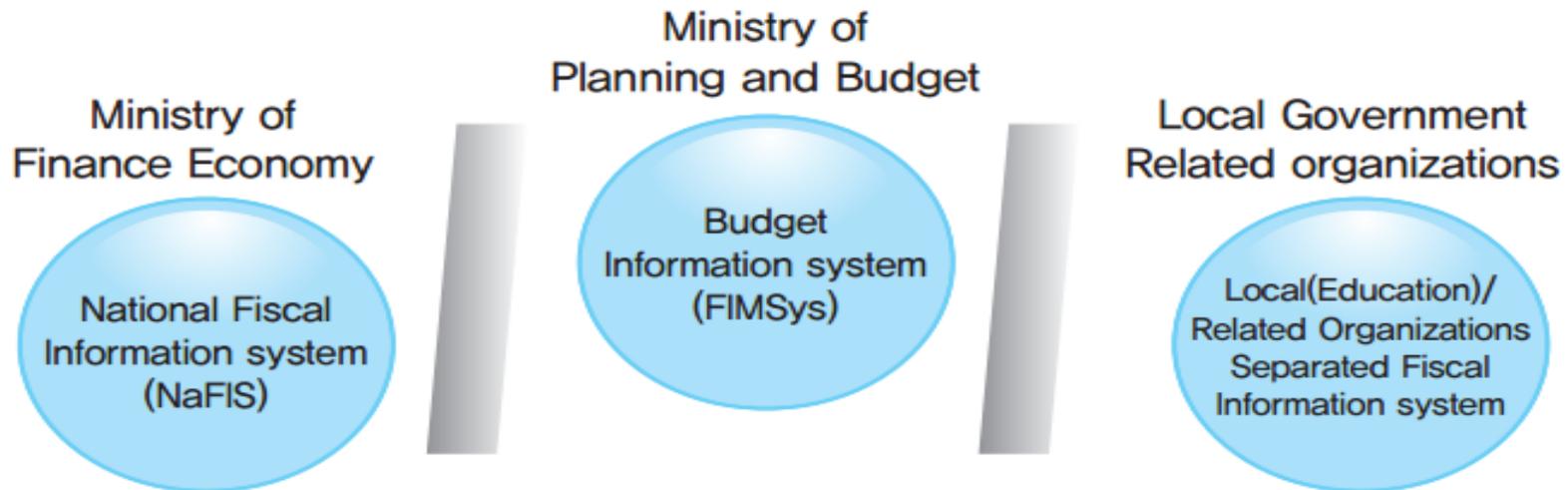


Digital Innovation in DBAS

Seongho, Jeong (Research Fellow, KPFIS)

Background

- Systemically manage the financial management information of related organizations
- Promptly reflect the internal/external changes in financial management
- Prior DBAS, financial management information systems operated separately



Reform process

- After fiscal crisis of 1997–1998, benchmark around the world
 - 1) introduction of the national finance management plan (MTEF);
 - 2) introduction of the top-down budgeting system;
 - 3) introduction of the program budgeting system;
 - 4) development of the performance management system;
 - 5) introduction of the accrual-based accounting and financial statements;
 - 6) construction of the integrated financial management information system
-

Primary Function of DBAS

- Program management system (PMS)
 - Budget Management System (BMS)
 - National Treasury Management System (NTMS)
 - Electronic Billing Presentation and Payment (EBPP) Electronic Fund Transfer (EFT)
 - Assets and Debt Management System (ADMS)
 - Real-Time Receipts/Disbursement System (RTRDS)
 - Performance Management System (PfMS)
-

Reason for Fiscal Reform

- Traditional budget system, centralized way, strict control of the budgetary inputs.
 - Spending without a thorough performance evaluation.
 - National priorities is often harmed by the line ministries' self-interests
 - Line ministries were likely to obtain more of an allocation with more budget requests
 - MOSF' s Budget Office cutback (or decrease) budget as much as possible
 - Budget review process became a game-theory, time-consuming
-

Big bang Approach Reform

Year	Introduction of New System	Remark
1999	Performance-oriented Budgeting System	Pilot test with 16 agencies
2003	Top-down Budgeting	
2005	National Finance Management Plan (NFMP)	
	Performance Management System (PfMS)	Submission of Performance Plan, all ministries
	Self-Assessment of Fiscal Projects (SAFP)	
2006	Program Budgeting	
2008	Operation of KFMIS (DBAS)	Developed since 2004
2009	Accrual Accounting	Developed since 1999
	Submission of Performance Report	All ministries

First Generation

- **Early FIMSys** is a DOS-based (DOS-NARA), run 5.25 floppy diskettes, client-server method.
Afterwards, Windows_IBM (A/S 400) method was applied.
 - budget management (NBS-Net) and fund management (FMS-Net).
- **SALIMI** is a simple, while NaFIS is much more specific.
 - provide: integrated settlement of cash-based standards

Early FIMSys function (From DOS to Window)

Budget Management	
National finance operation plan	Budget Compilation & Execution

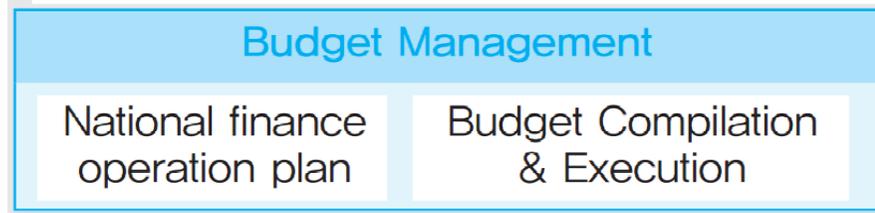
SALIMI(early version of NaFIS)

National Treasury Management		
Revenue	Expense	Fund

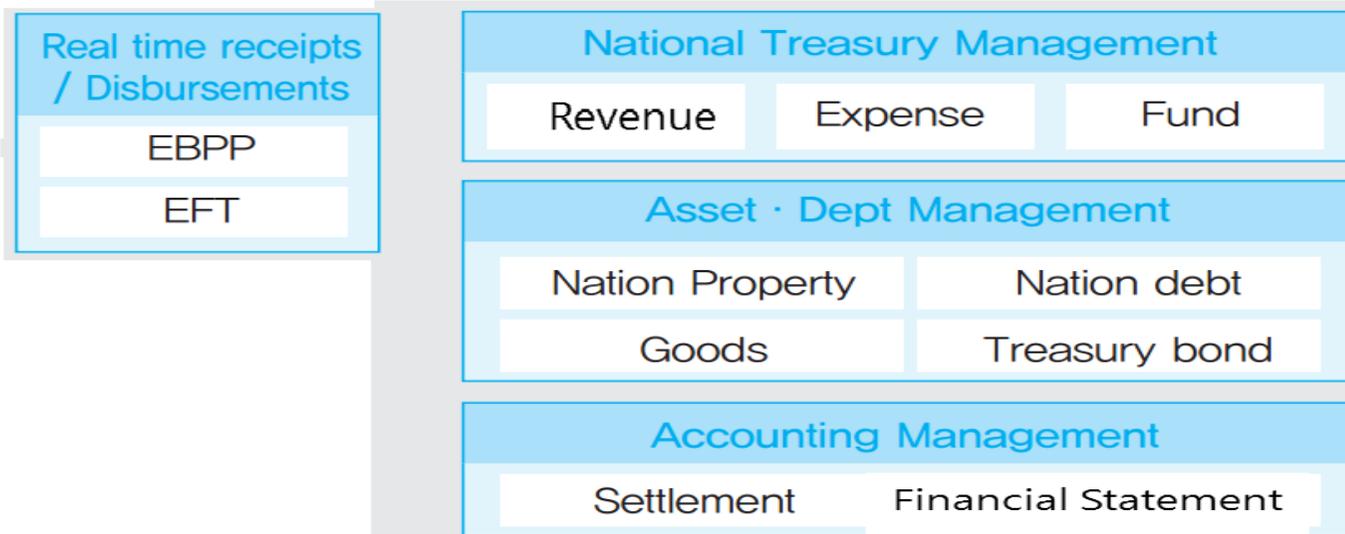
Asset · Dept Management	
Nation Property	Nation debt
Goods	Treasury bond

Second Generation

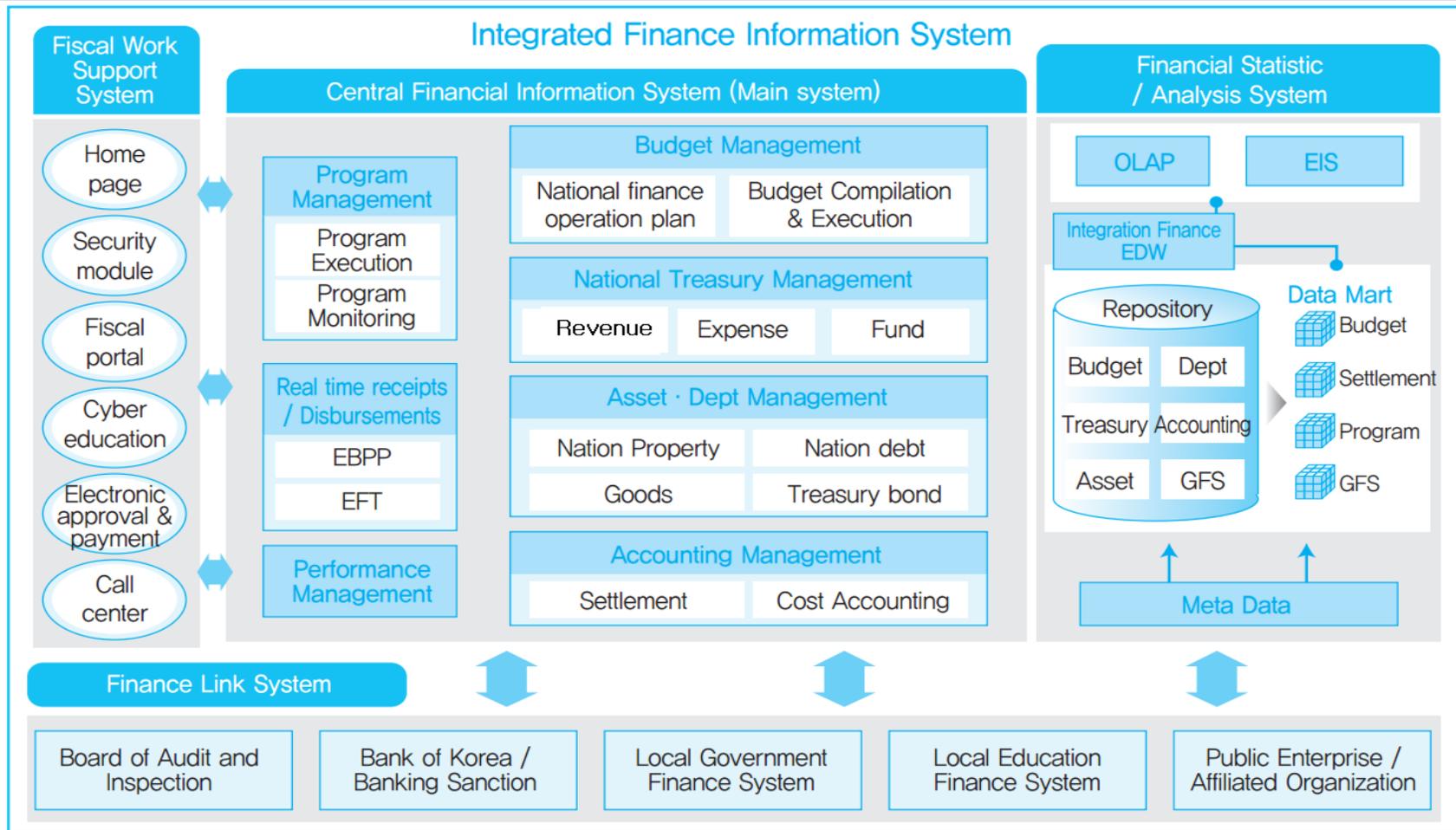
- FIMSys function (Window_based)



- NaFIS (update version of SALIMI)

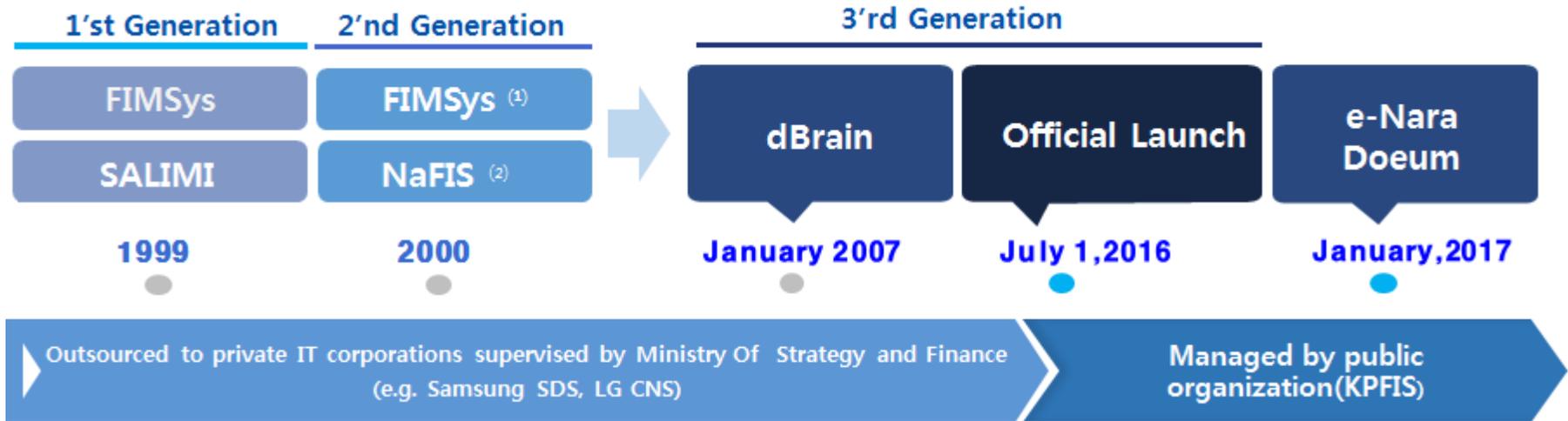


Third generation (DBAS)



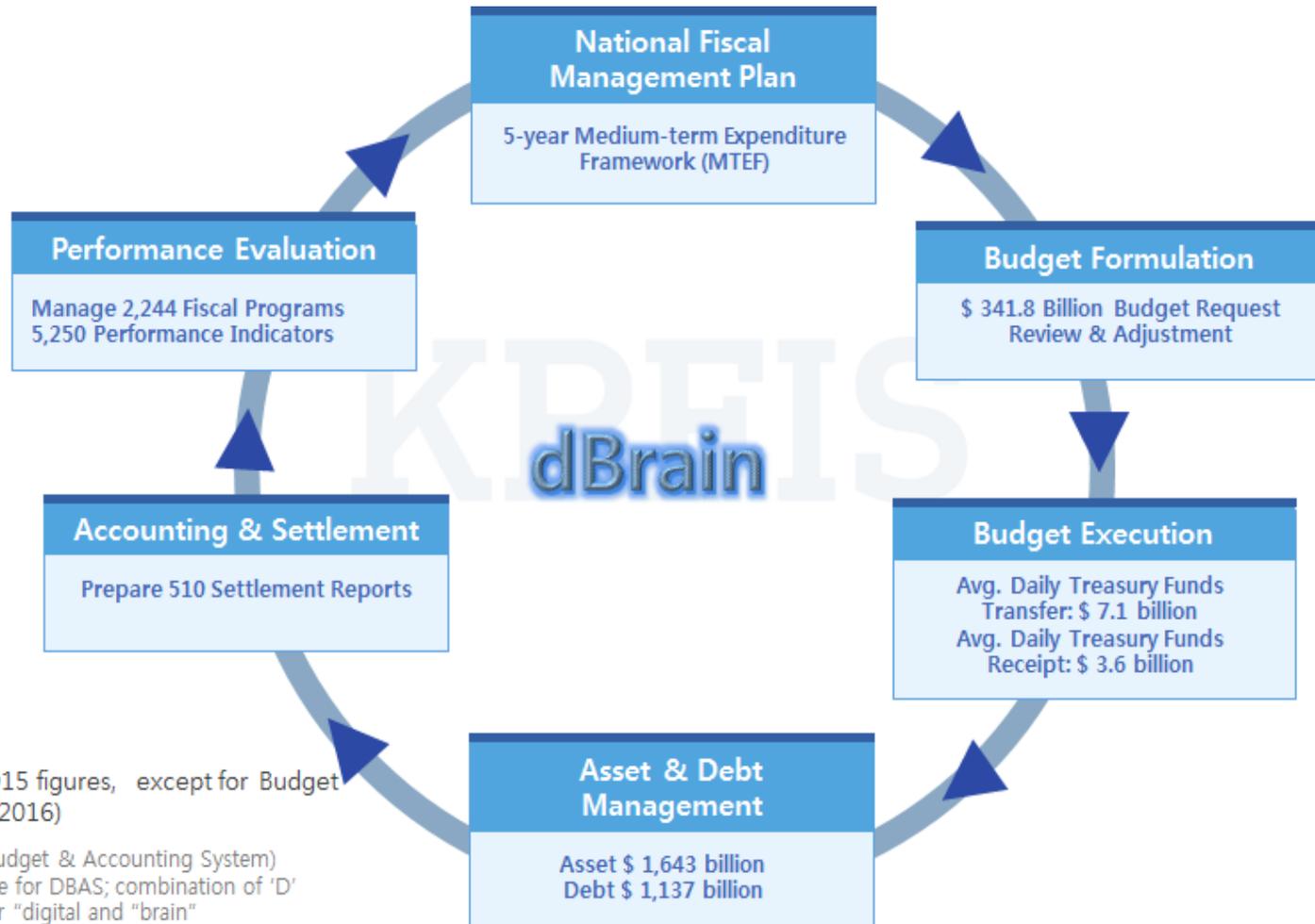
OLAP: On-Line Analysis Processing
 EIS: Executive Information System
 EDW: Enterprise Data Warehouse
 GFS: Government Finance Statistics

Evolution of DBAS



	1st	2nd	3rd
Ministry of Planning and Budget	FIMSys(DOS->Windows) -> Budget Manag't (incl. Fund)	FIMSys (Windows) Budget Manag't (incl. Fund)	DBAS (fully upgrade) FIMSys + NaFIS + Program Manag't + Performance Manag't
Ministry of Finance Economy	SALIMI -> National Treasury Manag't + Asset/Debt Manag't	NaFIS + SALIMI + EBPP/EFT + ccounting Manag't (accrual_based)	

Life Cycle of Public Finance Management



(Based on FY 2015 figures, except for Budget Formulation-FY 2016)

- 1) DBAS (Digital Budget & Accounting System)
- 2) dBrain: nickname for DBAS; combination of 'D' which stands for "digital and "brain"

Accomplishments

- **NFMP** has positive changes:
 - 1) Set up national priorities with long-term views,
 - 2) Line ministries are more cautious when they set up ministerial planning
 - 3) Many discussions about the strategic allocation of resources
 - 4) Targets economic stabilization for the long-term
 - Expenditure ceilings for **Top-down budgeting** is important, pilot operations for four agencies before fully adoption
 - **SAFP** has a direct effect on connecting the budget with the performance
Project evaluated as “unsatisfactory” by the SAFP loses budget allocation
Operates Preliminary Feasibility Test; Preliminary Feasibility Test is a prerequisite necessary to ensure the future performance of the projects.
 - **Reforming the budget system** (NFMP, top-down, and SAFP) is important issue
Republic of Korea's DBAS is one of the most developed finance management information systems which I ever seen...DBAS is one of the most integrated and unique financial information systems in the world.” (Dener, 2010)
-

Considering the Next Generation

- In recent years, government has been considering the next generation of the DBAS
 - Reflects new technologies and 4th industrial evolution (e.g., big data, AI, chatbots).
 - Promotes change to an integrated system seamlessly link (central government, local government, and state-owned enterprises and so on)
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