

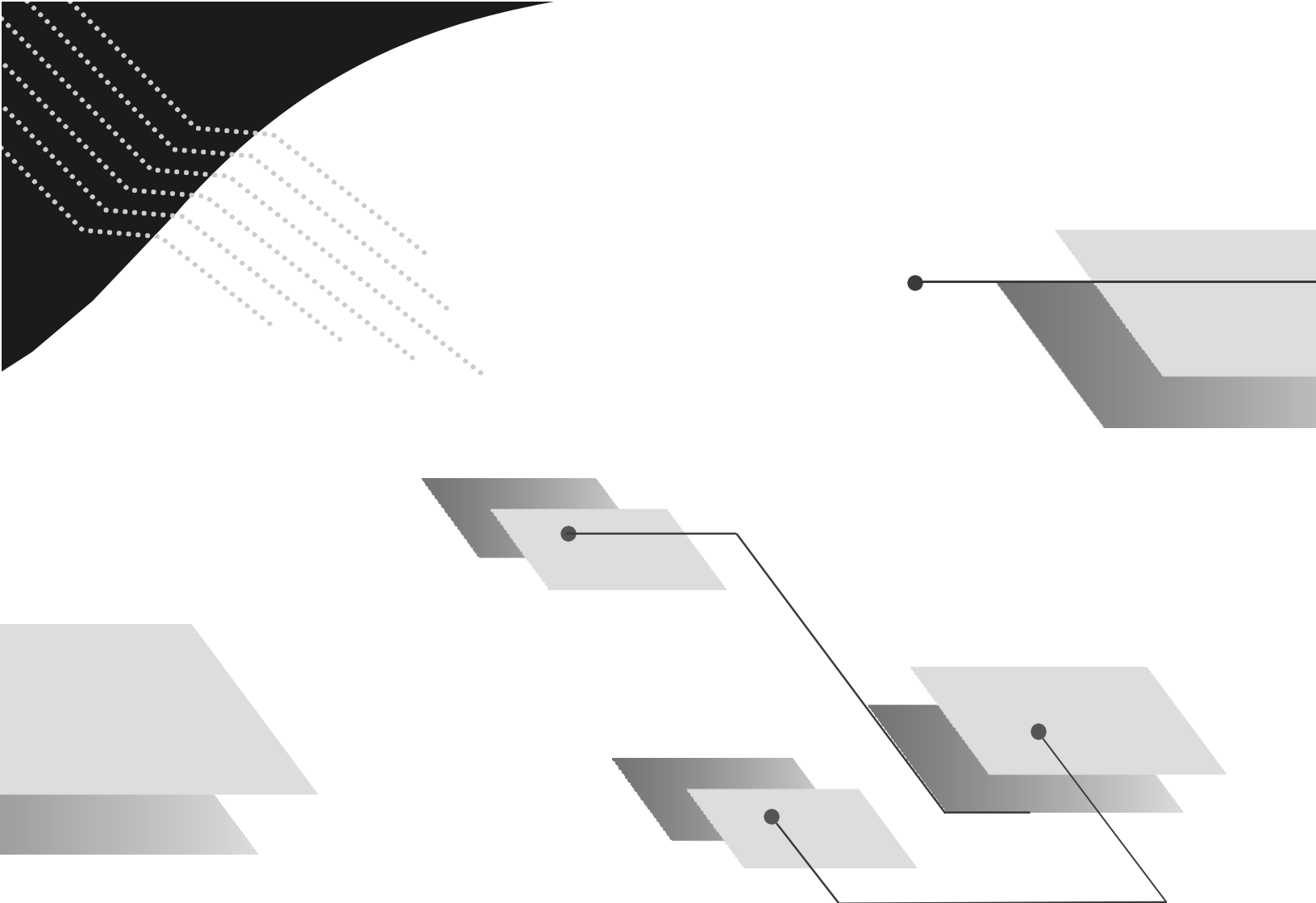
STRATEGY OF GOVERNMENT DIGITAL TRANSFORMATION

2019 - 2023

TREASURY

BOARD

SECRETARIAT



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SECRETARIAT

OF THE B O A R D

OF THE TREASURY



To lighten the text of the document, the masculine form is used without prejudice to the feminine form, and the term "citizen" is used in its broadest sense, which includes immigrants, foreign students, people with disabilities community and corporate workers, and government employees.

The examples proposed in the document are intended to support the reader's understanding, and are not a substitute for applicable laws and regulations.

This publication was produced by
by the Treasury Board Secretariat.

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Legal Deposit - June 2019
Bibliothèque et Archives nationales du Québec

ISBN 978-2-550-84204-0 (online)

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Government of Quebec - 2019

A WORD FROM THE MINISTER RESPONSIBLE OF GOVERNMENT ADMINISTRATION AND CHAIRMAN OF THE TREASURY BOARD



Since the beginning of its mandate, your government has been working tirelessly to offer Quebecers not only more, but also better services. As Minister responsible for Government Administration and Chair of the Conseil du trésor, it is my responsibility to ensure that the government is more efficient than ever and that it meets the needs and expectations of Quebec citizens and businesses.

The performance of the State is undoubtedly dependent on the improvement of its offer of service. At a time when digital technology has become an integral part of our habits and lifestyles and is transforming our relationships in society, it is essential that the public administration seize the opportunities of digital technology to facilitate its

interactions with the public. Digital also provides an opportunity for the state to increase efficiency and agility through the secure and innovative use and sharing of data to support decision-making and benefit the improvement of government services.

Until now, too few government digital initiatives have been implemented and integrated into a common and coherent vision. This strategy aims to move all public organizations towards a single, true government digital transformation, with common ambitions and measurable and quantifiable targets and indicators. This is also the way to ensure that investments in digital technology will result in the most value-added benefits for the public.

This transformation is fundamental to truly defining ourselves as a modern and innovative public administration that values its data and is in tune with the population it serves, as well as with the employees who make up its workforce. The success of this transformation depends on the mobilization of all employees, and I am confident that together we will be able to propel the Quebec public administration into the digital age and transform the way it interacts with the population of Quebec.

The Minister responsible for Government Administration and
Chair of the Treasury Board,

Christian Dubé

A WORD FROM THE ASSOCIATE MINISTER TO THE GOVERNMENT'S DIGITAL TRANSFORMATION



By appointing, for the very first time, a Minister of State to Government Digital Transformation, your government has laid the groundwork for the public administration of the future.

The desire is ambitious, but the basis for it is simple: the government must have the right tools to offer the public the right services in the right way.

What if making an appointment with your doctor was as easy as booking a hotel room?

What if updating your contact information after moving was as easy as updating your social media profile?

What if accessing your medical records was as natural as accessing your bank account?

What if the government redoubled its efficiency and reinvented the way it serves the people of Quebec?

If the mandate is accompanied by immense pride, it goes without saying that the role I have been entrusted with comes with colossal responsibilities, both towards the population and towards the actors of the public service.

Your government, with a clear vision, ambitions that meet expectations and concrete indicators, is taking action to reinvent the State and bring it closer to the reality of citizens and citizens of the XXI^e century, all in a safe way. It can be

done. And together, we will make it happen.

Without further ado, it is my honor to present your Government Digital Transformation Strategy.

The Minister for Government Digital
Transformation,

Éric Caire

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Introduction

Digital technology is now well integrated into society: it is transforming lifestyles, interactions with family and friends, and the way we consume and work. By facilitating dialogue and consultation, it is gradually helping to reinvent the relationship between citizens and the State, for the benefit of better adapted public services and a more vibrant democracy.

These transformations, brought about by digital technology, are now part of the daily life of citizens; it is a normality. In 2018, nearly three out of four Quebec adults (73%) owned a ^{smartphone}¹, the ultimate means of access to the digital world.

Influenced by digital experiences with the private sector, citizens' expectations of public services are increasingly high. For example, citizens now expect public administration to adapt to their way of doing things, not the other way around. The latter must use digital technology to offset the administrative complexity arising from the scope of the services it offers, in order to provide a more harmonized and integrated experience. To achieve this, the mobilization of all public organizations will be necessary, considering the crucial role they play in the government's digital transformation.

The public administration will also be able to capitalize on the maturity it has acquired in recent years in terms of information technology management, as well as on several digital success stories that demonstrate a transformation that is already well underway. Among

Digital transformation influences organizational culture and leads to public administration to rethink the way it delivers its services.

These include the Carnet santé Québec, the Zone entreprise, Données Québec, Québec.ca, the online dispute resolution platform (PARLe) of the Office de la protection du consommateur and the eTribunal of the Tribunal administratif des marchés financiers.

This strategy builds on the learnings and successes of other governments around the world that are also aiming to leverage digital technology to deliver better services and increase efficiency and transparency.

¹ [CEFRIO. NETendances 2018. *Mobility in Quebec: 10 years of growth*, volume 9, number 7, 2018 edition, p. 6](#)

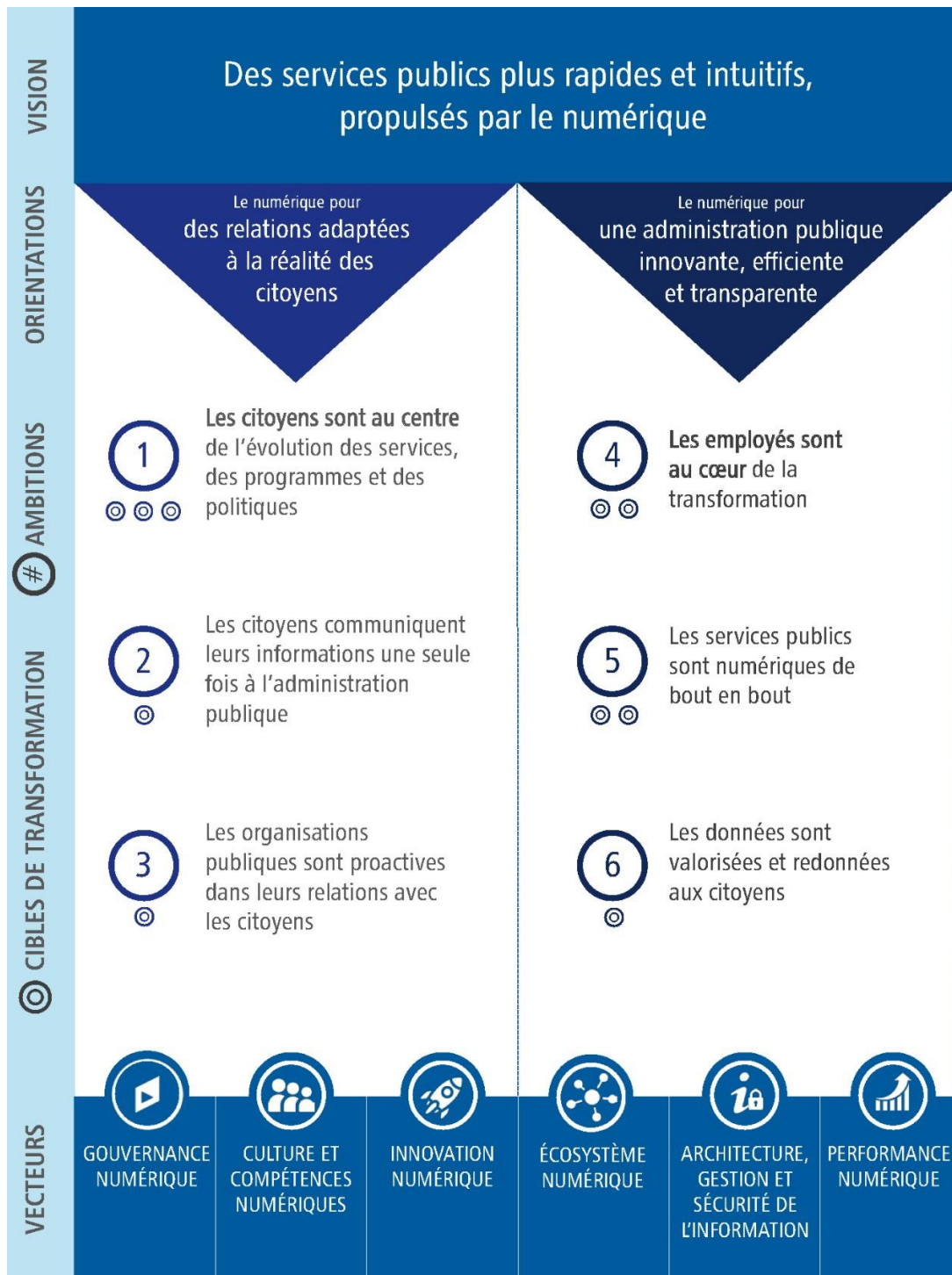
In addition, the voice of citizens, gathered during the [public consultation](#) held from April 11 to 25, 2019, has enriched the reflection and ensured that the ambitions for transformation are in line with the needs and expectations of citizens.

The Strategy sets out the major ambitions for transformation, grouped under two orientations and accompanied by targets aimed at setting all public organizations in motion. It also ensures a link with the transformation plans specific to certain sectors, notably those of the education and higher education network and the health and social services network.

All public organizations will be asked to include these major ambitions and targets in their transformation plans and to enhance them with targets specific to their mission. To ensure a sustained pace of transformation, they will be able to count on the support of the Centre québécois d'excellence numérique, an entity dedicated to government digital transformation. within the Treasury Board Secretariat.

Finally, the Strategy also includes a roadmap announcing the implementation of government-wide actions. These actions will be guided by proven acceleration vectors.

Structure of the Strategy



Vision

Faster and more intuitive public services, powered by digital technology

People are at the heart of a successful digital transformation, long before technology. That's why the Strategy places citizens and government staff at the center of the transformation it embodies.

On the one hand, the public administration aims to adapt its relations with citizens according to their reality. On the other hand, it relies on digital technology to transform the way it does business, in order to be more innovative, efficient and transparent.

This is how public administration will be able to offer faster and more intuitive public services, powered by digital technology.

This is also how she will be able to :

- simplify the life of citizens through a more fluid flow of information; be more proactive in its relations with citizens;
- Reach citizens where they are to promote access to public services; design easy-to-use "digital-first" public services;
- Use the strengths of the ecosystem to innovate; leverage the full potential of emerging technologies.

Furthermore, although a growing proportion of the population uses digital technology on a daily basis, it is essential to take into account those people who, by choice or because of constraints, interact with the public administration through more traditional means, such as the telephone or the point of service. This reminds us of the importance of considering the reality of these people and encouraging their integration into the digital age, but also of supporting the digital citizens of tomorrow. The same goes for people living with a disability, to whom the public administration must offer adapted and accessible digital services.

Heading for 2023

Digital technology at the service of Nathalie, natural caregiver

2019

Nathalie is separated from her spouse and has two children. Her brother lives in Vancouver and she is alone to take care of her 80 year old mother, Madeleine. She works full time as a graphic designer in a web agency. Recently, Nathalie has noticed that her mother has become increasingly confused: she has misplaced many items in her apartment and has forgotten birthdays, phone numbers and her financial institution PIN number, which she has used for many years.

Madeleine's family physician suspects cognitive and hearing loss. He recommended an appointment with a specialist and support from social services. Following these appointments, Madeleine was confirmed to have early Alzheimer's disease.

As a natural caregiver, Nathalie must undertake a series of steps to be legally recognized as a third party. In all that she has to manage for her mother, she experiences a lot of waiting, uncertainty and complexity. She must transmit the same information to different governmental authorities. She has difficulty obtaining all the information regarding the care, medication and support services to which Madeleine will be entitled. Nathalie carries around a paper file in a folder that she makes sure is kept up to date.

In addition to being away from work a lot to accompany Madeleine to her many consultations, Nathalie spends many hours on the phone during the day to get the necessary appointments and assistance, not to mention all the forms, vouchers and bills she has to send. She also knows that, sooner or later, her mother will have to be placed in an intermediate resource and then in a CHSLD, but she doesn't know how to prepare for this.

As soon as Madeleine's Alzheimer's disease is known, a care plan is proposed. With Madeleine's consent, the doctor entered her diagnosis into the online file, indicating that Nathalie would now act as her caregiver. With Carnet santé Québec, Nathalie has access to her mother's complete health record as well as the care plan established with the doctor. This makes it easier for her to provide her information and documentation once, and eliminates her paper file, while waiting to be officially recognized as a third party.

Among other things, she is proactively provided with relevant information on the diagnosis of Alzheimer's disease, suggestions for adapted services, appointment times that are consistent with Madeleine's health care pathway, and confirmation of the availability of her mother's medications at the pharmacy where she usually gets them. Finally, she is informed of the status of her requests and the next steps that will be taken in the follow-up of Madeleine's health. All the actors involved with Madeleine have access to the same information in real time and have the possibility of providing continuous feedback to Nathalie.

2023

Digital for relationships adapted to the reality of citizens

Digital technology allows the public administration to adapt its relations to the reality of citizens.

This means:

- 1) Continuously improved services, through citizen engagement, and public policies and programs that are better aligned with the needs of the people they serve;
- 2) more simplicity and personalization for citizens and less interaction required with the public administration to carry out their daily activities;
- 3) timely and fair access to public administration, so that each person can be sure that he or she has fulfilled his or her obligations properly and has received everything to which he or she is entitled.

Digital technology must be at the service of citizens to facilitate their interactions with the government. To achieve this, the public administration has set **three major ambitions** and **five transformation targets**:

1 Citizens are at the center of service, program and policy development

2 Citizens provide their information only once to the public administration

3 Public organizations are proactive in their relations with citizens

1 Citizens are at the center of the evolution of services, programs and policies

A better understanding of citizens' realities will allow the design of public services, policies and programs aligned with the needs, expectations, habits and ideas of the citizens they are intended for. The continuous dialogue with them, facilitated by digital technology, allows the State to stay connected to the people it serves, to maximize the influence of its actions.

If they wish, citizens should be able to comment on the service they have just used, in a simple and quick way, in order to contribute to the improvement of this service.

Since the reality of citizens varies according to their context, but also over time, it is also important to involve them in the continuous improvement of existing services. Moreover, considering that the learning resulting from their involvement is likely to be useful to more than one public organization, it is essential to ensure that it is shared.

Thanks to digital technology, the voice of citizens from all regions of Quebec can also be heard and taken into account when developing or revising public policies and programs. This contribution allows the government to better identify the parameters and application methods that the majority of citizens will recognize.

For example, the public consultation that led to this strategy is a good example of the value of involving citizens in the development of public policies and programs.

Highlights of the public consultation :

More than 500 people spoke out. Of these people:

- 99% believe that public organizations need to work together to provide integrated services;
- 97% want new public services to always be offered in digital format;
- 88% believe that digital transformation should focus on:
 - reduce processing times,
 - reduce the cost of public services,
 - avoid duplication of effort;
- 96% are satisfied with the consultation.

Transformation Targets

75 %
of new digital
services are
designed with the
involvement of
citizens

The more a service meets the needs and expectations of citizens, and is in tune with their habits, the more it will be appreciated and used. Taking into account the citizen's perspective, from the beginning and throughout the evolution of the service, allows to design more intuitive public services.

Different methods exist to involve citizens and the choice of these methods must be adapted to the context. Focus groups, satisfaction surveys, interviews (in person or remotely) and field observation are just a few examples.

Target Effect: That public organizations integrate into their way of doing business the habit of involving the citizen in the development of any new digital service.

75 %
of digital services will
evolve through
continuous citizen
evaluation

Systematically soliciting feedback after using a public service reduces the likelihood that it will fall out of step with citizens' needs and expectations, which change over time.

This feedback makes it possible to prioritize the improvements to be made in order to continually evolve the service, always involving the citizens.

Target Effect: That public organizations consider this input when prioritizing the evolution of their digital services to better serve citizens.

75 %
of public
consultations offer
a digital way to
participate

Public consultations are a means of engaging and gathering citizen input on various societal issues.

Digital technology supports this participatory process by reaching a greater number of citizens throughout Quebec at a lower cost, and offers the possibility of developing innovative tools in this area.

Target Effect: That public organizations take advantage of digital technology to reach a greater number of citizens during public consultations.

2 Citizens share their information once to the public administration

When citizens interact with the public administration, they may have to provide personal information in the various steps they take. In order to gain efficiency, citizens should have the possibility to consent to the sharing of their information relevant to all their actions.

By avoiding the need to provide information already known to the government, the citizen will have a simplified, non-duplicative and more personalized experience. When required, digital services will ask citizens to confirm the validity of information already held, rather than forcing them to provide it again.

The communication of this information between the various public organizations will need to be more open in order to support the desire of citizens to share their information once, as highlighted by 94.3% of participants in the public consultation on digital transformation.

Citizens should also be able to control their own information, whether it is to consult the information held by public organizations, to modify it or request its correction, to authorize its sharing or to designate a person who can act on their behalf. However, the public administration will have to ensure that the mechanisms always respect the individual's consent and that information exchanges are carried out in a secure manner, in compliance with the protection of personal information, privacy and applicable laws.

For example, a change of address communicated to a health care facility should be shared with other facilities, as well as educational institutions, where appropriate, and all relevant departments and agencies.

Transformation target



When the public administration already has information, the citizen should not have to provide it again, as long as he or she agrees to its sharing.

This target reflects a strong desire for simplification and collaboration in order to reduce the silos between public organizations. Achieving this target will inevitably require an increased knowledge of the reality of citizens and of the interrelationships between the various missions of the State.

Target Effect: That public organizations develop the reflex to check at the outset whether the information they are requesting is already held by the organization or available elsewhere in the government.

3 Public organizations are proactive in their relations with citizens

Citizens find it useful to receive (non-sensitive) updates or information by text message or email, along with a short piece of relevant information. This means that the government can no longer simply make information available to the public.

Participants in the public consultation identified the provision of reminders and confirmations via email or text message, as well as the provision of complementary services, as essential features of good digital service.

accessible and wait for citizens to find it before approaching it. By leveraging digital technology, it must be more proactive and reach citizens where they are, at the right time.

For example, the public administration could notify citizens who so desire, by the means of communication of their choice, to remind them of a appointment (as [Rendez-vous santé Québec](#) does), notify them of the upcoming expiration of an official document (and provide them with the renewal procedure) or inform them of the due date of a payment or remittance made to their account.

A proactive public administration informs citizens that they may be eligible for other programs applicable to their context, whether it be concerning their personal situation or their current procedures. It must ensure that it does so while respecting the State's duty of neutrality, in order to offer equitable service to all, especially to citizens who cannot interact online with the public administration.

By completing the [application for simplified access to government programs and services related to birth](#), parents do not have to take any further steps to obtain their child's health card and social insurance number, or to register for the Family Allowance or the Canada Child Benefit. This proactivity could be applied to other everyday situations.

For example, parents whose children attend a child care centre could be informed in advance that the kindergarten registration period is approaching for their facility. They could then choose to transfer the information held by the child care facility that is relevant to the registration process to make their lives easier. Similarly, a citizen filing a claim for a motor vehicle accident might be interested in knowing that he or she is potentially eligible for other forms of assistance, such as a disability pension (if that accident prevents him or her from returning to the workforce).

Transformation target



Common in the private sector, digital reminders help citizens remember important dates related to their rights and obligations. To be useful, these reminders must reach citizens by the means of their choice and transmit relevant information according to the situation and the person's consent.

For example, a reminder could be sent by email or text message before a deadline, as a preventive measure, and provide clear information on the consequences of being late (fees or penalties). A reminder could also be sent after the due date to inform the citizen of the steps to take to minimize the consequences of being late.

Target's desired effect: That public organizations leverage the immediacy of digital to better serve citizens.

Digital for an innovative, efficient and transparent public administration

Digital technology enables public administration to be more innovative, efficient and transparent.

This means:

- 1) Engaged employees with up-to-date skills to take full advantage of digital technology and a modern, attractive work environment;
- 2) services designed to be "digital first" to **reduce costs and service delays**, as well as innovative use of digital technology to better serve citizens;
- 3) mobility and data exploitation for greater efficiency and transparency.

Digital technology must be at the service of public administration to increase its performance and transparency. All possibilities are important, whether they involve structural projects or more targeted advances. In this perspective, the public administration has set itself **three major ambitions** and **five transformation targets**:

4 Employees are at the heart of the transformation

5 Government services are end-to-end digital

6 Data is valued and given back to citizens

4

Employees are at the heart of the transformation

It is by relying on the mobilization and creativity of its employees that the public administration will succeed in its digital shift. Openness, collaboration, networking, sharing and reuse will have to become part of everyone's digital reflexes.

Employees will be at the heart of the transformation of the way things are done. This transformation will inevitably involve an in-depth review of administrative processes and a modernization of work environments, most of which were designed in the era of paper.

The transition in both organizational and technological ways of doing things must be harmonious and supported by a sound change management process to ensure the quality of services throughout the transformation.

These adaptations will have a positive impact on productivity and innovation capacity as well as on the attraction and development of talent, a key factor in the delivery of quality public services in a context of labour scarcity. Thus, the public administration will ensure that it capitalizes on its internal expertise by developing it and by promoting talent retention.

In addition, digital transformation will drive the need for new professions within public organizations, such as user experience and behavioral science practitioners or data scientists and other specialties that arise from the use of emerging digital technologies.

Particular attention will also be paid to the ongoing development of the digital skills of all existing staff, in order to maximize the benefits of the digital transformation. This will of course involve the information technology teams, among other things, to support the mastery of computer system development projects, the implementation of emerging technologies, the use of agile approaches and information security. This ongoing development of digital skills also aims to support lawyers, legislators, and specialists in the protection of personal information or in the management of contracts and material resources in their appropriation of digital technology.

Transformation targets



Digital technology and the culture that goes with it bring a different way of looking at solutions and designing work processes.

Public organizations will therefore be called upon to develop a digital transformation plan that will include the deployment of measures to support and accelerate their transformation, including the ongoing development of employees' digital skills.

Target Effect: That public organizations articulate transformative actions within a plan to mobilize in a structured way toward achieving transformative targets.



Over time, traditional ways of doing business will be reviewed and transformed to take advantage of digital opportunities. Workplaces must be aligned with new management practices and work methods, such as agility and multidisciplinary team building. The major reduction in paper use will minimize the space required to store it, both in staff offices and in storage areas.

The modernization of work tools will contribute to increasing efficiency and reducing costs, particularly those related to travel. It will also allow for telepresence and the ability to bring together different types of expertise, regardless of geographic distance, through high-performance digital means, for the benefit of the quality of services offered to the population.

Target effect: That public organizations migrate towards a work environment and ways of doing things that promote agility and collaboration (even remotely), using modern work tools to promote efficient work organization and the attractiveness of public administration.

5 Government services are end-to-end digital

The public administration will promote the autonomy of citizens by offering them fast, complete and accessible digital services, at their convenience, from the devices they use every day. To do this, it must design its services to be entirely digital, from the initial request, through the administrative processing, to the return to the citizen.

Moreover, in a context of labor scarcity, public organizations benefit from using digital technology to maintain the quality of their services, notably by robotizing manual and recurring administrative operations. Among other things, this allows employees to reallocate their efforts to other, more complex tasks, thereby reducing service times for everyone.

Some robotization projects for administrative operations could be handled by Quebec Technological Infrastructures, as well as projects related to new generation intelligent buildings.

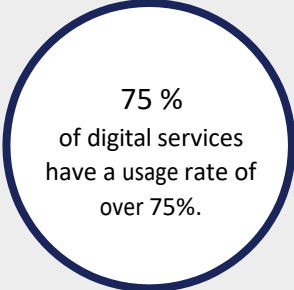
Public administration will also be able to generate efficiencies by systematically prioritizing digital interactions with citizens and by supporting citizens in fostering such interactions.

Some public organizations still use fax machines to transmit documents electronically, often when they contain handwritten signatures or confidential information. Digital solutions will soon be implemented to put an end to this practice from another era and thus increase the efficiency of public organizations.

Finally, digital technology makes it possible to take advantage of the ecosystem by using solutions or services offered by third parties. For example, a growing number of citizens and businesses are using private software, certified by Revenu Québec, to file their tax returns electronically. This type of partnership with the ecosystem allows public organizations to focus their efforts on their main mission to better serve citizens, while generating

public administration. These benefits could be reinvested in public services, making them digital from end to end.

Transformation Targets

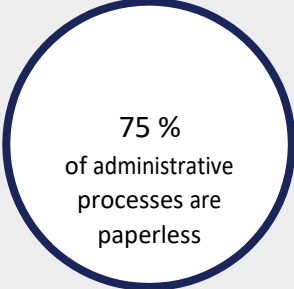


75 %
of digital services
have a usage rate of
over 75%.

In order to encourage greater use of digital services, in addition to promoting and continuously improving them with citizen participation, it is essential to lower the barriers to their use. For example, it is necessary to facilitate authentication, which is often the first step in accessing the digital service. Work in this direction, called Accès UniQc, is underway.

The complexity inherent in administrative procedures or the regulatory framework can also represent a barrier, and efforts must be made to stimulate the migration to this more economical mode. Finally, it is a priority to accompany citizens and support the development of digital literacy (a person's ability to use digital technologies).

Target Effect: That public organizations address the various factors that encourage the use of digital services, in order to maximize their use and optimize the performance of other modes (e.g., telephone for support and intervention on more complex cases).



75 %
of administrative
processes are
paperless

A significant amount of paper is used daily in public organizations for administrative purposes. This use of paper often compensates for the lack of administrative systems or interoperability between administrative systems (for example, for the employee file) or the outdated equipment and technological solutions available to employees.

The use of paper is strongly linked to the administrative processes in place in public organizations. The elimination of paper will inevitably lead to a reduction in printing costs, as well as a considerable increase in productivity.

Target Effect: That public organizations ensure that their business processes evolve in a way that promotes digital efficiency.

6Data are valued and given back to citizens

One of the riches of digital technology is the innovative use of an increasing amount of data, making possible gains in performance and agility, in addition to allowing for greater transparency in public administration. Public organizations will therefore be called upon to place greater importance on data in order to extract its full potential. The optimal use of this data will allow organizations to achieve their strategic objectives by offering quality services that fully meet the expectations expressed by citizens.

The public administration can also benefit from the data made available by society and other administrations, in particular to innovate and compare its performance.

Secure data sharing fosters innovation by allowing the cross-fertilization of data from different sectors, while respecting the protection of personal and confidential information. In addition, technological advances now make it possible to simultaneously analyze phenomenal amounts of data, also known as massive data, which can contribute to the

performance of public organizations and to support informed decision making in business intelligence practices.

In addition, opening up public data (available for download and use) undeniably contributes to government transparency as well as to the reuse and enhancement of data by ecosystem actors, such as community organizations, businesses, students, researchers, and the media.

The [Quebec Data](#) portal is a sharing platform with more than 1,100 open data sets, offered by Quebec municipalities and public organizations.

This leveraging of public data can support economic development and give rise to [new value-added digital services](#) in many sectors, such as transportation and health. For example, citizens can already use these new services to estimate emergency room wait times or find out which food establishments have received public health code violations.

Transformation target



Data with high potential for reuse by government and the ecosystem include performance and reference data.

Since sharing data generally requires efforts to ensure its quality, security and translation into a usable format, prioritization is necessary. Thus, public organizations will be called upon to determine, among the data they hold, which ones will be shared on a priority basis.

Target Effect: That public organizations transparently collect, leverage and make available their data with high reuse potential within government (from an efficiency perspective) and disseminate more public data.

Acceleration vectors of digital transformation

The government's digital transformation will require the orchestration and convergence of all public organizations, in the public service, the health and social services network, and the education and higher education network. These are essential conditions for the realization of the government's vision and ambitions, as well as for the achievement of the transformation targets.

Several actions will have to be deployed, some of which are governmental in scope and which public organizations can build on, and others which are specific to each organization according to their transformation plan.

To structure and ensure the coherence of these actions, **six vectors** for accelerating digital transformation have been defined. These represent the main families of resources around which efforts to achieve the strategy must be structured.



Digital governance

Digital literacy and skills

Digital innovation

Digital Ecosystem

Information architecture, management and

Digital performance

Digital governance

The success of the government's digital transformation cannot be achieved without strong and appropriate governance. This is a pillar on which public organizations can rely to achieve the pace of work required to reach the transformation targets. In this regard, the Secrétariat du Conseil du trésor will bring together all the necessary expertise to carry out this transformation, in particular by guiding and supporting public organizations in the implementation of their digital transformation plan aligned with this strategy.

Redeployment of resources from the Quebec Shared Services Centre

As announced in the [Expenditure Management Strategy of the 2019-2020 budget](#), the resources of the Quebec Shared Services Centre will be redeployed within two new entities, namely Technological Infrastructures Quebec and the Government Acquisition Centre. This decision will ensure the availability of reliable, high-performance technological infrastructures and support systems, and will support the changing needs of information resource acquisition.

Creation of the Quebec Center for Digital Excellence

The absolute desire to achieve the ambitions of the Strategy requires the implementation of structuring and innovative means such as the creation of the Quebec Centre for Digital Excellence, an entity dedicated exclusively to the government's digital transformation within the Secrétariat du Conseil du trésor.

The Quebec Centre of Digital Excellence will be the engine that generates the impetus necessary to accelerate the digital transformation. It will aim to pool innovative ideas through sharing and collaboration within the ecosystem in which public organizations are involved. In addition, all the know-how gathered at the Centre québécois d'excellence numérique will be put to good use for the benefit of the government community in order to allow the emergence of a digital culture. As one of the leaders in digital transformation, its first mandate will be to embody the exemplary nature of digital values and practices, thus giving it all the credibility inherent to its role.

Legislative and regulatory developments

Laws and regulations will have to continue to evolve in order to use the full potential of digital technology and to achieve the transformation targets that the government has set. For example, the Act respecting access to documents held by public bodies and the protection of personal information could be revised in order to achieve the ambition that citizens communicate their information only once to the public administration. The affixing of a handwritten signature is another example of an administrative formality that digital technology is leading us to rethink.

Digital literacy and skills

It is critical for the government to promote and support the adoption of digital literacy across public organizations, an important change that is a major challenge to achieve.

Digital culture is characterized by a people-centric approach, innovation, data-backed decisions, collaboration, openness, "digital first" thinking, and agility and flexibility.

To act on all these dimensions, different means must be used, on all levels, to engage and inspire managers as well as employees and to give them the latitude to work together to bring about this change and to create the leadership that fosters the emergence of a government digital culture.

Adoption of digital practices

The adoption of digital practices within public organizations is without a doubt one of the cornerstones of this transformation. These practices facilitate the sustainable implementation of digital culture and make possible the deployment of more intuitive public services. These practices describe ways of working in the digital age that can be applied to the design and improvement of public services, and even to the development and revision of public policies and programs. To this end, the Treasury Board Secretariat will set out the internationally recognized digital practices that it wishes to see take root in each organization, including the use of multidisciplinary teams in the development of solutions and the migration, where appropriate, from project management to product management.

Transparency, innovation and collaboration are examples of values associated with digital culture.

Moreover, in order for relations with citizens to be adapted to their reality, it is necessary to have a good knowledge of it. User experience research techniques and feedback analysis will therefore have to be an integral part of public organizations' practices in the coming years.

Digital skills development

Developing the digital skills of existing staff is certainly one of the keys to the success of digital transformation. Based on a partnership with the Academy of Digital Transformation of Laval University, the École nationale d'administration publique and other educational institutions, multiple training programs will be offered. These will be aimed at employees, managers and leaders to foster the acquisition of a multitude of essential digital skills, which will provide a solid foundation for government digital transformation. The Université Laval Digital Transformation Academy also aims to support the digital transformation of Quebec society. Thus, through its varied course offerings adapted to their context, it will also serve private or non-profit organizations wishing to develop the digital skills of their employees.

Digital innovation

The government wants to use innovative solutions to improve its public services. By relying on an approach based on exploration, ideation, experimentation and prototyping, the government emphasizes controlled risk-taking and ensures that it invests in innovative solutions that will have a positive impact on citizens and public organizations. The public administration will thus be able to take advantage of technologies that have been tested from a government perspective and a global vision of government digital services.

Use of artificial intelligence

Organizations are interested in the opportunities and challenges that artificial intelligence brings to the government context. They hold quality public data that can be used for the benefit of Quebec society. Thus, the public administration will make the most of the data it holds in the interest of the common good and in respect of the protection of personal information, to position the State as a beneficiary of artificial intelligence technologies.

These innovative technologies would make it possible, for example, to accelerate the processing of certain requests and to modernize eligibility controls for government programs, while ensuring the fairness and accuracy of the services provided by the State. Moreover, in an effort to position itself as a leader in this field, the Quebec government will soon announce a strategy for the adoption of artificial intelligence, which will pave the way for public organizations by supporting its use and setting guidelines for its use.

Digital Ecosystem

Leveraging the digital ecosystem is an opportunity to address new market challenges, where innovation has become essential to create value. The contribution of the ecosystem will be key to the success of the transformation. Whether they are community, private or public, partners will be invited to share their expertise and innovative ideas. Their contribution can also take the form of sharing existing solutions, leveraging public data or contributing directly to public services, when this will make life easier for citizens.

Through a partnership with financial institutions, the Quebec government will launch Accès UniQc, a service that simplifies access to its digital services. Citizens will be able to securely use their banking ID and password to access government services.

Information architecture, management and security

By stating the ambition that "citizens communicate their information only once to the public administration", the Quebec government affirms its will to use digital technology to increase the quality of services to citizens, through a fluid and innovative sharing of information.

However, public administration faces a significant challenge because of the way current services have been designed and developed. Indeed, in order to ensure such a sharing of information, and thus foster the deployment of fast and intuitive digital services, the development of a global and coherent digital architecture must be ensured.

The deployment of such digital services also requires the use of new technologies such as shared platforms within the government, which will have to meet the highest security standards.

In addition, data mobility means continuing to ensure information security, including the protection of personal and confidential information, according to best practices derived from international standards. Ongoing training of information security personnel and the enhancement of the cybersecurity framework will help maintain the confidence of citizens in the security of their information. In addition, a Quebec cybersecurity policy will be developed to maintain and ensure greater security of the information held by the public administration. In addition, a cell of cybersecurity specialists reinforcing the CERT/AQ (which brings together the information security incident response team of the Quebec administration under the responsibility of the Ministère de la Sécurité publique) will now be attached to the Secrétariat du Conseil du trésor.

Consolidation of data processing centers

A first milestone has been reached with the beginning of the consolidation of data centers and the optimization of data processing and storage management through the priority use of public cloud computing. In addition to reducing costs and increasing data security, this will allow public organizations to focus their efforts on achieving their mission and mandates, rather than managing technology infrastructures. This measure will increase the maturity of the Quebec government's infrastructure, which is necessary to support digital transformation, while ensuring that data remains under control. Data considered to be the most sensitive will be placed and protected in a government cloud.

Digital performance

Ongoing performance measurement and data-driven decisions are integral to a successful digital transformation. In this regard, public organizations will be called upon to put in place or strengthen mechanisms to monitor their digital performance. Collecting data, identifying key performance indicators and disseminating this data will allow for a more transparent evaluation of the success of the service offering to citizens and for informed decisions on the evolution of services. Thus, performance will be an integral part of the digital practices set out by the Secrétariat du Conseil du trésor, as is the approach adopted by other public administrations.

In addition, the public administration wishes to measure its progress towards achieving the transformation targets set by the Strategy. To do so, close collaboration will be required with public organizations in order to synchronize their transformation initiatives with government-wide structuring actions and thus maximize the results of the roadmap. In addition, means will be implemented to share the progress of the digital transformation with citizens.

Finally, the benefits generated by the digital initiatives and projects of each of the organizations should be estimated, measured and reinvested in public services, for the benefit of citizens and the efficiency of public administration.

Guidance mechanisms, guides, and reusable tools will be developed to support the collection of transformation target data and benefits management.

Roadmap

The success of digital transformation depends on mobilizing all public administration personnel, putting in place measures to accelerate the transformation, and converging transformation efforts in all four corners of the public administration to make it a joint success.

Responsible for the governance of the government's digital transformation, the Secrétariat du Conseil du trésor will provide the impetus by tabling a first iteration of the roadmap of government-wide actions. This roadmap will bring together actions under the responsibility of the Secretariat, some of which will be the responsibility of the Centre québécois d'excellence numérique, as well as initiatives entrusted to partners such as the Centre de services partagés du Québec, soon to be called Infrastructures technologiques Québec.

This roadmap will allow public organizations to synchronize their transformation initiatives with government-wide structural actions.

Financial Framework

To finance this transformation, \$955 million has already been earmarked in the 2019-2029 Quebec Infrastructure Plan. In addition, for 2019-2020, the Secrétariat du Conseil du trésor has a provision of \$12.2 million to support the digital transformation of the public administration. In total, for the four years provided for in the Strategy and to ensure that the financial implications are taken into account, this provision amounts to \$212.11 million.

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