STRATEGY

Government 4.0 and the Pandemic

by Nathalie de Marcellis-Warin, J. Mark Munoz, and Thierry Warin

To respond effectively to the COVID-19 pandemic, the digital transformation of government must go beyond remote work.

☑ **INSIGHT** | **NOTE**   24 Jun 2020

In these trying times, the question, as we understand it now - and at least for the foreseeable future - is how to live *with* COVID-19, rather than *after* COVID-19.

COVID-19 has forced a large part of the world to transition to digital tools rapidly. As candid observers, we are all stunned by the pace at which our various industries have transitioned from a brick and mortar-based office to remote work. Many of the reasons we were, as a society, resisting this digital switch have gone down to a lower priority level, replaced by the need to adapt to the new risk in town. Many thoughts have been produced recently about the benefits and challenges of this forced digital transition. We often expect governments to play a significant role in this transition. Governments help our societies through multiple vehicles, regulatory and financial (public expenditures, etc.). Something of particular interest to us amid all the announcements made by our governments is the fact that they emphasize the need for the digital transformation of our economies, but the risk is that governments may want to postpone their digital transformation. An apparent reason could be that they have other priorities right now with COVID-19, which we understand, but we somehow disagree with this argument. The digital transformation of governments goes beyond remote working.

This question is obviously of the utmost importance for governments across the world. Amid the COVID-19 crisis, governments have three high-priority mandates: health, education, and the economy.

All three need a government 4.0.

A Silent Coup d'État

A coup is defined as the removal of a government from power through a violent approach. To some extent, it is precisely what the COVID-19 pandemic did. It caught government off-guard, turned nations upside down, stirred political and economic turmoil, contributed to civil unrest, and left countless citizens dead.

In desperation, governments defended their position the best way they could. They immediately put together "supportive" policies to offer a buffer to many companies in distress. These supportive policies are sometimes regulatory responses (structural responses), but most of the time, they are financial responses.

Facing urgency, financial responses are the "easiest" ones, and hence the first ones to put in place. The extent of the crisis, however, requires a more extensive course of action. It requires a well-orchestrated structural response for the economy. This response requires a quick and aggressive response from the government. Governments must strategize to win the war, not just a battle. Much like what a government must do when confronted with a threat of a coup d'état, drastic measures and government reform needs to take place.

Battle for Survival

Many governments are facing existential threats. This threatens political and economic stability because governments represent a big chunk of our economic activities.

To some, long-term survival is in question. Financial distress has been so severe that governments are taking on new debt to face the crisis head-on. The immediate strategic response is to "flatten the curve" of the financial burden by transferring the debt repayment to future generations.

Governments will be forced to have a "new normal." They will have to cut spending in the future. Indeed, the rise in the debt level will require governments to prioritize their spending. It will be valid for a period that will last as long as the one required to pay for the extra debt the COVID-19 crisis has generated. Cutting public spending is a little more complicated than increasing spending. Cutting programs will reduce the government's impact in some areas where it was seen as a necessity during normal times. In this context, the question is: can we have the same impact while spending less?

A possible solution is in sight. When thinking in the context of business, a key question might be - can we improve the efficiency of our governments in order to reach the same level of service with less money? The answer is: yes, and the timing cannot be better. The authors believe that the Government 4.0 model, as it aligns with the current 4th Industrial Revolution, can be the pathway for survival and transformation.

Government 4.0 – The Rescue Strategy

Government 4.0 is the digitization of public service administration to optimize work processes and systems to gain operational efficiencies and boost productivity.

It is not science fiction, and it does not mean putting AI everywhere and replacing civil servants. It is about using technological tools, not for the tools themselves but its overall contribution to the organization's mission and goals. Government 4.0 is about digital processes that shape the way governments work rather than another new software that civil servants have to learn and grapple with. It is much more than a software update; it is about rethinking the workflow and the processes and an in-depth redesign of the government's organizational structure. In line with the COVID-19 pandemic, these are the arsenal that Government 4.0 provides:

Direct impact. The digital transformation of governments is not about one soldier going to battle but rather a large troop working together and doing their job. In war, there are typically several levels of command: there is a general, and then colonels, majors, lieutenants barking their orders to get things done. In the Government 4.0 model, mid-level officers are eliminated. When a "general" sends a message, it goes directly to the "soldier" or doer. There are no message transmitters in between, and the desired impact is immediate.

Agile action. The new technological tools in a Government 4.0 system leads to a more agile workflow, fewer bottlenecks, and leaner processes. It does not require a dramatic change in terms of training, software installation, etc., but it changes everything in terms of processes. This digital transformation has to be done in an agile way, not waterfall. Little by little, in an organic way, groups or committees can be created that go beyond the 20th-century silos, without meetings and inter-ministerial committees to coordinate. Coordination should no longer be an issue, and tasks can be done faster.

Faster information flow. Asymmetries of information, often resulting from organizational bureaucracy, need to be overcome. Decision-makers who need data should have them quickly so that prompt and effective decisions can be made. Like any war, information delays can lead to disastrous consequences. This does not mean that hierarchy and supervision need to disappear, but they should take on a new magnitude and a different form.

Nimble teams. A more horizontal way of managing that is project-oriented, and with task forces rather than vertical departments is well suited for Government 4.0. It requires a less hierarchical structure with the empowerment of employees. With digital government, physical walls fall, organizational walls fall, and temporal walls fall. Employees can work remotely if needed, ensuring mission continuity, regardless of the situation or the external shock. Employees can be in teams with groups from other departments. Government 4.0 is about breaking down silos, assessing job descriptions, and revamping HR management with AI-based tools to drive efficiencies. In a war, imagine an ad-hoc A-team pursuing a special mission.

Mission-driven. In Government 4.0, the mission should dictate the hierarchy model, not the reverse. Too often, the hierarchical structure dictates the mission parameters. Policymakers need to rethink bureaucratic processes and embrace groundbreaking technologies as tools for system improvement and accomplishment of goals. A simple upgrade of technological tools is not enough and can even be deceiving. It would be like a soldier going to war with a brand new grenade when enemies are using robots and drones. The mission will not be accomplished this way.

Government 4.0 is about a well-thought, strategic organizational upgrade for governments that is in line with the breakthroughs brought about by the Industrial Revolution. For example, through its use, data analytics can be improved to assess unemployment data and assist high-risk citizens. Predictive analytics can be used to plan for skill-building efforts. Cybersecurity can be improved to protect all constituents better. A holistic and comprehensive plan is essential.

A silent coup d'état is in our midst in the form at a COVID-19 pandemic. Governments need to take prompt and decisive action. It is a perfect time to make dramatic changes. Through Government 4.0, **there are opportunities** to digitize public administration, automate public service workflows, enhance cybersecurity, enhance human capital development, strengthen regulatory platforms, support the private sector's technological needs, and engage the citizenry.

The **Bearing Point Government 4.0 Framework** (2017) suggested the assessment of relationships across different service lines: Government to Citizens (G2C), Government to Employees (G2C), Government to Business (G2B), and Government to Government (G2G).

National governments have an essential role to play. There is a need to set digital strategy and goals, utilize appropriate IT platforms, establish clear technological standards, implement legislative changes and support projects that enhance digital skills (Stern et al., 2018).

During a crisis period, the timing of the action is critical. With political chaos, economic upheaval, and financial distress plaguing the world and turning governments upside down – Government 4.0 may well be the rescue plan for the global community to win the war against the COVID-19 pandemic.

▶ References

Nathalie de Marcellis-Warin (Follow)

Nathalie de Marcellis-Warin is a Full Professor at Polytechnique Montreal, Department of Mathematics and Industrial Engineering, President and Chief Executive Officer at CIRANO, co-PI of the Observatory on the Societal Impacts of AI and Digital Technologies (OBVIA) and Visiting scientist at the Harvard T. Chan. School of Public Health.

J. Mark Munoz (Follow)

Dr. J. Mark Munoz is a tenured Full Professor of Management at Millikin University, and a former Visiting Fellow at the Kennedy School of Government at Harvard University. Aside from top-tier journal publications, he has authored/edited/co-edited more than 20 books such as: Global Business Intelligence and The AI Leader.

Thierry Warin [Follow]

Thierry Warin is Professor of Data Science for International Business at HEC Montreal and holds a professorship in pedagogical innovation in Data Science.