

The concept of AI-government: Core concepts for the design of AI-government

Michael Dukakis

Nguyen Anh Tuan

Nazli Choucri

Thomas Patterson

Professor,
Political Science Department
Massachusetts Institute of Technology

Professor,
Kennedy School of Government
Harvard University

June 25, 2018

Abstract

E-Government is the use of communication and information technology for improving the performance of public sector agencies. AI-Government transcends E-Government by applying AI to assist decision making for all critical public sector functions – notably provision of public services, performance of civic functions, and evaluation of public officials. At the core of AI-Government is the National Decision making and Data Center (NDMD). NDMD collects, stores, analyzes, and applies massive amounts of data relevant to the provision of public services and the evaluation of public programs and officials. It does not replace governance by humans or human decisional processes but guides and informs them, while providing an objective basis for service provision and evaluation.

Citation: Dukakis, M., Nguyen, T. A., Choucri, N., & Patterson, T. (2018). *The concept of AI-government: Core concepts for the design of AI-government* (Concept Paper). Boston Global Forum, & Michael Dukakis Institute for Leadership and Innovation.

Unique Resource Identifier: <https://bostonglobalforum.org/mdi/wp-content/uploads/sites/15/AI-Government-version-1.0.pdf>

Publisher/Copyright Owner: © Boston Global Forum, & Michael Dukakis Institute for Leadership and Innovation.

Version: Final published version.

The Concept of AI-Government

Michael Dukakis, Nguyen Anh Tuan, Nazli Choucri, Thomas Patterson,

Boston, June 25, 2018

Core Concepts for the design of AI-Government

The concept of AI-Government was developed at the Michael Dukakis Institute for Leadership and Innovation through the collaboration of Governor Michael Dukakis, Mr. Nguyen Anh Tuan, Professor Nazli Choucri, and Professor Thomas Patterson.

E-Government is the use of communication and information technology for improving the performance of public sector agencies. AI-Government transcends E-Government by applying AI to assist decision making for all critical public sector functions – notably provision of public services, performance of civic functions, and evaluation of public officials. At the core of AI-Government is the National Decision making and Data Center (NDMD). NDMD collects, stores, analyzes, and applies massive amounts of data relevant to the provision of public services and the evaluation of public programs and officials. It does not replace governance by humans or human decisional processes but guides and informs them, while providing an objective basis for service provision and evaluation.

AI supported public services span major critical functions to enable:

- *AI for healthcare, social services*
- *AI for law, legal services.*
- *AI for education*
- *AI for tourism*
- *AI for public transportation*
- *AI for labor*
- *AI for agriculture, fishing, and natural resource management*
- *AI for public finance*
- *AI for public housing*

Structure of AI-Government:

- National Decision Making and Data Center (NDMD) lies at the core of AI-Government. It would link to all ministries, departments, and collects data from ministries, departments, provinces, provincial sub-units, cities, villages, schools, and other administrative units. NDMD would be located in the office of the President or Prime Minister.
- NDMD would serve as the basis for automated public service functions. It would be a broad-based support system for public sector decision-making

Tasks required to develop AI-Government:

- Build National Decision Making and Data Center (NDMD)
- Create regulations for automated public services
- Provide mechanisms to evaluate the performance of leaders or officials
- Facilitate feedback for civil society
- Set rules for decision making in all organs of government
- Set regulation to collect data from levels of governments, Party Office, National Assembly.
- Establish a taskforce for implementation and evaluation
- Create methods to assist citizens through use of block chain ID for entities that would include corporations, institutions, social organizations

Create automated public services assisted by AI, notably:

- *Health care, public health, and social services:*
Build AI hospitals and other social services for remote, rural, and mountain area.
- *Education*
AI schools for remote, rural, and mountain areas.
- *Law, legal services:*
Build AI law, legal services
- *Public transportation:*
AI public transportation information, and support system.
- *Tourism:*
AI public services for tourism.
- *Labor:*
AI labor, job guidance system.

- *Agriculture, fishing, and natural resource management*
AI agriculture, fishing, and natural resource guidance systems.
- *Public Finance:*
AI revenue collection and monitoring system.
- *Public Housing*
AI public housing targeting, allocation, and monitoring system.

AI-Government is a component of the Artificial Intelligence World Society (AIWS) model developed by the Michael Dukakis Institute for Leadership and Innovation. The model was seven layers, two of which pertain to AI-Government.