Bahrain Census Experience

التعداد

2010

CENSUS

Kingdom of Bahrain
Central Informatics Organization

مملكة البحرين
الجهاز المركزي للمعلومات

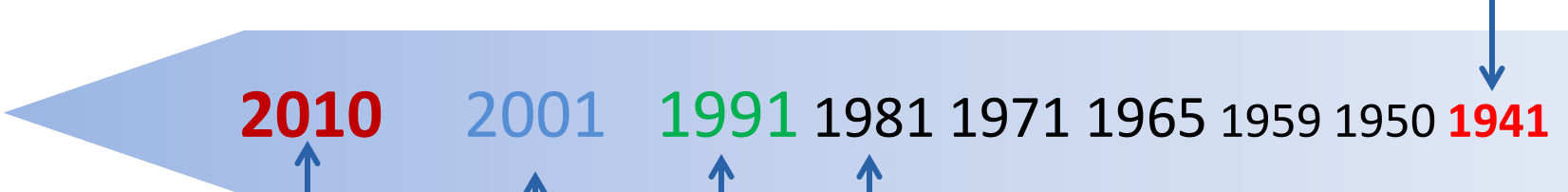Bahrain Experience

Census 2010 Agenda

- Bahrain Census Background

- Census 2010 planning

- Census 2010 Scope

- Census 2010 Methodology

- Census 2010 Workflow

- Challenges and lessons learned

- Critical Success Factors

Bahrain Census Background

Fourth Arabic country
First Arabian Gulf

2010 2001 1991 1981 1971 1965 1959 1950 **1941**

.....................Traditional Census ....

Administrative data for Census Planning

Administrative data for Census forms

Registered Based Census

2010 World Population and Housing Census Programme

The 2010 World Programme on Population and Housing Censuses was approved by the Statistical Commission at its 36th session and adopted by the United Nations Economic and Social Council in resolution A/2005/13.

The Marrakech Action Plan agreed at the Second Meeting of the International Round Table on Managing for Development Results held in February 2004 identified implementation of the 2010 World Programme on Population and Housing Census as one of the key areas of action for improvements in national and international statistical capacity. The action plan calls on countries to plan to carry out a census during the 2010 census round, and for the United Nations to provide guidance for the collection of official statistics, including the coordination of international standards for outputs and support for countries undertaking censuses.

- All GCC member countries agreed to conduct Census in the same year and month (April 2010) and repeat it every 10 years.

- Bahrain Reference day was April 27th 2010

Census 2010 Planning

Time Frame	Tasks
2007 - 2010	Study Legal Framework
	Define variables needed for Census tables
	Define Census variables ownership
	Define Census Data definitions, codes
	Study availability of administrative Census variables
	Study Census variables update mechanism
	Ensure Census administrative variables quality
	Study Infrastructure readiness
	Study Marketing, Feedback and Trust

- Government Computer Data Center (Central Servers & Government Mainframe) 1979
- National Addressing system 1980
- Government Central General Store system 1982
- Central Population Register 1984
- Central Establishment Register 1990
- GDN (government data network) 1994 , more than 300 government linked locations.
- NDS (National Data Set), data ownership with most of the government entities with update mechanism 2000
- Ministerial Resolution for Terms, Classifications, and Coding 2009
- Government ICT
- Security, Regulations & Policies.
- Direct update link with Traffic, Immigration, Electricity, Pension Fund, Civil Service, …..etc 2005
- Legal Framework

Infrastructure Readiness

Availability of Census Administrative Variables

Not Available

12%

88%
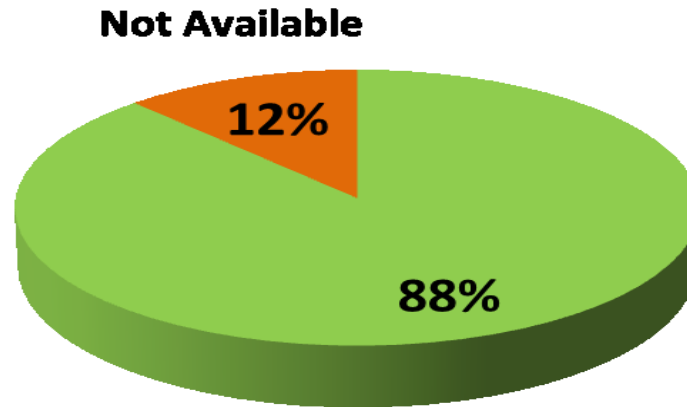
Available on-off line

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| Entity	Data Ownership
Central Informatics Organisation	Population Demography (ID, Name, Gender, Address, Religion Unit Registry Houses and Buildings
Justice	Marital Status
Health	Bio data
Social Development	Disability
General Dir of Passports, Nationality and Residency	Nationality Residency
Labor Market Authority	Employment
Commerce and Industry	Economic activity Commercial Registry
Education	Enrollment Education Level & Speciality
Municipality and Electricity	Houses & Buildings ownership

Census 2010 Planning

Missing Census Variables	
INDIVIDUAL CHARACTERISTICS	Reason of Changing Previous Place of Residence (for Bahrainis Only), Using Personal Computer Using Internet at Home, Using Internet Outside the House, Actions Taken for Searching for Work, Date of Latest Work Searching, Reason of Failing to Find a Job, Reason of Disability/ Impairment, Smoking Category (Daily), Visits to Health Facilities (During the Pervious Month to Census
ESTABLISHMENT CHARACTERISTICS	Establishment Organisation, Capital Nationality, Type of Major Wastes/Scraps Method of Disposing Major Wastes/Scraps, Internet Connection

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	Missing Census Variables
BUILDING CHARACTERISTICS	Building Attachment , No. of Floors Building Age (in Years)
HOUSING CHARACTERISTICS	Number of Household Rooms, Bed Rooms, No. of Toilet Bathroom, Source of Drinking Water Cooking Facilities, Type of Fuel Used in Cooking, Number of Private Parking, Method of Garbage Collecting, Method of Garbage Disposal, Method of Disposing Plastic Bags, Number of TVs, Availability of the Satellite Dish, Number of Personal Computers, Number of Personal Computers Users, Internet Connection, Number of Internet Users, Availability of Daily News Paper - Availability of Separate Bed Room for Couples in the Household
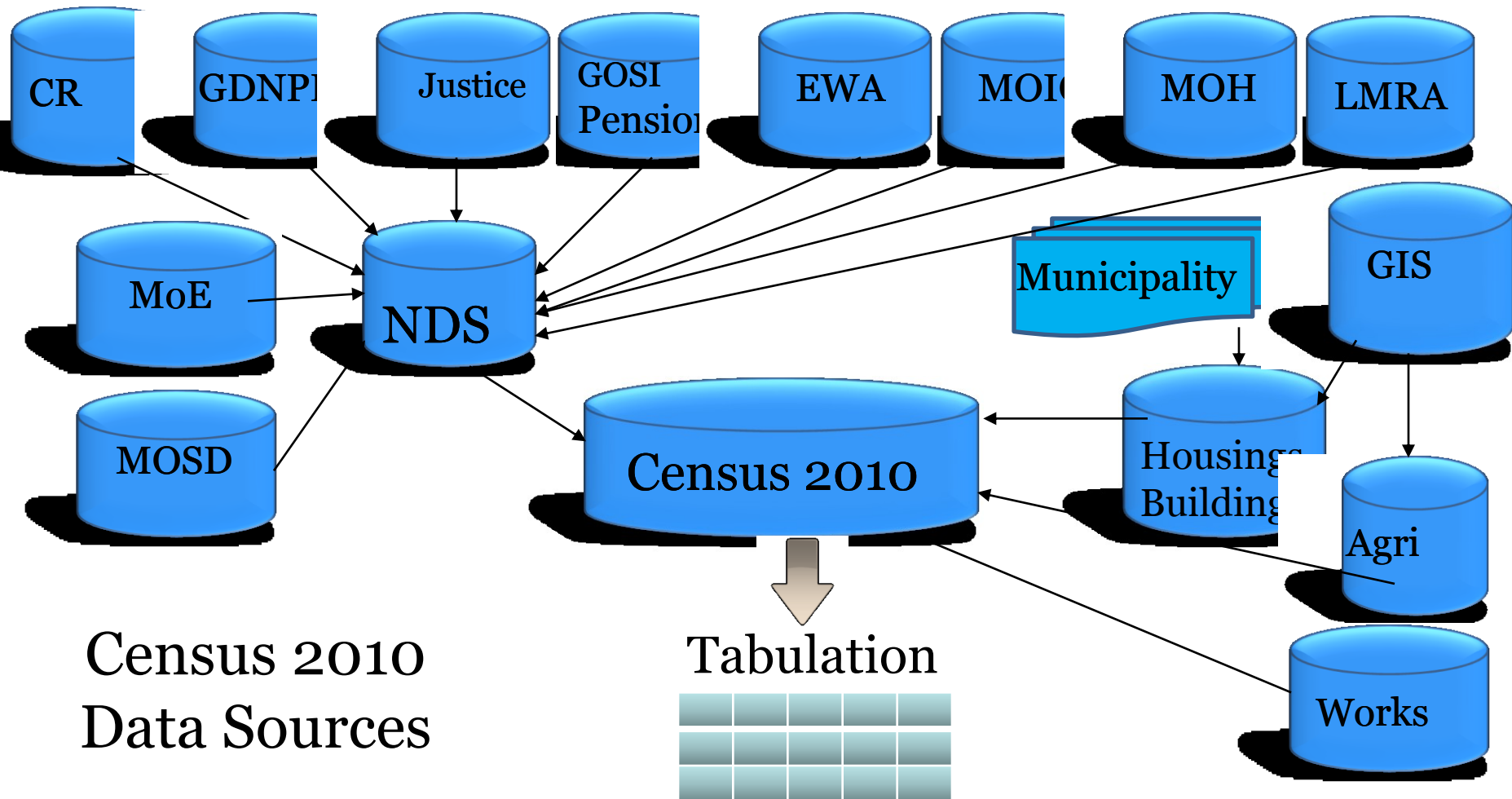
Census-CPR Cleansing Process
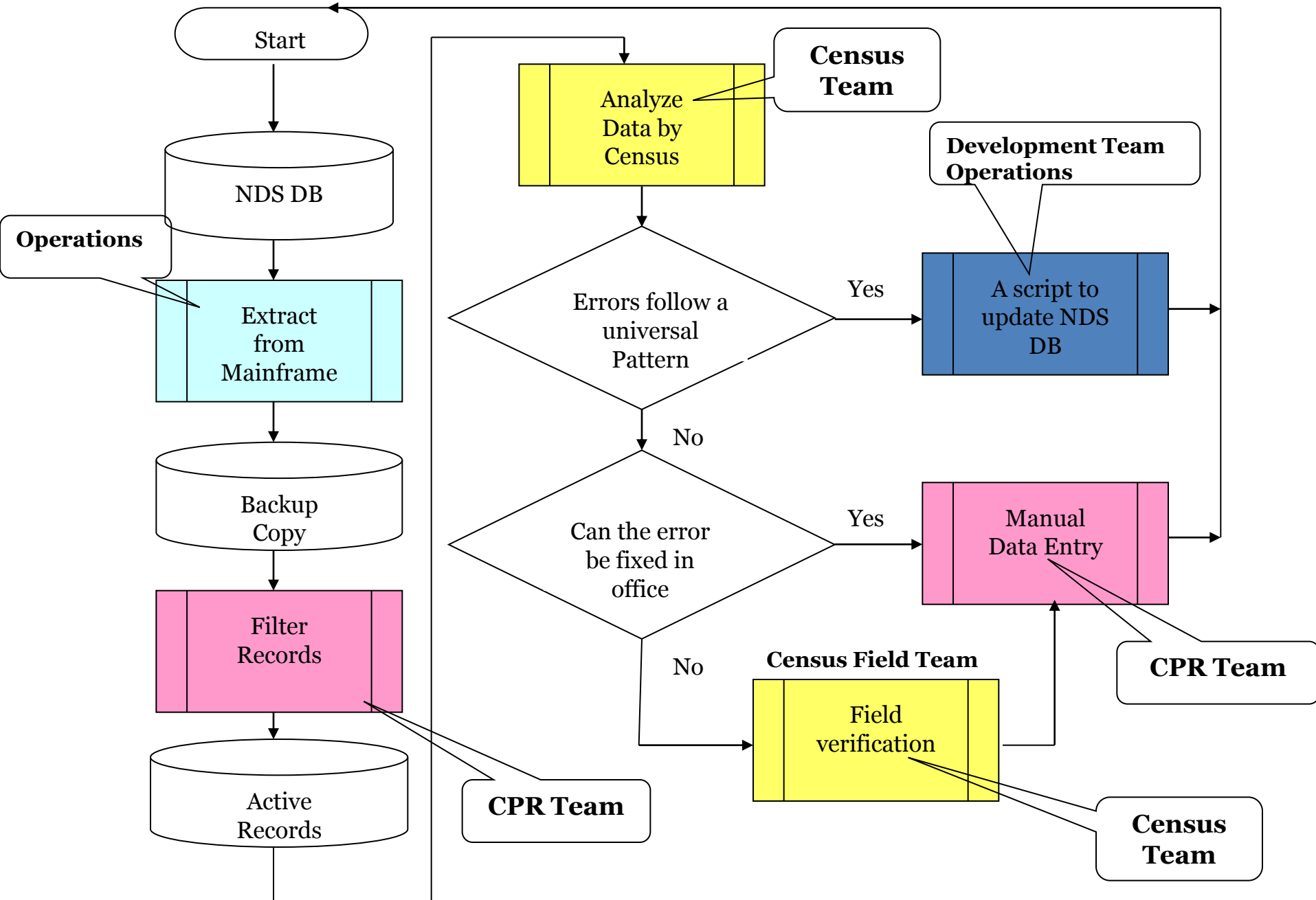
Census 2010 scope

- **P**opulation

- **H**ousings

- **B**uildings

- **E**stablishments

- **A**griculture

- Using the Population Registry and the **National Data Set** (NDS) as the base Register for Census 2010.

- Unify definitions, classifications, codes

- Complete Census variables from other government entities connected to the **Government Data Network** (GDN).

- Complete Census variables that don't exist in any government DB by 15,000 addresses Survey.

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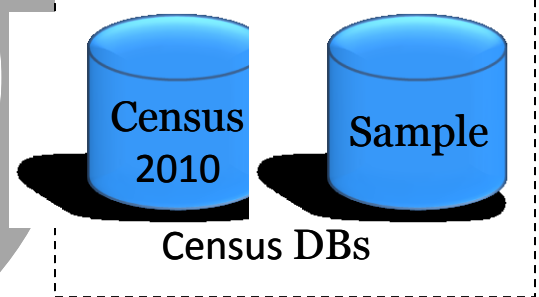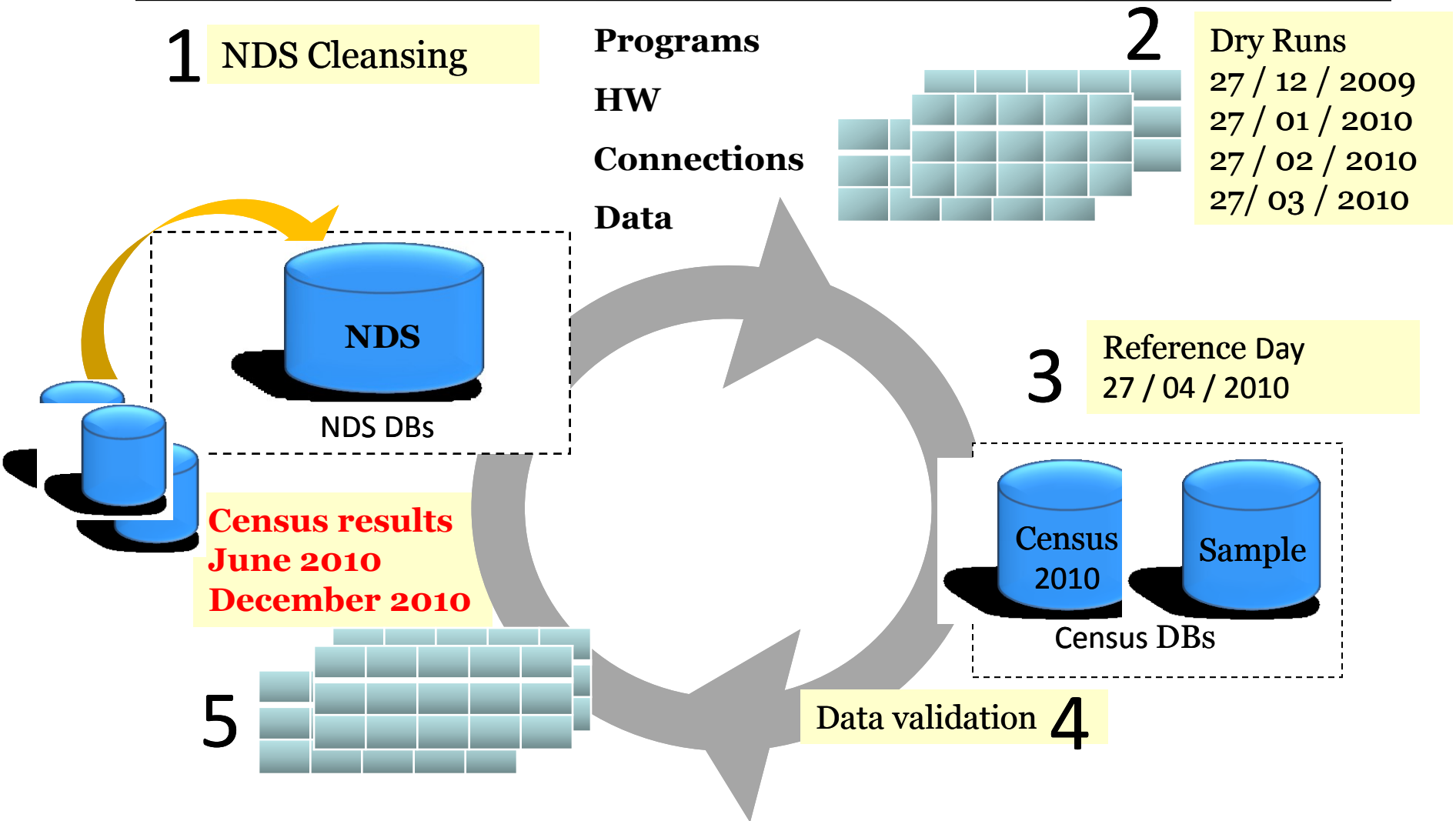
Census 2010 Workflow Features

- Electronic form in Desktop
- Electronic maps
- Retrieve data from DB
- Check certain variables for updates
- Complete missing variables online by phone
- Complete missing variables online by visit
- No data stored at PC
- DB online Updates

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2001 – 2010 Census

	2001 Census	2010 Census
Implementation	3 – 4 years	9 months
Publishing	1 ½ year	Population results immediately
Cost	BD 7 million	BD 1.6 million
Staff	1512	214
Codes	Manual	Automated
Form pages	4 with 103 questions	Online form
Data entry	Manually	No data entry. Retrieved and corrected if any updates
Summary results	Mainly Papers	Mainly online
Detailed results	Papers	Online

Challenges and lessons learned

Challenge	Solution	Lesson learned
Missing data in Administrative records	Conduct Field Survey to cover missing data	Enhance DBs in the government .
Incomplete data validation rules in related government applications	Provide data validation rules within the government applications to ensure data quality	Enhance DB quality and efficiency in data producer entities
Variance in classifications, definitions between data producer entities	Prepare mapping data tables	Unify definitions, classifications, and codes within different DBs

Challenges and lessons learned

Challenge	Solution	Lesson learned
Lack in skilled human resources	- Utilize teachers, graduates, and unemployed graduates - Use technology - Give authority and flexibility to heads and teams	Build competency within staff
Data security and privacy	Deploy government security and data protection policy	User satisfaction Protect government fire wall

Critical Success Factors

Strong executive sponsor

☑ Build a shared services National statistics office (PMO) and prepare legal framework (Laws, policies). Put mechanism to encourage data producers to adopt and apply the data standards need to be followed.

☑ Good partnership with data producers , encourage and assist data producers to conduct Surveys to generate the required needed data.

☑ Work with data producers to apply the definitions, standards, and methodologies and encourage them to fill the gap for missing variables by conducting surveys and researches.

☑ Ensure confidentiality of data through secure and appropriate storage of records.

☑ Active trained call center, skilled technical staff and business matter experts

☑ Plan and implement national information infrastructure

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I Thank You All

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