*	0
v18	emp_stat	employment status	*	*	*	*	0
v19	cohort	cohort	*	*	*	*	0
v20	attendance	attendance	*	*	*	*	0
v21	edu_parent	edu_parent	*	*	*	*	0

Category Hierarchy

- 1 - Never married
- 2 - Married
- 3 - Widowed
- 4 - Divorce/separate
- 5 - Other
- 9 - Not stated

Value: Label:

Category Text:

Level Name:

GeoMap URI:

Variable information

Data Type: Numeric

Measure: Nominal

Is Time Variable: ☐

Is Weight Variable: ☐

Min: 1 Max: 9 Decimals: 0

Implicit decimals: ☐

Missing data: *

Documentation

Statistics

☒ Include Weighted Statistics

☒ Include Frequencies

☒ List Missing At End

Sorting of Frequencies: Value (ascending)

Summary Statistics Options:

☒ Include Valid

☐ Include Min

☐ Include Max

☐ Include Mean

☐ Include Weighted Mean

☐ Include StdDev

☐ Include Weighted StdDev

Frequencies:

Value	Label	N	Percentage
1	Never married	706	28.7%
2	Married	1543	62.8%
3	Widowed	47	1.9%
4	Divorce/separate	159	6.5%
5	Other	0	0%
9	Not stated	1	0%
Sysmiss		1033	Missing

Summary Statistics:

Type	Value
Valid	2466

Figure (4) Editing and organize dataset for (HSEE) using Nesstar Publisher v 4.09

4- Use Nada 4.2 in Dissemination Metadata for (HSEE) survey

NADA 4.2 Dashboard Studies Citations Users Menu Reports Settings WALEED

Central Data Catalog central

Manage studies Add study Bulk import DDI Licensed requests

Dashboard > Central Data Catalog > Manage studies

Manage Studies [Central Data Catalog] [Switch](#)

Sort results by: Title SurveyID Modified Showing 1-15 of 26 1 2 Next

☐ Batch actions

	Household Survey of socio-economic effect on Education-2015 Japan, Year Missing Published
ID:	DDI-JAP-SIAP-HSEE-2015-v01
Collection:	CENTRAL
Modified on:	12/14/2015
Edit Delete	

Filter [Clear filter](#)

Title

SurveyID

Producer

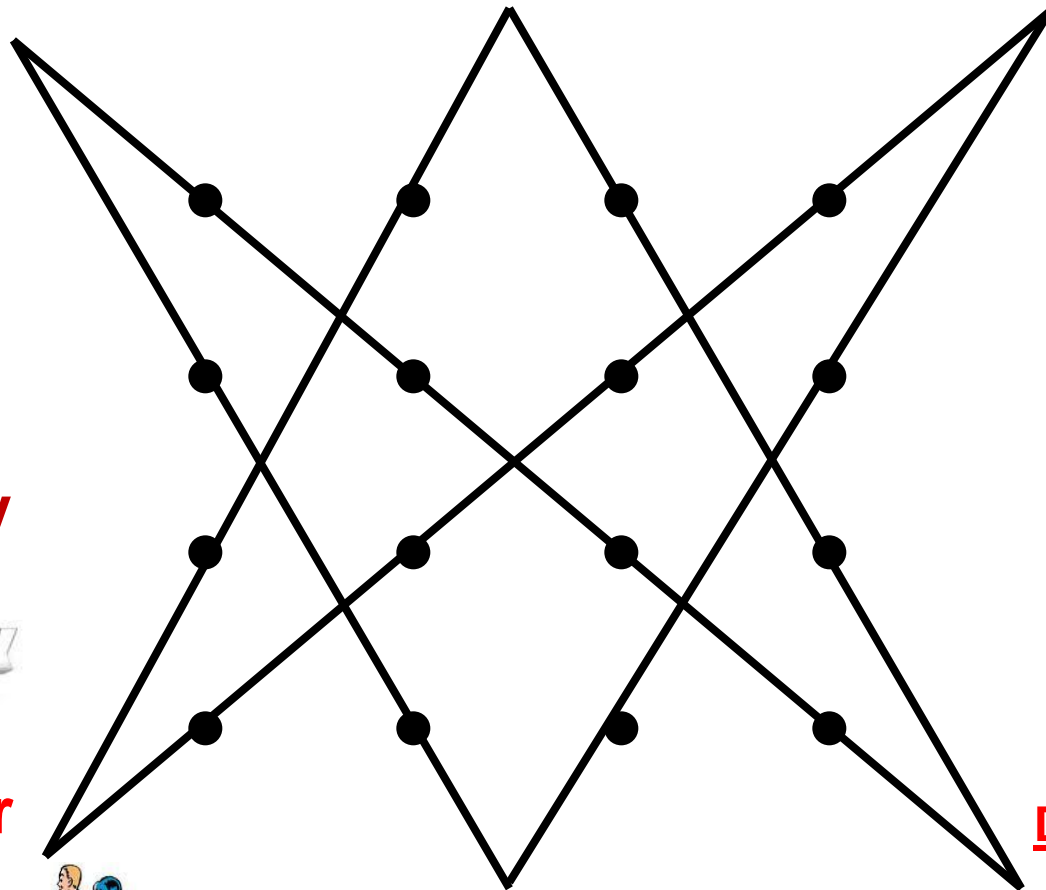
Figure (5) Dissemination Metadata for (HSEE) Survey

Out put

Brain storming

How to connect this point each others without raising your hand ?

Using 6 lines only



Accessibility



Data producer



Data USERS



Conclusions

the Nesstar Tools and GSBPM can be used to identify components that are not performing efficiently, that are duplicating each other unnecessarily, or that require replacing. Similarly it can identify gaps for which new components should be developed.

Also it considered A valuable tools that ensures that processes and statistical results meet users priorities' , needs ,Moreover users can understand the strengths and limitations of the statistical surveys when they use it for any Proposes.

Nesstar tools are free and can be downloaded from here:

- <http://www.nesstar.com/> . (Nesstar)¹
- <http://www.ihsn.org/HOME/software> (Nada)

The National Statistical Office in Egypt used these tools for Documentation census and statistical survey, for more details visit website of CAPMAS www.capmas.gov.eg and <http://catalog.ihsn.org/index.php/catalog/2312/study-description>(1)^[1].

Future plan

❖ Documentation metadata for SDG by using Nasstar Tools , GSBPM.





REFERENCES

1. ***DDI and SDMX: Complementary, Not Competing, Standards , Version 1.0, July 2007.***
2. ***Quick Reference Guide for Data Archivists, Version 2007.03, June 2007. This document (or an updated version of it) is available at www.surveynetwork.org***
3. ***IHFAN Quick Reference Guide for Health Facility Assessment Data Archivists, DRAFT - Version 2008.02 .***
4. ***UNECE Secretariat (2009) "Generic Statistical Business Process Model: Version 4.0 – April 2009", Joint UNECE/Eurostat/OECD Work Session on Statistical Metadata (METIS).***
5. ***Olivier Dupriez and Ernie Boyko: Dissemination of Micro data Files Principles, Procedures and Practices: IHSN Working Paper No 005 August 2010.***



EGYPT

THANK YOU

Email : kant2012xp@hotmail.com

website: www.capmas.gov.eg