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The impact of IT on the Greek Public Sector Intelligent Modelling of e-Governement initiatives in Greece

Policy Brief

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Intelligent modeling of e-Government initiatives in Greece

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Key insights

• Small scale, agile but effective ICT projects currently improve the eGov maturity in Greece and reduce the administrative burden in front-desk transactions after a prolonged stagnation.

• Despite recent progress, Greece still lags the eGov maturity of EU. Recent reforms may be impressive for Greek standards; however, many EU countries follow a steeper digital growth.

• The current emphasis on front-office technology to reduce red tape can only lead to moderate eGov improvement on its own. This strategy may serve as a short-term tactical objective, but it will soon fail to support a strong eGov maturity regardless of the volume of investments.

• If the eGov strategy sets the organizational efficiency, the interoperability, and the regulatory simplifications as important objectives, then ICT will deliver its full potential, and the eGov maturity will improve significantly even with moderate ICT investments.

• Considerable migration planning and change management are crucial for the efficient transition to G2B digital services.

Introduction

This policy brief aims at providing realistic policy recommendations on how to implement effectively eGov reforms in Greece. The policy brief builds on historic data analysis augmented with soft artificial intelligence soft tools which model the multi-dimensional causal relations in such complex reforms. Strategy and projects are modelled together with stakeholder needs, process changes, regulatory constraints, procurement tactics, reform coordination, etc to set up a comprehensive "intelligent x-ray" of eGov. The suitability and usability of the policy recommendations are verified with this intelligent x-ray.

State of play

Over the last two years, the Greek public sector has employed agile ICT solutions to reduce red tape in front-office transactions. Simple but very effective web applications have digitalized eGovernment (eGov) services which used to ask for physical presence, proof of authenticity, submission of documents, one-step approval, etc. The covid-19 era with the major difficulties for physical transactions accelerates eGov solutions. Digital maturity improvement is apparent especially when compared to a poor digital past. Additionally, the mindset of the administration since 2019 prioritizes eGov solutions in several public sector services. The set of covid-19 applications in Greece is regarded as a best practice in the EU.

Despite the recent progress, eGov maturity in Greece still lags many EU practices. When it comes to "government-to-business" (G2B) digitalization, eGov maturity does not improve with the same pace as with many EU cases. A comprehensive benchmarking of eGov maturity in Greece (with emphasis on G2B services) indicates the following:

• **eGov strategy in Greece remains largely fragmented**, with a short implementation horizon and guided by benefits within the short ministerial lifespan. Many digitalization strategies have been designed since 2000. They intended to span across five to seven years, however they were revised every two to four years, on average. In addition, the interest for well-established digital G2B services remained weak before the covid-19 era.

• **Despite recent progress, Greece still lags the EU-28 average performance** in many dimensions of eGov maturity. Recent reforms are on the right direction; however, most EU countries follow a steep digital growth. For example, access to digital services in Greece remains complex (28th place in EU in 2020) with few digital documents (26th) and interfaces which fail to comply with the "fill-in once only" design principle (60% less pre-filled forms than EU average). Absence of process reengineering in public sector services reduces transparency and digital accountability (25th). Also, most EU cases give strong emphasis on G2B transactions.

• **Regulations and organizational structures of the public sector fail to expedite eGov maturity.** The regulatory environment for digital delivery and well as the organizational efficiency stagnate for many years. Recent reforms focus on quick-wins on front-desk transactions; however, the current eGov strategy does not cater for drastic regulatory and operational simplifications to reduce the digital complexity. Deep dives into KPIs indicate that new regulations often patch existing legislation and fail to adopt the new ICT standards applied in many EU countries. As s result, Greece ranks 27th or 28th in most regulatory KPIs.

• **Public sector interoperability remains low,** hence eGov does not utilize new ICT efficiently. As a result, the digital gap remains considerable (28% less than EU average), despite a convergence trend since 2018.

• **eGov service utilization remains low** (until recently) mainly due to the large number of G2B transactions lacking a single point of entry and interoperability between registries. Access to G2B services remains complex in many cases with few digital

documents and interfaces which fail to comply with the "fill-in once only" and "digital-by-default" principles.

- **Usability lately converges with EU standards** as well as the number of new G2B services and the access from mobile / portable devices.

- **The recent L.4782/2021 legislation for public procurement**, seeks to simplify and reform the regulatory framework for public procurement, based on input from business, economic and civil society stakeholders. The updated processes are expected to expedite ICT procurement, especially in terms of turn-key solutions, ICT-as-a-service, agile ICT implementations, etc.

- **eGov strategy best practices** from other EU countries indicate that (a) Effective use of state-of-the-art ICT can reduce administrative burden in front-office transactions but only to a certain extend. ICT on its own offers moderate service optimizations only (b) Operational, regulatory and technology coupling is mandatory to increase eGov maturity significantly (c) Digital by default process design results to increased utilization of G2B services.

The "Digital Transformation Book 2020-2025" documents a comprehensive list of eGov projects and outlines an implementation strategy. However, its impact on eGov maturity is conditional to implementing complex reforms on public sector operations on top of ICT projects. In any case, the current eGov strategy, presents several positive implementation choices. For instance:

- **Simple, small scale, agile** but effective ICT projects improve the eGov services, after a long period of eGov maturity stagnation. As a result, the current ICT priorities play indeed an important role on eGov maturity.

- **Focus on front-office ICT**. Investments on new ICT focus heavily on services currently without digitalization. The eGov strategy adopts an incremental use of ICT with agile implementations and a major focus on quick wins. Such objectives increase the eGov maturity in Greece which has remained stagnated for years. While this approach gives tangible benefits in G2C transactions, it may not have the same results on G2B services or on services that prerequisite operational simplification.

- **The efficient design of digital services also has a positive impact on eGov maturity**. The eGov strategy should maintain its focus on services designed digital by default, with suitable e-channel usability, transparency, and increased availability.

Policy recommendations

The intelligent x-ray indicates that technology plays an important role to eGov maturity, especially in reducing the administrative burden in front-desk transactions. However, such applications do not re-engineer in depth the bureaucratic public sector processes, nor do they focus on services with multiple approval steps and extensive organizational interoperability. The digital bypass of the bureaucracy associated with physical presence seems to be an effective start. But the intelligent x-ray indicates that under the current eGov strategy mix, front-office technology on its own will soon fail to support a strong eGov maturity. The

intelligent x-ray indicates that the emphasis on red tape reduction through ICT can only lead to "positively medium" maturity improvement on its own. Hence, any excessive ICT investments of such type are not the proper strategy choice for the medium-term. This emphasis can only serve as a short-term tactical objective.

If the strategy mix sets the organizational efficiency, the interoperability, the regulatory simplifications, and the service delivery as important objectives (along with front-office ICT), then ICT will deliver its full potential, and the eGov maturity will improve significantly.

Building on those arguments, the intelligent x-ray highlights the following policy essentials. The "Digital Transformation Book 2020-2025" must effectively accommodate such recommendations to deliver the full potential of eGov investments.

Policy proposal 1: Functional and regulatory reforms must couple with ICT projects to improve further G2B digital services. A comprehensive strategy setting should set administrative burden reduction, organizational efficiency, regulatory simplifications, and service delivery as important eGov objectives as well.

> **A moderate simplification of eGov regulatory environment improves eGov maturity without excessive technology investments.** Regulatory simplification has not matched at all the pace and momentum of G2B digitalization. This has resulted to significant ICT effort but with stagnated results. For ICT investments to impact fully on eGov maturity, the current eGov strategy mix should be updated to give additional focus on regulatory alignment. Even a moderate update in the strategy mix can achieve further increases on eGov maturity. In any case, regulatory simplification cannot be initiated as a separate project, but instead it must be a major principle that governs all ICT projects.
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> In addition, **operational and process changes must accompany eGov projects to realize the benefits of new ICT infrastructure.** Excessive technology investment is not the proper strategy choice for improving eGov maturity. The eGov strategy must shift focus to remedy long standing regulatory and organizational problems like cross functional silos, conflicting regulations, red tape, service delivery optimization. This will allow ICT infrastructure to couple with operational efficiency and have an additional impact on eGov maturity.
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> Also, the current strategy mix should **stop interpreting new ICT as applications for internal use**. In addition, the eGov maturity **should only not prioritize front-desk G2C transactions**. The introduction of ICT to digitalize "life events" for citizens must be extended to include business interactions as well.

Policy proposal 2: Considerable migration planning and change management are crucial for the efficient transition to digital services.

> **The timely implementation of public policies** that reduce red tape can have a major positive impact on eGov maturity. Hence, the eGov strategy must couple them effectively with new ICT.
>
> **Also, proper change management and migration planning must be integral to complex ICT reforms**. That is because new ICT infrastructure significantly increases

the need for effective change management and efficient migration of physical G2B services to digital.

Process and regulatory simplification together with ICT projects can be expedited with an integrated project management structure. Such a structure may impose synergies between ministries and public sector bodies whose operational needs will be served by ICT. An integrated project team also involves end-users (citizens and businesses alike) as they benefit from any regulatory or process simplification first. Moreover, extensive testing as well as continuous evaluation by the end-users will accelerate migration.

It would be useful to legally shield the use of ICT, in terms of its universal use, management responsibility, data protection, etc.

Training must be coupled with reduced workload for public sector personnel. Thus, any new digital service should incorporate specifications for easier, shorter, and less work intensive tasks for internal users, in comparison to the physical servicing.

Finally, the absence of a uniform mapping and managing ICT projects must be addressed. Best practices, standards, or methodologies, such as the European Commission's PM2 project administration, can be adopted. In addition to the apparent benefits of efficient project management and resource allocation, such a uniform way of mapping, may make access to EU funding easier.

Policy proposal 3: Interoperability remains key to effective G2B digital services. Contemporary G2B services rely heavily on extensive ICT interoperability. However, the limited ICT interoperability remains the Achilles' heel of the Greek eGov. Hence, In addition to regulatory and operational changes, the eGov strategy must give strong emphasis on ICT interoperability.

Interoperability-by-design can be applied to various system architectures. It may be easier to enforce in centralized architectures, but it can also be ensured in distributed systems.

To promote interoperability, eGov applications should adopt the open platform approach, the principles of agile software development, contemporary data management standards and customer-centric interfaces. The eGov strategy should integrate ICT with universal and horizontal support of G2B services. These «end-to-end» provisions will ensure interoperability with key business registers, compatibility with the services and the standards of "gov.gr", and compliance with authentication and safety principles.