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**A W.I.S.E. Performance Management Framework, a Key Element in Building
Evidence Engines in Government¹²**

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Disclaimer: Pop V. (Munteanu) Ioana's views do not represent those of her affiliated organization General Service Administration, Federal Acquisition Services.

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CHAPTER I. INTRODUCTION

Much has been written and debated about the role of government. Encyclopedia.com describes it as the following “Governments are responsible for providing services that individuals cannot effectively provide for themselves, such as military defense, fire and police departments, roads, education, social services, and environmental protection”³. Government implements its responsibilities and fulfills its role through actors such as legislators, courts and or bureaucracies by issuing and implementing laws, policies, rules and regulations and by holding its institutions accountable for results.

One mechanism for holding the government accountable for the results it obtains is by measuring its performance. Currently, in the United States (US), federal agencies must comply with performance reporting requirements set by the 2010 Government Performance and Results Modernization Act (GPRMA) as the statutory framework for assessing performance. Federal leaders’ and managers’ manage programmatic performance within a compliance-inducing, reductionist by nature, environment and statutory requirements, such as holding quarterly data reviews, has not induced great creativity or resulted in transformative systems approaches across the government.

Governmental policies and programs are implemented to improve the well being of its citizens. This research is intended to shed some light into whether the current performance frameworks and organizational capacities to produce performance and other types of evidence empower decision-makers with comprehensive, reliable and timely evidence to guide their decisions towards efficiently and effectively implementing and adapting governmental policies and

³ <https://www.encyclopedia.com/economics/economics-magazines/role-government-0>

programs to respond to changes in the programs' operating ecosystems and maximize resources and positive impacts on improving the well-being of society and citizens.

Each chapter describing the research I conducted includes introduction, findings, observations, recommendations and an appendix of supporting documentation. The concluding chapter includes lessons public administration institutions can learn to improve their evidence-based decision-making processes in support of strategic decision-making.

CHAPTER II. PERFORMANCE MANAGEMENT

To answer abovemention questions I engaged in a series of descriptive, fact-finding studies using a variety of research methods. First I conducted a literature review to determine the US mandatory requirements for performance measurement and the academic recommended frameworks for performance measurement. Then I collected, analyzed and synthesized administrative and survey data from the Federal Acquisition Service (FAS), General Services Administration (GSA) one of the larger US Executive Agencies as established by the Chief Financial Officer Act⁴, to determine the agency's capabilities (data, analytical capacity and data and evidence infrastructure), to produce quality and timely evidence and performance data for decision-making. This research resulted in several recommendations that were implemented by FAS and GSA, as notional enhancements, complementary to the legislative requirements.

The first research question is aimed at learning what types of performance indicators do current mandatory and academic frameworks encourage governmental managers to use for assessing their performance and guiding program growth and adaptation decisions? As Peter F. Drucker famously said *“Unless we determine what shall be measured and what the yardstick of measurement in an area will be, the area itself will not be seen”* (Drucker,1959⁵). The intent of

⁴ <https://www.whitehouse.gov/omb/office-federal-financial-management/>

⁵ Peter Drucker, [People and Performance](#), pg. 120, Allied Publisher Limited, 1977

this research was to determine whether managers have the appropriate performance frameworks and organizational capacity and infrastructure to empower them to deepen their understanding of the programs' performance and provide quality and timely evidence to make program improvements and adaptation decisions in response to changes in their programs' internal and external operating ecosystems.

I engaged in a descriptive study, employing a literature review and a use case to document and analyze whether current performance frameworks and practices encourage managers to deeply and thoroughly understand how their programs achieve results, and whether performance frameworks encourage the obtainment of quality evidence to arm managers to make informed and timely decisions about the future of their programs. Further, I looked in greater detail at how the government approaches the success and measurement of a newly released Administration priority – sustainability⁶ – to determine how programs approach public policy performance.

I concluded that performance management requirements and frameworks are built on the provisions and capabilities of the past (looks at organizations as siloed systems with concrete boundaries with success being measured at the siloed, functional levels, and sees performance measurement as a past- and current-oriented compliance, descriptive, and reporting exercise. This results in performance guidance that encourages agencies to measure, monitor and use for decision-making the siloed performance of its sub-units (i.e. financial, HR, etc.)

CHAPTER III. BASELINE STUDY OF DATA SOURCE

Theoretical frameworks and perspective are useful to set *north stars* to guide program performance and implementation. I utilized FAS, GSA, a medium-to-large size federal agency, as

⁶ Priorities, The White House

<https://www.whitehouse.gov/priorities/#:~:text=The%20Biden%20Administration%20will%20create,by%20no%20later%20than%202050>. And M-22-06 Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability <https://www.whitehouse.gov/wp-content/uploads/2021/12/M-22-06.pdf>

a test case for the remaining research questions to understand the demand, production and use of performance and other types of evidence in support of strategic decision-making. The second research question was aimed at baselining, understanding, and describing FAS's data and analytical capacity to produce evidence. I engaged in a fact-finding data collection effort to baseline the number, type and location (internal, external) of sources used to support decision-making; the type of data the databases capture; and automation needs to dynamically provision performance dashboards.

I found that FAS data sources, like those of all US Federal Agencies, were developed by FAS subunits in a disjointed, ad-hoc, needs-based manner. This allowed for duplicative and inconsistent data collection systems to be developed with data being collected in an unstandardised manner (i.e. use of different customer ratings scales). More often than not FAS analysts belonging to different FAS offices selected, enriched, analyzed and visualized evidence from the same sources in an uncoordinated and inconsistent manner. This resulted in internal duplicative, inefficient efforts, and limited use of data assets.

CHAPTER IV. BASELINE STUDY OF ANALYTICAL CAPACITY

Agencies are unable to make strategic decisions around governing their data and evidence capacity if they lack visibility of what data sources were used the most and by whom; what analytical and visualization tools analysts employed; what business questions and analysis areas they were addressing; and what analytical gaps they experienced. In order to determine FAS's analytical capacity I implemented a survey that identified the data sources that were most often used to support performance dashboards as well as the type of analysis, areas of research and research products that resulted from use of data sources and analytics. Lastly I collected data about analytical gaps.

After finalizing the research I concluded that analysts mostly focused on their functional area for their analyses and tended to perform descriptive, diagnostic, and trends analysis. They made limited use of disparate sources and of inferential and advanced statistical and ML/AI

methodologies. FAS staff reported skill gaps, including advanced statistical and analytical skills and personnel.

CHAPTER V. DATA AND EVIDENCE INFRASTRUCTURE REQUIREMENTS

A forth research question was to identify the data and evidence infrastructure needs. Specifically, *what are the data governance and infrastructure requirements, unmet needs and pain points to implement dynamic, evidence-driven decision-making?* To answer this complex question, I first employed a Delphi methodology study to gather FAS experts' viewpoints on key infrastructure attributes and needs. I then developed and administered a survey to gather FAS data scientists' and analysts' viewpoints that were subsequently used by FAS leaders to validate, support and allocate resources to address the infrastructure needs. I found that FAS staff at all levels acknowledge the disjointed efforts and the need to establish a cohesive, service-wide, unified data and evidence governance strategy that would centralize key resources and processes and orchestrate the alignment of data and analytics with strategic decision making as well as the need to build and improve data management requirements including data availability, data access controls, processes to enhance workflows, technology that supports storing, and joining, computing, sharing, and visualizing data and its metadata.

CHAPTER VI. DATA AND EVIDENCE MATURITY

After FAS implemented the findings and recommendations to modernize FAS data and evidence infrastructure and capabilities, I addressed the last research question aimed at assessing FAS organizational *capacity maturity* to provide quality and timely evidence for dynamic, evidence based decision-making. FAS staff at all levels reported the need to further resource FAS data and evidence capacity by identifying data and evidence roles and providing competencies, job series and description, and training for each role.

CHAPTER VII: CONCLUSIONS

To address FAS evidence demand and challenges in providing dynamic performance management systems as well as timely and quality evidence for strategic decision-making identified above, I issued a set of recommendations that can be adopted by any governmental organization. I use FAS as an example to document challenges and provide adaptation recommendations to optimize the demand and supply of knowledge.

Public organizations operating into the future require new vision and capacity to design and manage knowledge-building systems or evidence engines. I believe that the four necessary building blocks, if aligned, will constitute the evidence engines⁷ that can timely provide the quality data and analytics to deliver dynamic, evidence driven strategic decision making. The four pillars of evidence engines include:

- **A performance management framework:** that encourages leaders and managers to look beyond the holistic organizational measures (i.e. the balanced scorecard), to include indicators and metrics of impacts to the external environment; indicators and metrics of synergies among its internal and external metrics; and indicators and metrics for measuring and monitoring the external operating ecosystem to identify changes and opportunities. Such a framework, will empower leaders with foresight and catalyze organizations to align use of data sources and analytics to measure, monitor, and assess their performance and use dynamic evidence for decision-making – a W.I.S.E. performance management framework.
- **Data and infrastructure management:** To implement a W.I.S.E. performance management framework and augment data and analytics for amplified results, agencies have to centrally manage and coordinate their data sources and develop data architecture

⁷ A similar term, insights engines, was used in Building an Insights Engine: How Unilever got to know its customers by Frank van den Driest, Stan Sthanunathan, and Keith Weed; HBR September 2016; <https://hbr.org/2016/09/building-an-insights-engine>.

infrastructures and processes that support data identification, ingest, storing, securing, cataloging, access, standardization, analysis, and reporting/visualization).

- **Analytical capacity:** that includes an evidence framework and process that help analysts align data with appropriate research methodologies and use the most effective analytics to answer strategic business questions (fact finding, performance management, policy analysis, and evaluation), and a clear identification of roles, position, performance descriptions, and training needed for growth in each area.
- **Knowledge broker:** Agencies need leaders who can strategically orchestrate through internal processes both the demand for and supply of evidence, and provide relevant insights from the data collected to inform strategy formulation as well as management. The knowledge broker role can be played by Chief Evaluation Officers, Data and Evidence Governance Boards, etc.

For the past five years FAS implemented these recommendations. In a 2001 study, GAO found GSA to be one of the agencies that reported having data and evidence enhancing capabilities that were significantly higher than the Government-wide average (GAO, 2021).⁸

Overall, this paper provides a reflection on whether current performance management systems encourage US governmental agencies to measure the impacts of their policies and programs on their operating ecosystems, and offers a roadmap and an example for how agencies could increase their capacity to develop a data and evidence infrastructure to support dynamic strategic decision-making. It includes:

- A call to action for federal agencies to develop an open systems performance management framework that:
 - supports better integration and use of internal and external data,
 - derives synergies among its elements, and

⁸ US GAO, Report to Congressional Committees, Evidence-Based PolicyMaking, 2021 pg.27; <https://www.gao.gov/assets/gao-21-536.pdf>

- deliberately measures and monitors ecosystem changes to adapt organizational strategies in a timely fashion.
- A model for the role of the knowledge broker (e.g. Chief Evaluation Officer; data and evidence governance boards, etc.) who should strategically direct agency-wide data and evidence building efforts, and coordinate the agency components that collect, analyze and visualize data to provide agency leaders and managers with relevant and timely evidence to inform decisions.
- A roadmap and an example of how to assess and develop the needed organizational data and evidence infrastructure that fuels the quality and reliability of performance and other evidence types in support of dynamic decision-making.

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