

Data Exchange and Infrastructure Sector

Estonia has established a robust digital infrastructure, notably through its "X-Road" data exchange platform, in which it seamlessly connects public sector databases, municipalities, and businesses for secure and regulated data exchange. As opposed to the Philippines (While progressing in digitizing government services) may lack comprehensive integration and infrastructure for efficient data exchange. Estonia prioritizes data privacy and ownership, offering individuals control over personal information with secure authentication mechanisms and transparent access protocols. While in the Philippines, we face challenges in regulations for data privacy and citizen data ownership. Estonia has a proactive adoption of innovative technologies like blockchain ensures real-time data integrity and security, keeping it ahead in cybersecurity. Meanwhile, in the Philippines, in its digitalization efforts, can leverage emerging technologies like blockchain to enhance government service reliability and security. To emulate Estonia's success, the Philippines should invest in digital infrastructure, prioritize data privacy, adopt innovative technologies, and promote collaboration across sectors to drive digital transformation.



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Feb 7 8:25pm

One sector of Estonia that stood out to me was the healthcare sector, since it was so intriguing to see how seamlessly they are able to integrate ICT technologies into their services. This makes healthcare services easier to access remotely, all the while preserving the privacy and security of one's medical data. For me, the key differences I noticed from how they use ICT in comparison to ours is the integration and centralization of ICT. ICT is not just there to provide aid to the healthcare sector, but it has become a primary way that the people of Estonia can access the healthcare that they need. Additionally, since the ICT used is highly centralized, it allows for an easier user experience since majority, if not all, healthcare services are accessible through one portal. If the Philippines were to replicate this digitalized healthcare system, accessibility and integration must be taken into account, as well as hardware and software compatibility in order to ensure that the ICT would be able to perform well. Additionally, proper training of how the system works is crucial in order to fully maximize ICT technologies.

Reply |

FERNANDEZ, EVAN LORENZ DAVID

Feb 7 8:18pm

Estonia has successfully integrated technology in their way of living. They have the trust of the people in using these technologies because they are open and transparent in the way they are handling data. Some examples given in the videos are having a strong digital and secure identity. They also have access to know what information is collected or who is accessing their information. With these, governance in Estonia allows citizens to access government services online. Estonian citizens can vote, file taxes, and have access to other services digitally.

The main difference between Estonia and Philippines is that their ICT infrastructure is well-integrated. Everyone can access their services anywhere while some areas in our country do not have proper internet access. They also give emphasis on cybersecurity and user-centered design. It was also mentioned in the video that the government sectors and private sectors work together. I think that for Philippines to replicate what Estonia has done is that they should first understand what sectors in our country can they apply these from. Private and government sectors need to work together in order to have proper funding and training programs should be taught in order for citizens to use these ICTs properly. Trust and proper handling of personal data and information is also important.

Reply | 2

DE LA CRUZ, ANGELO LORENZO

Edited Feb 7 7:11pm

When comparing how Estonia and the Philippines use technology in government services, there are some big differences. Estonia, after gaining independence from the Soviet Union, decided to rebuild everything using technology. They've been doing things like paying taxes online and voting electronically since the early 2000s. Estonia's success comes from having strong technology, clear laws, involving citizens, and systems that work together smoothly. They focus on keeping data private and reliable.

Despite advancements in technology globally, the Philippines has been late in implementing e-government services like digital ID and e-voting. While countries like Estonia embraced digital solutions early on, the Philippines only began its

journey towards digital governance relatively recently. However, the country still faces several challenges. Many areas in the country lack reliable internet and technology access, particularly in rural areas. There's also a need for improving digital literacy among citizens and government officials to ensure effective use of technology for accessing and delivering government services. Additionally, limited financial resources and technical expertise may hinder the implementation and maintenance of complex ICT infrastructure and systems.

For the Philippines to replicate what has been done in Estonia, the challenges mentioned above must be first addressed. The Philippines should prioritize investments in digital infrastructure, including expanding internet connectivity and upgrading technology infrastructure, especially in rural and remote areas. Education and awareness programs may be launched to improve digital literacy among citizens, government officials, and employees, which will empower them to effectively use and benefit from digital government services. These are just some of the many solutions that can be done to overcome the challenges and achieve success in integrating ICTs into government services.

Reply |

ARELLANO, MARTIN JAMES ABES

Edited Feb 7 7:13pm

A sector in e-Estonia with integrated ICT that I found interesting is the e-Governance sector. This can be broken down into several parts which are eDemocracy, Justice and public safety, e-Services and Registry. The main point of this sector is that government-related services can be done online for efficient processes and less hassle for its users. If you compare it to the Philippines, the way eGovernance is implemented is far more advanced in Estonia. An example of this is the method for ballot collecting during elections. According to the e-Estonia website, e-Democracry utilizes internet voting or (i-Voting), that allows the voters to cast their vote from any internet-connected device anywhere. To log-in the user must use their government-issued electric IDs to cast their ballots. In the Philippines, voting cannot be done online yet and one must go to the barangay appointed to them in order to vote. This kind of setup is prone to mistakes (like manual shading of ballots) and can also be an inconvenience since some election centers are filled with people and can be chaotic. Ballot machines may also break which will impact how much votes can be counted.

The Philippines may start replicating what has been done in e-Estonia by investing more resources in the online sector for government services. While the Philippines already offer similar services like in LTO, DFA, and BIR, the implementation is not that much advanced yet as it is limited only to services such as scheduling of appointments and online payment. The government may start exploring other ways they can provide their services online. However, the government must ensure that it has the technology to be able to offer online services. They need to expand and upgrade their existing ICT infrastructure to be capable in offering e-Government services. They also have to ensure that it fits the digital literacy of its targeted users.

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Ron Hideki Kawachi
Feb 7 4:44pm

In terms of the healthcare sector, there is a major difference in how ICT is being implemented by Estonia and the Philippines. Firstly, Estonia requires practicing doctors to use a system to enable electronic health records and digital prescriptions. Additionally, the use of a centralized system for their entire healthcare sector enables easy record retrieval and access while ensuring confidentiality and security with the use of digital signatures and logging. On the other hand,

the Philippines has yet to implement such a system nationwide as most hospitals use their own systems to handle their operations and record keeping. I think part of the reason for the difficulty in implementing a centralized system in the healthcare sector in the Philippines is due to the big presence of private hospitals in the country. For a similar ICT project to work in the Philippines, the government should take initiative to enforce the use of standardized systems and ensure that all hospitals follow or use it.

Reply | 1



ASARES, KARL LOUIS MANGALIMAN

Feb 7 3:57pm

I would like to focus on the education sector, and Estonia's use of 'e-school' platforms.

The Philippines has two different systems that are roughly similar or are overlapping in usage with e-schools: the use of diaries and the learning management systems like Canvas, Quipper, Genyo, and more.

The first key difference I see is that e-schools are a centralized source of a lot of information that diaries and LMSs only partially capture. Parents can actually see what classes there are, who is teaching, what the schedule is, what their child's marks are, and more. In comparison, the Philippines's systems generally have the same information but with differing levels of accessibility. For instance, while you can find the schedule and the teacher of a subject, you would have to look for the documents that say such. This is the same thing for grades. Sometimes, the only way to know is to have the actual output itself with the score, or something that has the score in writing.

Another key difference is that our use of diaries and LMSs is strictly private. The implementation of these systems and technologies is dependent on the schools. If the school can't afford to provide diaries or host LMSs, then the students are unable to use them.

Finally, the video stresses the idea of communication between the student, the teacher, and the parents. The way the Philippines seems to handle it now is that the diaries and LMSs are used for student-teacher communication. Parents and teachers usually only communicate during PTAs, excuse letters, and more. They also usually only communicate when something bad is happening with the student. The 'e-schools' seem to stress a more connected correspondence between parent and teacher to make sure that parents can properly help their children at home.

I would say that with the widespread adoption of different LMSs by schools in the Philippines, people could be more prepared to adopt a system similar to the 'e-school'. The development of such a system must ensure better communication between the three parties, and the implementation should make considerations for everyone due to our issues with technological divide.

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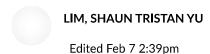
GO, ALDRICH MATTHEW SY

Feb 7 2:41pm

The videos presented in class mention that Estonia is widely hailed as a global example of using ICT in governance, in particular, voting which is part of the political sector. The video mentions that the system builds primarily on the Estonian ID card. Voters can change their electronic votes an unlimited number of times, with the final vote being tabulated. Once all precincts have finished their work, a list of people who have voted in person at polling places within a precinct is submitted to Estonia's central online voting system. Once repeat votes have been checked for and annulled, the process of anonymizing electronic votes begins, in which voters' personal data, i.e. their digital signature, is separated from their vote, leaving only encrypted information regarding a voter's selection.

In the Philippines meanwhile, there is no means to vote online, which makes voting tedious, and disenfranchises those who don't have access to or cannot access voting stations, a situation exacerbated by poor Philippine infrastructure and the archipelagic and mountainous nature of the country making logistics inherently inefficient. Similarly, this increases corruption and causes delays in the process due to fraud or vote buying which damages government credibility. In order for the Philippines to replicate Estonia, there has to be a significant focus from the government and the private sector on first improving internet infrastructure all across the country to ensure everyone has the ability to exercise the right to vote, followed by implementing robust security features and mandatory transparency in order to promote anonymity and reduce corruption. Furthermore, a change in the country's educational system is required as digital literacy is needed in order to access voting websites, which can be mitigated if done via an app to an extent. Finally, the changes made have to be done slowly but steadily, as rapid change might cause instability with the people, hampering progress and creating a negative outlook with regard to the adoption of such a technology.

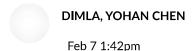
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In the video, Estonia's integration of ICTs in the voting process is a noteworthy improvement in the political sector of the country. It was mentioned that Estonia has streamlined its voting process by implementing digital signatures for electoral ballots, allowing its citizens to vote online. Estonia's approach differs significantly from the traditional face-to-face voting method in the Philippines, since online voting platforms are absent in this country. However, it's worth noting that the Philippines has a unique case with its voter ID system, which doubles as an additional valid government ID, unlike in Estonia where most of its functions are all placed in one government ID instead of having multiple IDs for different processes.

To replicate Estonia's successful use of technology in voting, the Philippines could develop an online voting platform. However, this transition must be accompanied by measures to ensure digital literacy among citizens, as adoption of such technology requires a gradual integration process. The government should view emergent technologies as opportunities rather than threats, as they offer improved accessibility to state registers and services for citizens. However, establishing robust infrastructure to ensure the security and simplicity of these systems is imperative for successful implementation. Therefore, careful planning and investment in both technological infrastructure and digital literacy initiatives are essential for the Philippines to replicate Estonia's advancements in online voting.

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The transportation sector in Estonia is very digitalized. It allows Estonian citizens to manage things like license and registration online. Features of this include: online renewal and digital verification. The use of technology in these sectors make it a lot easier for the people when dealing with transportation requirements with the government. In the Philippines, the LTO is not as digitalized as it is in Estonia. There is some use of technology which helps a bit. It still isn't significant enough to lessen crowd numbers in physical spaces. For example, when renewing a license, you would still need to write down your name on a list and wait in a line. This could be solved with technology by using online appointments. That way, people with any concerns with their licenses would only need to go at their appointment time, not needing to wait in a long line.