

Digital Budget and Accounting System (dBrain)

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Organisation: Ministry of Strategy and Finance

Country: Korea

Level of government: Central government

Sector: General public services

Type: Digital, Financial Resources, Public Service

Launched in: 2007

Overall development time: 5 years 8 months

Link to the innovation's website

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Description

dBrain is an integrated financial information management system, which combines revenue, expenditure, national property and settlement functions. It has made the entire public finance management process far more efficient and systematic, with its Electronic Bill Presentment & Payment (EBPP) function and Electronic Funds Transfer (EFT) function, which enable users to conduct all transactions online (e.g. pay taxes, make program expenditures for various government projects) without having to see government officials in person. Previously, cash-basis accounting with single-entry bookkeeping was used for national accounting but after implementation of dBrain, the auto-journalising function allows for convenient and improved management of various ledgers and settlement information based on accrual-basis accounting and double-entry bookkeeping standards.

Why the innovation was developed

- World-wide economic downturn, especially the global financial crisis, has sparked the urgency for reforms and innovations in fiscal management system in order to strive towards continued economic growth.
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Objectives

Improve access, Improve effectiveness, Improve efficiency, Improve service quality, Improve user satisfaction

- Providing efficient and systematic management of all fiscal activities and processes.
 - Enhancing the user convenience by combining and streamlining national budgeting and accounting systems.
 - Improving the accuracy of fiscal information and statistics.
 - Providing a convenient and user-friendly service to the public.
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Main beneficiaries

Businesses, General population, Government bodies, Government staff

- The direct beneficiaries of dBrain are civil servants in charge of budgeting, accounting, settlement, and contract management for each line ministry; dBrain has significantly boosted their work efficiency.
- Indirectly, decision making high-level government officials benefit by having access to better quality fiscal data. (Currently, there are approximately 68 000 users for dBrain in total.)

Results

Efficiency

- Combining the former budgeting system (NaFIS) and the former accounting system (FIMsys) into one integrated system resulted in increased user convenience, cost reduction, and improved work efficiency. The daily transactions volume through dBrain is approx. USD 5.5 billion.
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Effectiveness

- Successfully carrying out the adoption of accrual-basis accounting and double-entry bookkeeping.
 - Improved budget execution and performance monitoring capacity.
 - Able to produce statistical data that match the international guidelines set by the IMF and other international organisations.
 - Accurate and real-time assessment of fiscal management status.
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Service quality

Accessibility:

- Today, there are approximately 68 000 dBrain users from various government offices and public institutions and the system handles on average 360 000 cases daily.

Reliability:

- There haven't been any major system errors since its inception in 2007.
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User satisfaction

- User Satisfaction: 52.6% (2008), 62.4% (2010), 67.7 % (2013).

Development

Design

The idea was suggested by policy planning staff; the decision to develop dBrain as one of major fiscal reform initiatives was made at the National Agenda Meeting chaired by the president.

Design time: 5 months

Testing

- Two months of pilot operation and testing after the development of dBrain system.

Testing time: 2 months

Implementation

Tools used:

- Implemented Business Process Reengineering (BPR; optimising and streamlining the existing procedure in accordance with information system to maximise the effect of adopting new system) and Information Strategy Planning (ISP; computerisation of a given work process).
- Developed a customised system that best suits the needs of the Korean government's fiscal management system and environment by utilising ICTs.

Resources used:

- Total budget : USD 60 million.

Implementation time: 4 years 4 months

Diffusion

- In order to introduce and promote dBrain, the Ministry of Strategy and Finance participates in various seminars hosted by international organisations such as the World Bank and the Inter-American Development Bank, hosts international delegations for study visits, and signs bilateral knowledge sharing and cooperation agreements (MOUs) as part of efforts to transfer technology and know-how to other countries to help them develop and improve their own FMIS.

Diffusion time: 2 years 9 months

Challenges and solutions

- Challenge: Other Public institutions were against the idea of disclosing and integrating their financial information.
 - Solution: Allowed them to maintain their own system with requirement of submission of financial information.
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Partnerships

Experts, Academic and Public Institutions

Other

During the development phase, there was much cooperative partnership with experts from various research centers, academia, and public institutions.

Lessons Learned

Lessons Learned

- Conducting all fiscal transactions online greatly enhances fiscal management efficiency.
 - Having a centralised system that integrates various individual systems of public institutions and organisations produces comprehensive and high quality fiscal information that increases the efficiency and transparency in fiscal management.
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Conditions for success

- Developing a system like dBrain requires determination and support of high level decision makers in charge of national finances.
 - Need to have a certain level of ICT expertise for maintenance and continued improvement of the system.
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