Organizational change management of digital administration

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Abstract:
The recent interest of management researchers in the issue of organizational change is mainly based on its indispensable role in the efficient and effective accompaniment of the administration in its reform and modernization. Organizational change is therefore an imperative for appreciating the benefits of digitalization, a field that is currently expanding and evolving, and is prompting professionals and researchers to analyze and study the digitalization of public services. Although organizational change is considered a central element of any modernization process, it has not been studied beforehand to understand how to implement adequate change management for the technological developments that public organizations are undergoing. This article aims to clarify the concept of organizational change in the context of the digital transformation of public administration through different dimensions and forms, and to present an overview of the elements that play an important role in its success. In the public sector, the resistance of administrators to structural changes is considerable. It is in this perspective that it is essential to prepare the change management of any company or organization before embarking on modernization, digitalization, and redesign of procedures, in order to better support the administration in the success of its organizational and digital transformation. This digital transformation cannot succeed without a real change management approach, which is seen as an essential element of the support of administrations to adapt to change, we will deepen our debate on the subject through the stages of change management and the keys to the success of the latter. The discussion and analysis of the different relationships between organizational change and digital administration have allowed us to propose a comprehensive theoretical framework in order to fundamentally identify multiple areas of future research and contribute to the knowledge of the subject.

Keywords: Digital transformation, Organizational change, Change management, e-administration, e-government

JEL Classification: O32 ; O38

Paper type: Theoretical Research
Introduction:

In recent years, various events such as the COVID 19 health crisis have pushed governments around the world to embrace a vision of digitization and digitalization of public services in order to offer citizens a quality and proximity service that allows them to actively participate in the development and growth of the efficiency of public administration.

In order to succeed in this digital transformation project and to manage it effectively, it is necessary to be part of an organizational change perspective that can lead the administration to the desired end behind this digital transformation. However, change projects often come up against human problems, hence the need to support these projects with change management methods to facilitate their success.

The ubiquity of digital technologies in contemporary organizations has led organizational scholars to revitalize the concept of technology in organizational studies (e.g., Kallinikos, 2006; Orlikowski, 2007). Most work in this area is based on individual case studies of private sector organizations, and with a few notable exceptions (Pors, 2015; Introna et. al., 2009; Harris, 2006; 2008; Yeo and Marquardt, 2015; Hossan et al., 2013), public sector digitization remains an underexplored area in organization studies as well as in the subfield of organizational change management studies. Studies that focus on change caused by digitization in public sector organizations tend to focus on the implementation of a particular technology in a particular public organization, and do not theorize the public sector as a specific change context (e.g. Hung et al., 2009; Hussenot, 2008). This is a paradoxical gap in organization studies, as much of the literature insists that technologies, including digital technologies, can only be understood by considering the specific context.

The lack of attention to digitization in public organizations corresponds to a general disinterest in public sector organizations in organization studies (Arellano-Gault et al., 2013). A similar tendency to ignore public sector organizations can be seen in the change management literature. Pick et al. (2015, p. n/a) state that "the change management literature has tended to focus on the private sector, with little attention given to how public sector workers experience and respond to change."

The concept of change management first appeared in the 1980s and 1990s in the context of IT development projects. Today, this concept accompanies almost all types of projects, especially those that generate strong resistance, such as the digitization of public administration.

In order to accelerate the transformations and reforms that affect the administration, it is necessary to promote the involvement, the adhesion and the acceptance of the changes and thus succeed in the modernization projects, and this by adopting the change management method that is the most adequate to the context and characteristics of the public administration. The involvement of top management remains an important factor in the success of the administration's projects, without forgetting the aspects of communication and training.

In this perspective, the article will first explain the digital transformation of public administration and the results expected from this digitalization of governments. In a second part, we will evoke the theory relating to the conduct of change in the public administration as approached by the authors in the matter thus allowing tracing a roadmap resuming the organizational changes to be established for the public organization during its digital transformation.

1. Digital transformation of public administration:
1.1. E-government and Interactivity:

The relationship between the Administration and its citizens or Administration and its partners is one of the main opportunities of e-government. This relationship is based on different levels of interactivity, which correspond to several degrees of maturity of an e-government project.
This ranges from a simple online presence to a complete reorganization of the "Work Flow", via a whole range of more or less secure transactions. Some administrations in Japan, for example, have a strong online presence, but offer a low level of interactivity. Other countries, such as France, have a slightly less extensive service offering, but a little more in-depth. Some authors such as (Andersen, 2000) distinguish three or four thresholds that correspond to what Accenture calls "service depth".

We propose a typology composed of three levels of interactivity that qualify the relationship (Administration-Administration or Administration-Partners). These levels are: information, communication and transaction. We note that this typology does not constitute a decomposition of the E-Government process into stages, but it does offer a conceptual structure for better thinking about E-Government.

1.2. Towards the digitization of public services:

In their analysis focused on the digitization of services by governments in several countries, Leão & Canedo, 2018 propose a conceptual framework focused on the citizen and the need for his participation in the digital transformation strategy so that the government manages to appreciate the effectiveness of the digital services offered. Hence, the orientation of governments towards user satisfaction and citizen-centered policy. Digital government as a phenomenon implies new leadership styles, new decision-making processes, new forms of organization and service delivery, and new concepts of citizenship. (Gil-Garcia et al., 2018).

The success of the digital transformation of public administration depends on the organizational culture and the reluctance of different actors to adapt to digitized practices. (Ouajdouni et al., 2020). Given the speed of development of digital governments in the world, many governments are facing pressure whether it is internal or external which influences the way digital transformation is carried out, as external pressures lead to the digitization of services and processes while internal pressures initiate a more holistic change of the organization, such as changing the organizational culture. (Mergel et al., 2019). In order to integrate the citizen or user of the digital government in the digital sphere, it is essential to satisfy him and gain his trust, the user experience is a determinant of the level of trust in e-government (Alzahrani et al.2017). Indeed, the perception of the quality of online government services has a significant influence on public satisfaction. (Gabryelczyk, 2020). Thus, trust factors and awareness impact users' decision to adopt e-government services. (Joshi & Islam, 2018). Several factors hinder the success of a good digital transformation approach, such as the legal framework whose change is an imperative, because the legislation used in the analog world cannot be transferred to the new digital reality, an adaptation of laws is necessary to evolve in the digital era (Pavlyutenkova, 2019).

2. Organizational change in public administrations:

2.1. Definition of organizational change:

There are several definitions of organizational change in the literature; we select a few:

- "Change is the transition from one state to another that is observed in the environment and has a relatively lasting character" (Collerette et al., 1997)
- Organizational change is defined as a difference in form, quality, or state of an organizational entity over time (Poole & Van de Ven, 2004);
- Organizational change represents a radical or marginal transformation process affecting organizational structures and competencies (Guilhon, 1998).

According to (Otman, 2021), and based on a study done on the multiple facets of organizational change, process approach, content approach to change, structural approach or human, cultural and cognitive approach. Organizational change can be defined as the implementation of an imposed or voluntary decision, taken within the organization to partially or completely modify
one or more organizational aspects, in response to pressure from the internal or external environment, in a brutal or incremental, continuous or episodic manner, with lasting effects that are perceptible to the organization's actors and following a dynamic sequence of phases corresponding to the passage from one state to another.

2.2. Components of organizational change:
Pettigrew (1987) breaks down organizational change into three parts: context, content and processes:
- **Content**: This is the answer to the question of the "what" of change (Walker et al., 2007), it refers to the objectives and missions of change;
- **The context**: This component refers to the internal and external environment of the organization (Walker et al., 2007) as well as the actors involved in the change;
- **The process**: The process of change is considered as a set of continuous and interdependent actions and events used to explain the origins, continuity and results of the observed phenomena (Pettigrew, 1987).

2.3. Explanatory variables for organizational change
The literature has raised two variables that explain the change process; these are the intentionality of the change and its mode of diffusion (Vandangeon, 1998 a):
- The intentionality of change contrasts voluntary change (the actor has significant leeway regarding the initiation and realization of organizational change) with imposed change (subject to the determinism of the organization's internal and/or external environment);
- The mode of change dissemination opposing the progressive "incremental" change to the brutal change.

2.4. Organizational change management:
Change management consists of all the actions and measures taken with the objective of accompanying the implementation of the recommended change. The components of change management, according to the literature, are as follows:

- **Diagnosis of the change context**: For several authors, the diagnostic stage is important for the successful implementation of change:
  - For the "Organizational Development" current, the diagnosis of the psychosociological and cultural state of the organization is an important step in order to analyze the system's capacity to accept the recommended change;
  - The diagnosis is a step that makes it possible to draw the boundaries of the change, to identify the actors involved and to recognize the degree of receptivity of the organization to the change (Autissier and Moutot, 2003);
  - The analysis of the organization's culture covers a great importance prior to any change (Kotter and Schlesinger, 1983).

- **The vision of the change**: the creation of a shared vision of the change is important to accompany the change (Collins and Porras, 2000), it is, moreover, one of the elements serving to prepare the system for the desired change (Kotter, 2000).

- **Prescribed or constructed change for implementation**: two forms of implementing change, either prescribed/imposed or constructed with the population comprising the organization;

- **Communication**: constitutes an important variant in the context of change by being a lever for disseminating messages during the transformation phase (Autissier and Moutot, 2003).

- **Training**: also constitutes a second variant necessary for upgrading skills affected by organizational change.
2.5. Organizational change management: a key management tool:

For De Divonne (2005, p. 2): "Change management refers to the management of organizational change: it is the entire process that goes from the perception of an organizational problem to the definition of a framework of actions that allows for the development, choice and implementation of a solution under optimal conditions of success.

Autissier and Moutot (2013), for their part, consider that change management is: "a set of methods and tools for getting beneficiaries to adhere to the objectives of a project". According to De Divonne (2005), the change management process occurs in response to changes in the environment, both in organizations and in the individuals who make them up. Thus, Autissier and Moutot (2013) consider that one of the objectives of change management, which is considered a productivity lever, is to prepare individuals for change so that their learning time is as short as possible and so that the effects of change take shape as soon as possible. Thus, the objective of change management is to ensure that the main actors in the project adhere to and participate in the change process. To achieve this, it is necessary to understand the expectations and needs of the parties involved in the project and to target the factors that could hinder them in the accomplishment of their mission, in order to then propose communication, training and support actions to them so that they obtain the best possible results. The degree of support will determine the transformations that concern: processes, structures, practices and skills and that aim to change the organization and correct a situation that is deemed unsatisfactory.

2.5.1. The approach to organizational change management:

For many authors including Kotter (1996), Vandangeon-Derumez (1998) or Autissier and Moutot (2013), change management is materialized by the realization of a phase of diagnosis, deployment of levers and evaluation of change. Thus, for Autissier and Moutot (2013), change management is composed of three phases which are as follows:

- A diagnosis and planning phase whose mission is to determine the reasons for the change, the types of changes to be made, the actors involved, the objectives of the change, the potential risks and the structure of the team in charge of the change. This phase represents a scoping exercise that will help identify the most appropriate levers.

- Leverage phase that aims to implement communication, training and resistance management actions. The implementation of these types of actions depends on the diagnosis previously established.

- An evaluation phase which, in a cybernetic logic of "Actions - Results - Corrections", has the task of evaluating the results of the change management actions implemented in the levers phase. It is important to measure the results of the change management actions to know if the recipients of the change are informed, understand, adhere to and participate in the change project (Autissier and Moutot, 2013). It is a matter of evaluating the changes in people and looking at the evolution of the activity to see if the initial objectives of the project have been achieved.

Diagnosis and planning phases: For many authors, change management begins with a diagnostic effort. Thus, Allaire and Firsiro (1988) emphasize that the starting point of any change is based on a diagnosis that must specify the relationship between the organization and its environment. This diagnosis makes it possible to determine the situation in which the organization finds itself and therefore the type of strategic change to be implemented. The "diagnosis phase" allows us to identify the scope of the change in terms of processes, structures, actors and type of change. It is a matter of carrying out a scoping exercise that will make it possible to define the most relevant levers (Autissier and Moutot, 2013, p. 17). Johnson, Scholes, Whittington and Fréry (2008), explain that any strategy change requires three factors for success. The first factor is, according to them, the diagnosis of the situation the organization faces, in terms of the varieties of organizational contexts, the magnitude of the change, and the
cultural forces that can facilitate or on the contrary block the change through the cultural fabric. Other factors are change management styles and change levers. Moreover, this phase is the one that requires the most time (Colson, 2005). For Collerette, Delisle and Perron (1997, p.45), the three main activities of the diagnostic phase are: collecting data on the situation, interpreting the data and highlighting the most revealing and significant elements. The latter authors add that diagnosis is characterized by research, analysis, reflection and questioning, while planning is based on preparation, design and decision. Thus, planning represents "the stage where the agent of change chooses and develops the appropriate means to act on the situation he or she wants to change" (Collerette et al., p. 48). These authors cite the main activities of the planning process as follows: developing the strategy, determining the objectives, choosing the means of action, targeting the actors concerned by the action, developing an action plan, designing and preparing the tools needed for the action, and designing the monitoring and evaluation instruments.

2.5.2. The leverage phase:

- **Communication:** Communication is considered a support lever that comes after the diagnosis phase. Thus, "A change operation relies on significant efforts of dialogue and communication at all levels of the organization and throughout the change process" (De Divonne, 2005, p. 4). Also, Abric (1996), emphasizes that communication refers to an interaction. As an interaction, "Communication is in some way a dynamic phenomenon producing a transformation and is therefore part of a process of reciprocal influence between social actors" (Rakotomalala, 2010, p. 6). In addition to being an objectification process (Midler, 1995), Giroux (1998) notes that the main role of communication is to legitimize change during its implementation. Moreover, communication is not limited to disseminating the change, it is at the heart of the process, its interpretation and its appropriation by the actors (Demers, 1993). It modifies the attitudes of the actors, allowing the emergence of behavior in favor of organizational change (Giroux and Giordano, 1998). Giroux (1996) points out that there are three different types of communication in the literature on the implementation of change: planned communication, emergent communication and interactive communication.

- **Training:** Training is considered to be an important lever in a change action insofar as the latter is: "a process of learning by the actors of new ways of acting and cooperating" (Sartor, 2006, p. 38). Meignant (2006) emphasizes that training must be an investment in the company's strategy in order to facilitate investment projects and develop a high-performance corporate culture. Martory and Crozet (2002, p. 89), go in the same direction by estimating that training "is the basis of most performance improvements", because for these two authors it improves the quality of work by contributing to raising the level of knowledge and skills of the actors. Training is, therefore, "an investment at the crossroads of performance" (p. 90). Referring to the work of Toumsin (2005) and Autissier and Moutot (2013), the training approach includes the following elements: determination of training needs, development of training materials (tools), choice of training methods, training budgets, determination of the duration of training, determination of the pace of training, evaluation of training actions.

- **Managing resistance to change:** Change is synonymous with anxiety (Perret, 1996) because as Autissier and Moutot (2013, p. 167) remind us: "to change means to lose a known existing for an uncertain future. Change is scary because it forces individuals to learn a new situation. Depending on their aspirations, habits and personalities, a change project leads to different forms of resistance that it is important to detect and deal with so that they do not hinder the smooth running of the project. Resistance, and often negative-sounding phenomenon inherent to organizational life, refers, in the organizational context,
to a blockage, an obstacle, an obstruction and opposition (Bareil, 2004). In fact, "both the managerial discourse and the academic literature present the phenomenon of resistance to change as one of the main causes of failure and as an inevitable brake on change" (Vas and Vande Velde, 2000, p. 2).

Different forms of resistance come in the way of a successful change project. They can be more or less visible and detectable. They may be contained in the company's value system or be the result of isolated individuals. It is therefore essential to identify and deal with this resistance in order to increase the probability of success of a project.

2.5.3. Evaluating a change management action:

The performance of change management actions, such as communication, training and resistance management, should be evaluated using tools made up of different indicators. These indicators, which can be grouped together in a change dashboard, represent a tool for assessing the change management of a project. The tools for evaluating change management are the following (Autissier and Moutot, 2013):
- monitoring of change management actions;
- the ICAP model (Information, Understanding, Adherence and Participation);
- performance indicators. This article focuses on this evaluation phase and more specifically on one of the tools used for this purpose, namely the ICAP model (Information, Understanding, Adherence and Participation) developed by Autissier and Wacheux in 2006, which represents an indicator that can provide information on the degree of achievement of an organizational change through the appropriation of the change by the actors. In other words, the ICAP model evaluates the appropriation of change by individuals (Autissier and Moutot, 2013).

2.5.4. The ICAP model for assessing actors' ownership of change (Autissier and Wacheux, 2006):

After ensuring that the change management actions have been carried out, that their deadlines have been met, and that their costs have been controlled, another type of evaluation should be carried out and that consists of measuring the degree of ownership of the desired change by the actors involved. This can be done through four indicators that measure for a given population.
- the rate of information about the project;
- the rate of understanding of the project
- the rate of support for the project
- the rate of participation in the project.

"These four indicators, gathered under the title ICAP Model for Information, Understanding, Adherence, Participation, are obtained by interviews through questionnaires with the population concerned by the project or a representative sample of the latter" (Autissier and Moutot, 2013, p. 200). The latter two authors advise calculating these four indicators on a quarterly basis and specify that the indicators in question are put in place to complement those for the implementation of change management actions. In addition, it is possible to represent these indicators in the form of barometers or scales in order to make them more readable. Thus, "the simple or weighted average of the four indicators can constitute an overall indicator of change that can also be represented in the form of a barometer" (Autissier and Moutot, 2013, p. 200).

- The information rate: This indicator makes it possible to evaluate the number of individuals who have become aware of the change project in its various aspects, particularly through its bearers, its modalities for participation and its technical content. In order for individuals to engage in a transformation process, they must be informed about the project. All change project leaders must ensure that all the actors involved are informed of the different aspects of the change. Indeed, "too many corporate projects suffer from a lack of knowledge on the part of employees, who are the main stakeholders and, above all,
the main actors in their implementation" (Autissier and Moutot, 2013, p. 201). The purpose of this indicator is to evaluate the communication of the project by answering the question: What is the level of information provided to employees about the project?

- **The rate of understanding:** The rate of understanding is "an evaluation of the mastery of the technical content of the project. It is a question of understanding what employees have mastered from a technical point of view of a project that brings about change" (Autissier and Moutot, 2013, p. 203). It determines the level of understanding of employees with regard to the project’s objectives, work methods and organization. This rate is summarized in the following question: "What do you understand about the project? It underlines the effort made by some active players to understand the different aspects of the project. It should be noted that understanding depends on information, as it is impossible to understand without being informed.

- **Buy-in rate:** The "buy-in rate" is intended to measure the level of acceptance of the project. It is a form of opinion poll regarding the interest in the project and the proportion of people who judge it positively" (Autissier and Moutot, 2013, p. 206). The rate of adherence does not necessarily depend on the rate of understanding insofar as some people may adhere to an idea because of beliefs based on an ideology. At this rate, which gives an idea of the acceptance of the project, can also indicate the presence of resistance. Autissier and Moutot (2013) insist on the need to have a high rate of adherence because it is one of the keys to the success of any project. In particular, buy-in will encourage employee innovation and push them to give their best.

- **Participation rates:** "The participation rate is the indicator that shows that people are moving into action and production. It evaluates the percentage of people who participate and produce for the project on a one-time or recurring basis" (Autissier and Moutot, 2013, p. 209). The latter two authors highlight several forms of participation such as participating in information and work meetings; producing diagnoses, analyses and proposals; deploying transformations in daily activity; formalized feedback from deployment experiences so that it can be used by others. The fact that the actors do not participate, for example by not being able to assume their task, can lead to the failure of the project. It is possible to measure the four rates explained by using a questionnaire that is administered to all the actors involved or to a representative sample periodically. Finally, according to Autissier and Moutot (2013), it is also possible to synthesize these four indicators into an overall indicator of ownership of the change that will represent their arithmetic or weighted average. The two authors also state that this rate represents an indicative and relative value of the level of transformation and commitment of the actors involved.

### 2.5.5. Ownership of organizational change:

Change processes can be seen as an uninterrupted series of understanding-ownership cycles (Hafsi and Demers, 1997). Thus, like any learning process, the processes of ownership and change are intertwined according to Bateson (1977). Moreover, "Change is built progressively through processes of local adaptation and individual and collective appropriation" (Soparnot, 2004, p. 36). According to Autissier and Wacheux (2000, p. 37), the notion of appropriation of change "consists of mobilizing a threshold of actors in such a way that a majority commits the entire enterprise in a sustainable manner. These two authors thus consider that the appropriation of change refers to the integration of this change into the organizational functions of individuals. According to Proulx (2001) cited by Perotti (2011, p. 74), "the individual appropriation process [is] centered on the individual acquisition of knowledge and skills: it is the way in which an individual acquires, masters, transforms or translates the codes, protocols, knowledge and know-how necessary to deal correctly with [the tool]". Revel (2004, p. 17) notes that: "appropriating a change amounts to making it one's own. In a double movement of adaptation
and interpretation, the actor integrates the new features into his world at work. He links all or part of the change to an individual or collective experience at work. This is a process that lasts over time, reflecting an individual and then collective construction of a new meaning of action (Revel, 2004). Furthermore, the appropriation of change is associated with the participation of individuals in the design and execution of change. This participation indicates that the actors are informed of the planned change, its characteristics and its modalities, as well as its consequences on the way they work. "It is on the basis of this knowledge of the situation that people will be able to adapt and transcribe locally the general principles of the change" (Revel, 2004, p. 17). The author adds that the active participation of the actors in the change will lead them to appropriate this change. Thus, for Revel (2004, p.17), "An accomplished change would therefore be participatory." However, participation alone is not enough to characterize an accomplished change for Revel (2004). Indeed, for the author, participation is not always desired by the actors for a multitude of reasons, such as the fear of expressing a point of view or the fear of having more responsibilities. Other actors may misunderstand the objectives of participation.

Thus, given these limitations, it is important that certain conditions be met before participation, such as the establishment of a secure framework of rules. According to Revel (2004), the appropriation of change by the actors requires at least three other dimensions to be considered. The first relates to change management. In order for a change to be successful, management must affect different levels of decision-making and authorize and even encourage greater individual autonomy. Thus, according to the author, change requires a mode of management in retreat and emphasizes that the role of the manager is to accompany the change rather than to try to control it, which encourages the appearance of blockages. Furthermore, according to Kotter (2000), training or certain facilitation devices put in place by the organization can promote the appropriation of change. "These organizational supports represent key resources in the principles of organizational learning" (Davis, Bagozzi and Warshaw, 1989 cited by Latiri Dardour, 2006, p. 110) and enable individuals to take on new tasks by equipping them with new capabilities (Fabi, Martin and Valois, 1999). In addition, these organizational tools can counteract resistance to change to the extent that they present it as more favorable (Lau & Woodman, 1995; Eby, Adams, Russell & Gaby, 2000). The second dimension, presented by Revel (2004), is related to the previous concerns, since it concerns temporality. Actors need time to appropriate a change. It is therefore inadvisable to establish a short-term evaluation of the results to allow for adjustments. Mistakes are necessary for the project to mature. Thus, rigid and overly detailed planning prevents ownership of the experience and limit creativity. The third aspect of an accomplished change appears through the capacity of this process to modify the values, norms and representations internalized by all the actors of the organization who participated in the change, including the leaders. The condition of an accomplished change," lies in its capacity to be integrated into the daily work of the actors. It is its appropriation by the latter that then makes it possible to consider and question the established norms, to take into account the company's modes of social regulation and to encourage learning" (Revel, 2004, p. 17). As we have seen, ownership is a major condition for the success of an organizational change process. Consequently, ownership represents an indicator for evaluating the level of accomplishment of an organizational change (Revel, 2004; Autissier and Moutot, 2013) that allows us to judge the success or failure of an organizational change.

2.6. Implementing change in the public sector:

After the diagnosis of the context of change, the launch phase begins, in which it is a matter of disseminating the change at the level of the organization (Nouiker, 2021). The success of change in the public sphere is conditioned by the presence of three components: Innovation diffusion, listening, and adopting a flexible mode of planning (Nouiker, 2021).
The diffusion of innovation consists of a process made up of the following successive stages: basic research including the general idea, research applied to the organization, development (establishment of the typical model), demonstration and finally the diffusion of the innovation (Nouiker, 2021).

During this linear process, resistance may emerge due to a lack of understanding of the added value of the innovation to the organization (Nouiker, 2021). This process can follow a rather swirling model by developing progressively from the criticisms and the different proposals made, allowing for collective creation, especially in the case of complex innovation (Nouiker, 2021). In this context, the translation of everything concerning the innovation in terms of characteristics, advantages and disadvantages into a language understood by all is essential to win their support (Nouiker, 2021). These negotiations require significant communication skills on the part of change managers (Nouiker, 2021).

Thus, according to the same author, the organization must proceed in four ways: the gradual implementation of change, the setting of general goals instead of rigid objectives, the adoption of a limited horizon and the preservation of resources for innovation (Nouiker, 2021).

In the context of change management in the public sector, and in order to gain the support of the actors, it is essential to understand their behavior, hence the interest that psychology can represent (Nouiker, 2021). In the case of complex problems, it is necessary to establish trust between the members of the project team in order to have a common representation to solve them, and this between the stakeholders of the project: users, citizens with different political opinions, local and national elected officials... (Nouiker, 2021).

Recognition at work is also interesting as a symbolic reward for the contribution of individuals to change (Nouiker, 2021). Commitment to change is another aspect to be promoted among individuals in the organization (Nouiker, 2021). The freedom of decision and involvement in a group help develop this component (Nouiker, 2021).

2.7. Change management method in the public sector:

The method of change management in the public sector proposed by Guyon et al (2003), takes into consideration the characteristics of the latter, namely high social and political risk, strong values and organizational compartmentalization (Nouiker, 2021). The different phases of the method occur throughout large-scale changes such as the decentralization of responsibilities, the implementation of process-based management, and the development of service quality management. The method consists of five phases. The first phase consists of listening to the field to understand the nature of the activities and the logic of the actors concerned by the change in order to decide on the themes that can generate their support. The second phase is based on organized exchanges between the managers of the different entities of the organization, leading to improvements in the system in the form of upstream initiatives and a more precise definition of the problem. The third phase refers to the experimentation or pilot site allowing testing the change in order to have useful lessons concerning the global change. The fourth phase concerns the generalization of the change after the decision of those responsible for it, who may decide to abandon the change following the previous phase. However, in case of extension to other sites, it is necessary to be flexible, as unforeseen events may occur. The last phase concerns the institutionalization of the acquired knowledge. However, in the case of large-scale change, there may be intermediate results before the final result is reached.

To summarize this section, Guyon et al (2003) suggest an approach for conducting change in public administration without having to follow the established order. This approach begins with the definition of a modest project, with a limited time horizon, a unifying goal, and an adequate
budget, time and resources. Then, it is necessary to analyze the internal and external context, the technical analysis of the processes involved, the identification of the areas of uncertainty in these processes, the identification of the actors, the definition of their resources, professional project and political identity, the anticipation of the stakes and strategies, the enrollment of the most favorable actors, and finally the extension of the network, by modifying the initial idea if necessary, or even by creating translated projects.

3. Conclusion:
Digital-based public service transformations attempt to improve service delivery in public organizations, and thus increase public value. However, in reality, the complex structure of government institutions, the interaction of actors from various contexts, and the integration of multiple resources have made it difficult to achieve desired goals across multiple programs. This study focused on the change management to be adopted within public organizations in order to support the success of their digital transformation.

The reform of public administration is a subject that is much talked about at the international level, given the desire to modernize practices and minimize the dysfunctions of the sector. The latter is indeed characterized by inefficiency, inconsistency of objectives and slowness. As such, the question arises as to the results of these changes, their appropriation by individuals and their contribution to performance.

In this context, it is generally believed that reform or change in public administration comes from above. Also, change in this sector is delicate because of the particularities of the public organization, namely inconsistent objectives, organizational inefficiency and the attachment of civil servants to the status quo of the organization. All of these factors make change in government more complex, and are sources of resistance. However, the strong values of the sector help to anchor organizational transformations, which can promote change.

Thus, change in the administration, although delicate, remains possible. At this level, the human aspect of change is very interesting, which justifies the importance of conducting a change management process in parallel with the reforms in order to achieve the targeted objectives and goals. This approach must be adapted to the context in order to get the target people to adhere and to make the change projects succeed.

In this context, in order to manage the change properly, the project manager must have a realistic vision of the sector by taking into consideration all the features and specificities characterizing the administration in the preliminary diagnosis. This diagnosis includes three components: the context of change (internal and external), the actors and the processes.

After the diagnosis of the context of change, the launch phase begins, in which the change is disseminated throughout the organization. This consists of disseminating the innovation, listening and adopting a flexible planning mode. Communication and training play an important role here.

The article has tried to present the reference framework for change management in public administration to the challenges of digitalization of public procedures and services.

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