

2009

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## Recommended Citation

Prasopoulou, Elpida, "The Interplay Of Ict Innovation With State Administrative Tradition: The Case Of The Greek Taxation Information System (taxis)" (2009). *MCIS 2009 Proceedings*. 33.

<http://aisel.aisnet.org/mcis2009/33>

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# THE INTERPLAY OF ICT INNOVATION WITH STATE ADMINISTRATIVE TRADITION: THE CASE OF THE GREEK TAXATION INFORMATION SYSTEM (TAXIS)

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## Abstract

In recent years, there is an explicit link of ICT innovation with deep structural reforms in public administrations. Information and communication technologies (ICTs) are viewed as enablers of state reform towards the establishment of a minimal, agile and accountable government apparatus. The concept of administrative tradition allows us to understand how structural, historical, institutional and behavioral elements shaping a country's perception of proper public administration interact with ICT innovation. In this paper, we examine a specific administrative tradition, the Napoleonic, in its Greek variation. The properties of Greek administrative tradition are identified and analyzed. Their interaction with ICT innovation is studied in the case of TAXIS, the flagship information technology project of the Greek government in the mid 1990s. TAXIS's implementation occurred in a period of conscious and systematic effort of the Greek polity to radically change its operations and become aligned to the political structures of its Western counterparts. Thus, there is an explicit link between ICT innovation and the need for state reform. Nevertheless, ICT innovation did not follow an independent path but was infused by elements of the Greek administrative tradition producing a number of interesting outcomes.

**Keywords:** *ICT Innovation, State Reform, Administrative Tradition, Greek Public Administration*

## 1 INTRODUCTION

Radical institutional change towards the creation of a flexible, efficient and transparent public administration has been the driving force behind large scale ICTs implementations in the public sector (Dawes et al., 1999). Public administration has a long tradition of automating its core operations through extensive use of office technologies in order to perfect indexing and document storage methods (Agar, 2003). These technologies however increase only the capacity of public administrations to perform operations which remain essentially the same ever since the creation of large state bureaucracies (Dunleavy et al., 2006). It is only recently, with the advent of e-government, that has been established an explicit link between technological innovation with institutional change (Dunleavy et al., 2006).

E-government carries the broader vision of "an electronic, minimal state, more transparent, agile and accountable" (Ciborra, 2005: 261). This signals a significant departure from the traditional way of deploying ICTs for the automation of procedures and the streamlining of internal processes (Ciborra & Navarra, 2003). The new vision encompasses the establishment of collaboration and co-ordination among different public organizations (Drake et al., 2004), the reinvention of the relationship between citizens and the state (Ciborra & Navarra, 2003) and the creation of a minimal neo-liberal state that will not intervene in economic activities without lowering the quality of services provided to its citizens. Existing research on the interplay of ICT innovation<sup>23</sup> with state reform (e.g. Avgerou, 2002; Ciborra, 2005; Fountain, 2001) primarily focuses on the battle against bureaucracy with an emphasis on changes on administrative practices and organizational procedures. There are researchers who try to overcome mechanistic explanations by focusing on the impact of information technologies on the operational philosophy of public administration (e.g. Ciborra, 2005; Ciborra & Navarra, 2003). The importance of

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<sup>23</sup> We use the concept of ICT innovation as defined by Avgerou and Madon (2004: 162): "ICT innovation is concerned with design and implementation of a new technology but also addresses issues of information and knowledge, and it has an interest in IS-related changes of the organization and content of work tasks".

context during information technology implementations in the public sector has also been extensively addressed especially in under development countries like India (e.g. Avgerou & Madon, 2004) or late development countries like the Kingdom of Jordan (Ciborra, 2005), Mexico (Avgerou, 2002) and Greece (Avgerou & McGrath, 2007). Nevertheless, even research efforts (e.g. Avgerou & McGrath, 2007) which explicitly incorporate in their explanations the role of broader societal phenomena (i.e. modernization efforts at the country level) have not managed to establish a solid link of such macro phenomena to events at the micro level of analysis. The concept of a country's administrative tradition (Peters, 2008) allows the incorporation of historically based values, structures and relationships with other institutions into existing theoretical accounts. Hence, we gain a more elaborate understanding of the outcomes of ICT implementations especially in countries (i.e. late or under development) where ICT innovation is institutionalized as a trigger for changes on the institutional fabric of the state apparatus (Avgerou, 2000).

In section 2, we present the theoretical underpinnings of the concept of administrative tradition. Our research design and data collection methods are described in section 3. The basic characteristics of the Greek state as a member of the Napoleonic tradition as well as their influence to administrative reforms are presented in section 4. The following section (5) presents a brief overview of TAXIS as well as the core themes, identified during empirical work, which highlight the influence of administrative tradition on ICT innovation. Section 6 associates these themes with theory in order to further analyze how these two phenomena co-evolved. The paper concludes with observations on this interaction and areas for further research.

## **2 THE CONCEPT OF ADMINISTRATIVE TRADITION**

Public administration in all political systems is organized primarily in a bureaucratic manner in order to ensure the necessary equality and impartiality in the provision of public services to citizens (Cordella, 2007). Formality, separation of person from role, objectivity of rules, hierarchical organization and work specialization, as principal characteristics of the bureaucratic order (Kallinikos, 2004), can be traced in most political systems since they ensure work standardization and predictability in policy implementation despite changes in governing parties. There are, however, significant differences as well which can be traced in the comparative examination of political system and account for different outcomes in modernization efforts (Rustow, 1968) or in the pace of adjustment in supranational formations like the European Union (Knill, 1999).

To create a more comprehensive explanation for these differences and link them with structural and behavioral patterns within each public bureaucracy Peters (2008: 118) introduced the concept of administrative tradition which he defined as "an historically based set of values, structures and relationships with other institutions that defines the nature of appropriate public administration within society". The concept brings together several characteristics of administrative systems and demonstrates how these elements fit together to create more or less coherent institutions. The combination of structural properties and behavioral characteristics constituting each country's administrative tradition is partly owed to the historical trajectory of each country as well as to contemporary adaptations to changed circumstances (Peters, 2008).

The concept of administrative tradition groups together structural as well as behavioral explanations for a country's trajectory. It contains elements of historical institutionalism since it posits that the institutional fabric of each political system is the outcome of specific historical circumstances which shaped how state institutions evolved over time and how they fit together in the governing of the state. However, it is not a static concept founding explanations solely on past events and the historical evolution of each country's institutions. It allows also the examination of the dynamic adjustment of countries in national or international circumstances, like the adaptation of many countries to the European Union. Finally, the concept of administrative tradition incorporates also behavioral elements. As Peters (2008: 119) notes:

The notion of tradition does involve what people, especially political and administrative elites, think about administration, but it also involves a number of institutional features of public administration, as well as the relationships between state and society in administering public policies.

To better understand the constituting elements of an administrative tradition, Peters (2008) developed a set of dimensions which consider the relationship of state to society, the nature of administrative work and patterns of control that exist within administrative organizations. These four dimensions are summarized in the following table (table 1).

State and society	Relationship between state and society. Organic conceptions view state co-evolving, from its inception, with society. Contractarian conceptions view state as human product amenable to change.
Law vs. management	Definition of fundamental tasks of administration. Legalistic conception places law at the beginning of every administrative action. Managerial conception stresses the need to get things done.
Administration and politics	Whether or not some parts of public administration should be politicized or not. Where are the barriers between the political and the administrative?
Accountability	Whether accountability of public administration should precede or follow administrative activity. Legalistic traditions place emphasis on ex ante accountability while managerial ones on ex post.

*Table 9: Dimensions of administrative tradition*

The first dimension addresses the fundamental question of the relationship between state and society. There are primarily two major conceptions of this relationship. The first one, labeled organic, assumes that the state is linked from its inception to society. The two entities co-evolve since the state is essentially the expression of societal wills and perceptions. The other conception is the contractarian according to which the state is the outcome of a conscious contract, expressed through a constitution or similar constitutional arrangements. These two conceptions entail different understandings on the probability for change in state institutions. Organic conceptions view the state as a natural entity and therefore allow little room for reflexive questioning of institutional arrangements. Society has less autonomy while citizens are considered obliged to defend the state. Contractarian conceptions, on the contrary, view the state as a human construct which can be changed by the parties to the contract. Hence, such conceptions are more favorable to change since societies are more free to question existing institutions and incorporate novel ideas to existing arrangements.

The second dimension deals with the choice between management and law as the appropriate way to define the fundamental tasks of administration. In some administrative systems, public servants are considered to be in charge with administering the public law. This legalistic conception assumes that the law is readily understandable and that all individual public servants can apply it uniformly to various cases. To higher levels of hierarchy simplicity in law application declines, however, the legalistic mentality remains intact. The alternative is to view public administrators as managers. This conception does not deny the importance of following the law. However, emphasis is placed on getting things done. Therefore, the law is the point of departure and not an end in itself.

The fourth dimension tackles the relationship that should exist between politicians and civil servants. The core issue concerns the degree of autonomy of public servants from political pressures when administering the law. The same dimension also includes the degree of political sensitivity that public servants should possess especially at the higher levels of hierarchy. In all administrative traditions there is the belief that at least some part of the civil service should be apolitical in order to preserve administrative continuity and serve citizens in a fair and impartial manner. Nevertheless, there are

traditions where there are fewer barriers between the political and the administrative and it is acceptable for senior civil servants to have political careers.

Finally, the fourth dimension examines the way accountability is enforced within the public sector. Bureaucratic power is an issue of major concern for all democratic societies. To this end, accountability mechanisms are established in order to constrain and monitor the exercise of the powers delegated to public servants. The difference among administrative traditions does not concern whether accountability should exist, it is universally accepted as a necessary component of democratic control. It concerns whether accountability should be sought before or after the administrative action. To administrative traditions with a managerial conception of the role of public administrator, accountability comes after some actions are deemed as surpassing acceptable legal limitations. On administrative traditions with more legalistic conceptions, accountability is imposed *ex ante*. Controls come in advance of administrative actions and administrators must gain approval prior to making decisions.

An instantiation of administrative tradition, the first to be granted typological rank (Köning, 2003), is the Napoleonic administration. This tradition is based on the model of the public sector developed by Napoleon I in France, and has spread throughout many countries of southern Europe (e.g. Spain, Italy, Greece), neighbouring countries like Belgium, The Netherlands and even Germany as well as the French colonial empire (Köning, 2003). According to the Napoleonic tradition the state is in an organic relationship with society. This is translated to a mighty and omnipresent state rule both territorially and functionally (Köning, 2003). The state and its administrators know relatively few bounds hence there is a dominance of vertical hierarchical directive structures originating from the capital. Public servants are seen as primarily administering the law in an equalitarian and fair manner to ensure equal treatment of all citizens. Regarding the third dimension of administrative traditions, the Napoleonic state, according to Peters (2008), tends to have fewer barriers between politicians and civil servants. Administrators often have political careers, both as active politicians and as appointees to positions in ministerial cabinets. It is quite common for many politicians to have started their career as civil servants trained by the state and then move to politics. Finally, accountability is formal and legalistic. There is a number of legal controls exercised before any administrative act in order to ensure its compliance with legislation and give permission to the administrator to proceed.

Although all countries of the Napoleonic tradition share these common characteristics, they have also developed a number of variations because of the specific historical circumstances characterizing each country's trajectory. To this end, each country has a set of idiosyncratic properties which accentuate or restrain the characteristics of the ideal model of the Napoleonic state. The characteristics of Greece as a Napoleonic state are discussed in subsequent sections. Before that, however, we discuss our research methodology.

### **3 RESEARCH METHODOLOGY**

The aim of this research is to *“produce an understanding of the context of the information system, and the processes whereby the information system influences and is influenced by the context”* (Walsham, 1993: 4-5). The need to present the implementation of an information system in tandem with the Greek state's administrative tradition guided us to present our research in the form of a historical account. The value of this approach has been discussed by Mason and colleagues (1997) while it has already been deployed by Avgerou and McGrath (2007) in their study of IKA, a Greek public organization struggling with ICT innovation. Historical research invites the association of rich case descriptions with contextual elements and theoretical underpinnings. It is therefore quite appropriate for capturing *“the contingencies of organizational context and the situatedness of action in IS innovation [...] when the innovation being studied overflows with controversy, unexplainable actor behaviour, obstinacy in failing to “learn” and perform the expected technical roles, and an inability to improvise successfully”* (Avgerou & Madon, 2004: 168).

Research drew primarily on archival data, in-depth interviews and informal discussions with participants in the design and implementation of TAXIS. The aim was to recreate and thus understand the contextual frames of reference (Van de Ven, 1992) of the participants, in an effort to trace the interaction of ICT innovation with the administrative tradition of the Greek state apparatus during the six years of system implementation. For this reason, the first round of interviews aimed at retracing the basic events of TAXIS design and implementation in order to acquire a solid picture of the period under research. The first interviewees were selected among the actors who enjoyed most visibility from the press at the time, primarily members of the project team. These interviews revealed other persons involved in the design or/and implementation, which were consecutively interviewed. This process came full circle when the persons suggested had already been interviewed. This retrospective case history (Van de Ven, 1992) delivered an account of the major events during TAXIS's design and implementation. The outcome was used as the basis of the second round of interviews where participants were asked to comment on these events with emphasis on the link of ICT innovation with Greek administrative tradition. To capture the values, structures and institutional aspects of Greek state's administrative tradition, we collected an extensive range of academic studies on the matter. The idiosyncrasies of Greek public administration, the patterns of administrative reform as well as the problems experienced during each reform effort are extensively discussed by prominent Greek intellectuals (e.g. Mouzelis, 1995; Sotiropoulos, 2004; Spanou, 1996; Tsoukalas, 1995). Thus, we were able, to establish significant insights on the nature of Greek administrative tradition and further elaborate on its interaction with ICT innovation.

The outcome is an historical account of TAXIS during its implementation (1993-2000). For the presentation of our findings we have followed the approach adopted by Avgerou and McGrath (2007) in the case of IKAnet (the second bigger IS project in Greece at the time of TAXIS's implementation). Our case narrative presents a *"time line of events distilled from a wide range of empirical material"* (Avgerou & McGrath, 2007: 300). Events are selected based on our understanding of empirical material through the lens of the adopted theoretical perspective. Our analysis associates then these themes of the case narrative with the theory in order to develop a more concrete account of the interplay of ICT innovation with state administrative tradition. Evidence from the case is incorporated in all subsequent sections of the paper since theory and evidence unravel together to produce an understanding of the case. In the next section, we present the characteristics of the Greek state as part of the Napoleonic tradition. Then we discuss some critical issues concerning administrative reform in the context of Greek bureaucracy.

## **4 GREECE AS A NAPOLEONIC STATE**

Greece, like other late-development countries, did not experience the gradual transition from pre-modern rural society to an industrialized one (Mouzelis, 1978). Once the country has been established as an autonomous modern state, it underwent a massive injection of Western culture in order to align its structurally different institutions, developed in the context of the Ottoman Empire, to the ones existing in the West (Mouzelis, 2002). However, this large-scale adoption unavoidably caused a clash with the pre-existing institutional arrangements of a pre-capitalist, under-developed economy and a patrimonial structure of political controls (Mouzelis, 1978). Unlike other countries, where pre-existing institutions maintain only a decorative role, in Greece many indigenous characteristics of administrative tradition and political culture had roots strong enough to persist even to this date. The outcome of this clash between institutions as well as the reasons why the ideal organizational models are emulated but never fully embraced (Avgerou, 2002) are discussed in the following sections.

### **4.1 Elements of Greek administrative tradition**

Given the specific historical circumstances which shaped Greek administrative tradition, it is not surprising that some aspects of the Napoleonic tradition, part of which is the Greek state, have been negatively accentuated creating a rigid state apparatus. The conception of an organic relationship of society with the state, the great emphasis placed on the existence of a system of administrative law (Spanou, 2008) as well as the absence of significant barriers between the political and the administrative

(Peters, 2008), which are fundamental characteristics of the Napoleonic tradition, became significant impediments of the Greek state apparatus when imbued by the authoritarian remains of the country's Ottoman past. According to Mouzelis (2002) the government apparatus is characterized by authoritarian structures, a strong embrace from the political parties which view public sector as the vehicle for the fortification of their control to various social groups and a clientelistic mentality cumulating to lack of transparency and corruption (Featherstone, 2005).

In the Greek variation of the Napoleonic state, named "bureaucratic clientelism" (Lyrintzis, 1984), the centrality of the state in economic and social life in tandem with the extensive use of its apparatus by political parties to secure their stay to power is translated to an organized expansion of the public sector to accommodate various social groups (Makrydimitris, 1999). This expansion does not abide by the rules of effectiveness of public services. On the contrary, as Lyrintzis (1984: 104) vividly remarks, "it is oriented [...] towards the provision of parasitic jobs for the political clientele of the ruling sectors, in exchange for their political support". The recruitment of unqualified persons through clientelistic criteria has led to an increased need for formal procedures which minutely foresee all possible cases (Makrydimitris, 1999). This resulted in a vast and inflexible legal framework which restrained administrative practices (Karvounis, 2003). It also served as a façade for public servants to hide an anarchic behavior bending the rules either to offer preferential service to specific citizens or to simplify unnecessarily awkward tasks (Avgerou, 2002). Thus, legalism, in Greece instead of imposing order provided a fertile ground for informal arrangements and corrupt practices (Sotiropoulos, 2004).

Finally, the close interrelationship of politicians with senior civil servants, in Greece, has deprived public administration from well-educated top civil servants sharing an *esprit de corps* (Sotiropoulos, 2004). The highly politicized practices in recruitment procedures and the lack of meritocratic criteria did not allow the creation and solidification of such an elite. General and special secretaries of Greek ministries and managers of major public corporations are considered close collaborators of each minister (Featherstone, 2005). It is, therefore, considered logical and acceptable to be persons of confidence from each minister's milieu. This resulted in frequent changes of people staffing such positions even after each Cabinet reshuffle of the same government (Sotiropoulos, 2004). A common practice during the 1980s and 1990s, it resulted in people with inappropriate qualifications and little experience leading public services (Makrydimitris, 1999). Moreover, as Tsoukas (2007) observes short-termism and discontinuity of policies deprive public administration of the necessary institutional memory that would render more effective and fruitful policy implementation.

Hence, the Greek state apparatus, given its idiosyncratic organization and structural properties, could not serve as the flexible and supportive mechanism that would lead the country to a fruitful development path (Mouzelis, 2002). On the contrary, increased involvement of political parties in hiring procedures as well as the lack of adequate expertise and proper training resulted in a rigid public sector which hindered any attempt towards modernization since it was perceived as a threat to established privileges (Tsoukas & Papoulias, 1996). In addition, the prevalence of novel conceptions of the role of the state apparatus, such as the New Public Management, based on Weberian organizational models made administrative reform an imperative for Greek governments. The attempts to radically reform the state apparatus in order to actively incorporate the properties of the Weberian ideal as well as the role of ICT innovation in this effort are discussed in the following section.

#### **4.2 Patterns of administrative reform in Greek public administration**

Reform is a persistent claim of Greek society ever since the fall of the colonel's regime in 1975. Spanou (1996) observes that all governments responded to these claims by launching reform programs which primarily aimed at instilling to Greek bureaucracy the values and principles characterizing the Weberian ideal organizational model. However, despite several attempts with varying degrees of commitment, public bureaucracy remains the "great patient" (Makrydimitris, 1999) of Greek society. The Napoleonic properties of the Greek administrative tradition produce ambiguous results when exposed to ideas and models stemming from trends like New Public Management which originate from a different

administrative tradition (i.e. anglo-saxonic) (Spanou, 2008). Moreover, the idiosyncrasies of the Greek Napoleonic variation, where state structures are strongly intertwined with the clientelistic networks of political parties (Lyrintzis, 1984) further impede radical changes.

In recent years, the Weberian bureaucracy serves as an archetype that will introduce some order and uniformity in a context deeply affected by anarchic political/clientelistic interventions (Spanou, 1996). Yet, the organic conception of state inherent in Napoleonic tradition contradicts the contractual nature of Weberian bureaucracy which views the state apparatus as malleable (Peters, 2008) and the object of guided change. To this end, attempts to reform both structural and cultural aspects of the Greek state apparatus towards organizational models with no historic roots on the institutional fabric of Greek public administration generate a paradoxical situation vividly described by Spanou (2008: 152):

In Greece statism is a major aspect of Greek political culture [...] as a core social expectation. At the same time however, state intervention is often perceived as inefficient, too close to clientelistic, corporatist as well as economic interests. Thus, the capacity of the state to steer and regulate often appears deficient. Bureaucratic inefficiency and red tape discredit state action. Paradoxically however, state action is expected and welcomed while reform is viewed with suspicion as an effort to overturn rights gained after significant social struggles.

The outcome is persistence of specific structural and behavioral properties while core aspects of the Weberian model are taken into account only in recent reform efforts. More specifically, the primary objective of most administrative reforms is the clientelistic/particularistic aspects of the state apparatus (Tsoukas, 2007). In practice, this is translated into attempts to regulate the role of public servants. According to Spanou (1996), in almost twenty years of administrative reforms, priorities principally include the recruitment system, the grade and pay scale as well as the establishment of an 'objective' performance appraisal system. Administrative inefficiencies and red-tape are acknowledged as important problems (Spanou, 2008). Yet, the importance to contain corruption leads to the adoption of uniform, restrictive and detailed provisions which aggravate organizational inertia. Additionally, the lack of trained and competent personnel, because of erratic recruitment methods, as well as the need to leave little room for interpretation on behalf of public servants lead to principally legalistic reforms (Spanou, 1996). Hence, public bureaucracy is rendered more rigid without having contained clientelism.

Resistance to change and slow adoption of novelty characterizing all countries with a Napoleonic administrative tradition (Spanou, 2008) are not the only reasons for the limited success of state reforms in Greece. Nor is the deeply ingrained clientelistic mentality of Greek bureaucracy (Lyrintzis, 1984) the reason why corruption persists. According to Spanou (1996) policy making in Greece has a strong symbolic component which weakens reform efforts since legislative and administrative provisions constantly displace targets to fit the conflicts between the two major rival parties (i.e. PASOK and New Democracy). Politics have found in the field of administrative reform an arena for confrontation. Continuous references to past practices of questionable nature which are going to be fixed through novel administrative arrangements are the norm in the political scene which is also characterized by a confrontational style of politics (Spanou, 1996). It follows that a large part of reform visions and subsequent policies is never actualized since it forms part of the artificial and highly symbolic opposition among PASOK and New Democracy (Spanou, 1996).

In the following section, we show how the principal characteristics of Greek administrative tradition interact with ICT innovation. To illustrate the major issues emerging from this interaction we analyze them in the context of the Greek Taxation Information System, the first successful large-scale implementation in the Greek public sector.

## **5 THE INTERPLAY OF ICT INNOVATION WITH THE GREEK ADMINISTRATIVE TRADITION**

Greek state reform through ICT innovation presents a number of paradoxical outcomes, if someone focuses on structural properties of the state apparatus or examines separately macro-phenomena like

modernization. Until very recently, most ICT innovation efforts did not produce any tangible results (Avgerou, 2002) while many technologically-savvy public agencies had partially implemented IT systems which complicated instead of simplifying organizational procedures. To understand the interplay of ICT innovation with the Greek administrative tradition, the following sections present the role envisaged for ICT innovation in the case of the TAXation Information System (TAXIS) which constitutes the first successful large-scale implementation in the Greek public sector.

### **5.1 The Greek Taxation Information System (Taxis): Overview of case events**

The Ministry of Economics and Finances (MoEF) is considered as one of the most critical ministries of the Greek government apparatus. It is entrusted with the government treasury and plays a central role in the implementation and monitoring of the state's financial policy. Given its centrality in public policy, MoEF has always been quite innovative in its approach to information technologies. However, several of these computerization projects remained unfinished leaving the organization with semi-completed installations which complicated paper-based procedures instead of simplifying them (Avgerou & McGrath, 2007).

By mid 1990s, MoEF was in a critical position. Installed information systems were quite fragmented and did not cover all the tax agencies of the country (e.g. the 133 tax agencies information system). Work processes were not re-organized but simply replicated in an electronic environment. Ministry officials, to counteract this situation, developed a strategy to rationalize and facilitate the availability of public-sector information and stimulate the development of electronic information services. The Taxation Information System (TAXIS) originates from a master plan for the introduction of information technologies in all the activities of the Ministry. The purpose of the system was to collect and organize available financial information, dispersed at local tax authorities, in order to improve the collection process of assessed debts and taxation, reduce tax evasion and increase taxation revenues. Moreover, TAXIS was envisaged to improve decision-making and gradually lead to a more fair financial policy, a persistent demand of Greek society.

TAXIS was launched in 2000, after seven years of systematic design and implementation efforts. It provided IT support to the central tax authorities, located in Athens, as well as to the local tax agencies in the rest of the country, for carrying out tax filing, calculation and payment transactions with citizens and businesses. Despite its unquestionable success - it became operational while similar systems (e.g. IKAnet, Avgerou (2002)) struggled to overcome various obstacles - the system was received with skepticism by Greek society and political system. Discussions in the Greek Parliament show that TAXIS was considered overdue as a project while the services offered did not justify such a long implementation period neither the investments made. The press of the time was following closely the project's implementation and was critical of any setback putting additional pressure on the project team. Such heavy criticisms, despite TAXIS's unique success as an ICT implementation of such scale in Greece, beg for a deeper examination of the alignment of TAXIS (an innovative ICT project) with administrative tradition. Such an examination is undertaken in the following section.

### **5.2 Aligning ICT innovation to pre-existing patterns of administrative reform**

The Greek tax system suffers from both the lack of an inner logic and consistency that would ensure social justice. The maze of preferential allowances and incentives established over the years makes it difficult for tax authorities to monitor compliance and battle tax evasion (Bronchi, 2001). Reform has to be systematic enough as to create a more just system of taxation easier to monitor by the relevant administrative authorities (Balfoussias, 2000). Moreover, according to a long established belief, reform of the legal aspects of taxation should be done in tandem with a large scale re-design of existing administrative practices.

TAXIS has been designed to support the need for more efficient administrative practices in order to pave the way for a radical reform of the legal aspects of taxation. Information technology was considered as

the appropriate means for the rationalization of tax collection, hence ameliorating the state's revenues, and the provision of all the necessary information for a more equitable and efficient fiscal policy fostering economic growth. As the General Secretary of Information Systems at the Ministry explained:

Our first priority was to battle bureaucracy in a way serving the citizens too. Our vision was to eliminate any middlemen, let's say accountants that were necessary for the successful completion of the personal tax forms. We also strived to simplify the processes in order to eliminate corruption and ameliorate the service level at the local tax agencies.

However, given the legalistic character of Greek administrative tradition, ICT innovation was primarily conceived as automation of existing administrative practices while the actual tax reform, legal in nature, was to follow. The new information system did not trigger a consistent re-design of existing administrative practices. The managerial administrative mentality of ICT installations stumbled in the primacy of law inherent in the Greek state apparatus. The electronic forms for data entry were almost identical to the paper-based ones. The only differences consisted in simplifications in data fields that were no longer obligatory in the electronic version since data could be replicated by the system. There was no intervention in the actual logic of the tax system nor the administrative practices of civil servants at the tax agencies. This perception that the actual reform was to follow technological implementation leading to the division of ICT innovation from the actual process of reform is further instantiated by the fact that during the TAXIS implementation there was a separate task force, within the Ministry of Economics and Finances, preparing a proposal for changes in the legal aspects of taxation.

At the symbolic level, ICT innovation was perceived, by both politicians and society, as evidenced by relevant articles in the daily press of the era, as the medium to impose order and battle corruption, in the form of illegal dealings between civil servants and citizens and tax evasion. It was not considered a trigger to deeper reform. The visions guiding TAXIS design and implementation aspired to construct a system that would impose order over fiscal procedures in such a way that gradually both public servants and citizens would conform to existing practices. TAXIS had strict procedures which left no room for different interpretations or deviations from the norm. As the General Secretary in charge of the project's implementation stated in an interview for a Greek daily newspaper:

IT applications will impose process standardization. Moreover they will facilitate the containment of any form of clientelism as well as any lack of impartiality in the treatment of citizens from civil servants. In parallel, they will allow the political leadership of the Ministry to formulate long-range policies informed by the new data. (To Vima, 21-06-1998)

Public servants were deprived from the opportunity to bent deadlines and act in favor of some citizens. The later also gradually understood that the Ministry had managed to impose more control over its procedures thus tax evasion was almost immediately traced and penalized. Thus, automation of administrative procedures not only modernized the ministry's apparatus, it also endowed its operations with objectivity which ensured obedience and respect on behalf of both public servants and citizens.

Given the close organic relationship between state and society in the context of Napoleonic tradition it follows that an ICT innovation of the magnitude of TAXIS triggered various reactions on behalf of society. Reactions were further accentuated by the natural mistrust of Greek citizens towards the state and the honesty of its operations. The organic relationship does not mean that state activities are accepted without reservations especially given historical memories from the years of the Ottoman Empire. System implementation had large coverage in the daily press of the era since the public was really worried of the changes taking place. TAXIS was presented, in daily press, as a type of "Big Brother" that will record every financial aspect of citizens' lives. The potential of strict monitoring of financial transactions was perceived to be the first step backwards to the authoritarian past of the country. Hence, citizens were really sceptical towards ICT innovation. Moreover, the new technology itself was causing anxiety to a nation with little familiarity with new technologies.

There are several other aspects of the Napoleonic administrative tradition which also influenced the path of ICT innovation as instantiated by TAXIS. The heavy politicized nature of senior civil servants responsible for system implementation had both positive and negative effects on the evolution of the project. During the critical years of system roll-out (1996-2000) the fact that the General Secretary in charge was a political appointment, a standard practice in Greek public administration, boosted system implementation. The person occupying the position, having an Informatics background, was a project champion which managed to ensure the necessary material and financial resources but also enrolled the Minister of this period to the objectives of the project gaining the necessary political support for a successful implementation. However, just after the system has been fully operational at national level integrating all the tax agencies of the country there was a Cabinet reshuffle. The change of Minister resulted in subsequent changes of the senior civil servants. As a result, TAXIS lost its momentum and started to be perceived as a failing project.

The presentation of TAXIS as a failure, not with respect to the automation of tax procedures, but regarding its impact on the containment of tax evasion and its impact on state finances is also explained by the confrontational style of politics in Greece. As discussed in earlier sections (4.1), in Greece political discourse is characterized by confrontations among the political parties for issues which are deemed of major importance for Greek society (Spanou, 1996). Given the centrality of tax collection for state operations, TAXIS could not be left out of political debates. There is, however, an interesting displacement of the issues over which the political parties debated regarding TAXIS. The necessity for ICT innovation, given the country's imminent adherence to the European Union and technological advances at the international level, could not be debated. The country had to enter the information era and TAXIS was its first attempt towards this direction. Hence, the very fact of its necessity for the Greek public administration was non-debatable. Any political party attempting such an approach would be considered traditionalist in a period during which innovation and novelty was the trend. To this end, political confrontation, as traced in parliamentary sessions, has been displaced to more technical issues. The appropriateness of technical design, the size of databases as well as the version of Microsoft Windows™ installed in the personal computers of the tax agencies were placed under scrutiny. Even the sequence of modules to be launched has been judged with political criteria. Lack of critical modules recording large property ownership were considered by opposition parties as an attempt of the government to protect upper societal classes and impose more taxation to lower ones. Technical decisions were judged with political criteria since were identified as a new arena of political confrontation.

This brief overview of TAXIS implementation generated some interesting observations regarding the interplay of ICT innovation with a country's administrative tradition. These observations are discussed in the following section.

## **6 DISCUSSION**

In this paper, we have sought to examine the interplay between ICT innovation and a country's administrative tradition. The concept of administrative tradition allowed us to focus on both structural aspects of ICT innovation during administrative reform as well as behavioral patterns characterizing a country's logic for the operation of its government apparatus. This way, we infused structural explanations focusing only on changes of the bureaucratic organization of state apparatus with behavioral elements which enrich our understanding of ICT innovation in the context of public administrations. Moreover, the concept of administrative tradition constitutes a theoretical framework which allows macro-phenomena like state modernization to be linked with changes at the micro-level of analysis. By incorporating various institutional, historical and behavioral elements, it allows a more concrete and easy to establish link between the micro and the macro level of analysis and avoids generalistic explanations of ICT innovation.

The case of the Greek TAXation Information System implementation presents a fertile ground for the examination of the interplay between ICT innovation and administrative tradition. TAXIS development coincides with a period when the government, the rest of the political world and society allied with each other in order to introduce large scale changes to the government apparatus. According to visionary claims of the era, Greek polity would finally develop the institutions and accompanying logic characterizing Western polities. It was essentially a vision for a public administration free from cumbersome, bureaucratic procedures which came to be seen as synonymous to corruption. Hence, the properties of the Greek administrative tradition were brought to the surface because of the reflexive questioning of their necessity for the proper functioning of the state as well as their potential to change. Moreover, reform accentuated the fundamental constituting elements of the Greek state which resisted radical changes and tried to enroll ICT innovation so as not to affect them.

Given the circumstances of systematic state reform which, at least in the case of the tax system, has been coupled with ICT innovation, TAXIS allows us to delve into the way information technologies are perceived in the context of e-government projects. Greece has an administrative tradition which places formality and conformity to the law above all other aspects of a modern polity. Hence, reform rarely touches these fundamental elements of Greek public administration. Moreover, as a late-development country, which has not experienced the industrial revolution, Greece has not incorporated the teleological conception of technical evolution as the pathway towards progress like Western countries and their administration. Greece accepts ICT innovation as a modern Western institution on its own right. This way, ICT innovation is emulated like all the other institutional arrangements infused in Greek polity in an effort to align it with the West.

Therefore, ICT innovation is deployed more as a symbol of reform than an actual trigger to substantial changes in organizational practices. TAXIS, for example, was deployed, at the international level, as a symbol of the country's commitment to modernity and progress. Inside the country, the same system has been positioned as the most rational choice for the introduction of new practices imposing order to hectic bureaucratic practices allowing favoritism and clientelistic practices to thrive in citizens' transactions with the state. TAXIS, therefore, became the flagship information technology project of the era. Every stage of its development has been perceived as a step closer to the establishment of a modern polity equal to those of other countries in the European Union. This symbolic use of ICT innovation, in tune with the strong symbolic component of policy implementation in Greece (Spanou, 1996), deprives, however, ICT innovation from its dynamism and the potential to introduce changes on constitutional elements of administrative tradition. TAXIS, in terms of actual administrative reform, simply automated paper-based processes while actual tax reform followed a legalistic path once more.

Despite the project's inability to introduce radical changes in public sector operations, due to the persistence of core elements of administrative tradition, ICT innovation preserved its position as a trigger for change in the mindset of Greek polity and society. Nobody in public administration, IT industry and political parties questioned the appropriateness of ICT innovation as the logical means to battle bureaucracy. The project might have been considered a failed attempt to profoundly change government operations yet commitment to new technologies persisted and even grew stronger, as evidenced by the breadth of IT projects funded by the state the following years. As we saw, in parliamentary sessions, the criticisms of TAXIS were phrased in terms of specific technological choices of the Ministry officials. Even daily press, had placed under scrutiny the system's operation and the changes it introduced. ICT innovation, however, was still considered the only logical solution to state reform. According to both opposition parties, it was this specific project, because of political patronage, that could not deliver expected results.

At a theoretical level, findings on TAXIS implementation as well as subsequent evaluation from society and political parties are in tune with a broader discussion in the field of Information Systems regarding the role of ICT innovation in state reform. The potential of ICT innovation for deep structural changes remains a contested terrain. For one thing, ICTs do not enable changes per se they presuppose them (Ciborra, 2005). Moreover, many governments embark in re-engineering projects which introduce

changes without however engaging in more political and difficult structural reorganizations (Fountain, 2001). The agenda of New Public Management, which implicitly guides most reform efforts, targets primarily bureaucracy and state-public sector boundaries without questioning historical or behavioral elements of state institutions. In this context, bureaucracy, given also its inextricable link to modernity as the historical context of innovation efforts (Kallinikos, 2006), persists. As Fountain (2001) concludes, bureaucracy remains the foundation of the modern state despite significant changes. Another important parameter is the fact that countries with different administrative traditions from the anglo-saxonic one, are not equally favorable to New Public Management inspired changes. Napoleonic states are seen as laggards moving at a very slow pace towards the envisaged reforms (Spanou, 2008). Nevertheless, such understandings of state reform and ICT innovation are based on universalistic views of administrative tradition. Once core institutional and cultural elements of administrative tradition are omitted, reform outcomes are viewed in a rather simplistic manner which remedies failures with even more extensive reform or makes claims for the need of a novel mindset.

## 7 CONCLUSION

In this paper, we have examined the interplay of ICT innovation with a country's administrative tradition. ICT innovation is heralded, by proponents of e-government, as the means towards more efficient public administrations which can offer better services to citizens, now viewed as customers. Existing accounts of ICT innovation for state reform focus primarily on administrative aspects of public administration such as the bureaucratic organization of organizational practices. Nevertheless, there are behavioral, historical and institutional elements which ought to be incorporated in order to enrich our understanding of the phenomenon and provide more complete explanations of implementation outcomes.

The concept of administrative tradition, introduced in this paper, constitutes a theoretical framework which incorporates all the aforementioned elements. Moreover, it allows the bridging of macro-phenomena with micro-explanations of the outcomes of ICT innovation efforts. The concept of administrative tradition, and especially the Napoleonic one, has been deployed in the interpretation of the paradoxical outcomes of the TAXation Information System (TAXIS) implemented by the Greek state in the mid 1990s. From case analysis, it became evident that ICT innovation assumed a principally symbolic role. The legalistic character of Greek public administration, in tandem with the highly symbolic nature of policy implementation allowed only for the automation of paper-based processes. The re-design of organizational processes, a core element of ICT innovation, has contained in a superficial level which did not disturb the operational logic of the tax system. Administrative reform was considered the next step of automation, following the traditionally legalistic path.

This paper attempted to present a holistic picture of the interplay of ICT innovation with administrative tradition. To this end, it tackled a number of important issues without delving into the specifics of each one. Subsequent research will need to address any one of these issues separately in order to bring to the surface details which better explain the interaction of ICT innovation with each element of a country's administrative tradition. Moreover, further research can also apply the proposed concept to other late or under development countries where ICT innovation is considered as the sole way to radical state reform.

## References

- Agar, J. (2003). *The government machine: A revolutionary history of the computer*. Cambridge, MA: MIT Press.
- Avgerou, C. (2000). IT and organizational change: An institutionalist perspective. *Information Technology & People*, 13(4), 234-262.
- Avgerou, C. (2001). The significance of context in information systems and organizational change. *Information Systems Journal*, 11(1), 43-63.

- Avgerou, C. (2002). *Information systems and global diversity*. New York: Oxford University Press.
- Avgerou, C., & Madon, S. (2004). Framing IS studies: Understanding the social context of IS innovation. In C. Avgerou, C. Ciborra & F. Land (Eds.), *The social study of information and communication technology: Innovation, actors and contexts* (pp. 162-182). New York: Oxford University Press.
- Avgerou, C., & McGrath, K. (2007). Power, rationality, and the art of living through socio-technical change. *MIS Quarterly*, 31(2), 295-315.
- Balfoussias, A. (2000). Administrative cost of the Greek tax system. Vol. 34. (in Greek). Athens: KEPE.
- Bronchi, C. (2001). Options for reforming the tax system in Greece (No. 291). Paris: OECD.
- Ciborra, C. (2005). Interpreting e-government and development: Efficiency, transparency or governance at a distance? *Information Technology & People*, 18(3), 260-279.
- Ciborra, C., & Navarra, D. D. (2003). Good governance and development aid: Risk and challenges of e-government in Jordan. In M. Korpela, R. Montealegre & A. Poulymenakou (Eds.), *Organizational information systems in the context of globalization* (pp. 387-402). Norwell, MA: Kluwer Academic Publishers.
- Cordella, A. (2007). E-government: Towards the e-bureaucratic form? *Journal of Information Technology*, 22(3), 265-274.
- Dawes, S. S., Bloniarz, P. A., Kelly, K. L., & Fletcher, P. D. (1999). *Some assembly required: Building a digital government for the 21st century* (Report of a multidisciplinary workshop). Albany: Center for Technology in Government, University at Albany/SUNY.
- Drake, D. B., Steckler, N. A., & Koch, M. J. (2004). Information sharing in and across government agencies: The role and influence of scientist, politician, and bureaucrat subcultures. *Social Science Computer Review*, 22(1), 67-84.
- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). *Digital era governance: IT corporations, the state, and e-government*. Oxford: Oxford University Press.
- Featherstone, K. (2005). Introduction: 'Modernisation' and the structural constraints of Greek politics. *West European Politics*, 28(2), 223-241.
- Fountain, J. E. (2001). *Building the virtual state: Information technology and institutional change*. Washington, D.C.: Brookings Institution Press.
- Kallinikos, J. (2004). The social foundations of the bureaucratic order. *Organization*, 11(1), 13-36.
- Kallinikos, J. (2006). *The consequences of information: Institutional implications of technological change*. Cheltenham: Edward Elgar.
- Karvounis, A. (2003). *Organization and operations of the State: An introduction*. (in Greek). Athens: Patakis.
- Knill, C. (1999). Explaining cross-national variance in administrative reform: Autonomous versus instrumental bureaucracies. *Journal of Public Policy*, 19(2), 113-139.
- Köning, K. (2003). On the typology of public administration. *International Review of Administrative Sciences*, 69(4), 449-462.
- Lyrantzis, C. (1984). Political parties in post-junta Greece: A case of bureaucratic clientelism? *West European Politics*, 7(2), 99-118.
- Makrydimitris, A. (1999). *The "great patient": Reform and modernization of public administration*. (in Greek). Athens: Papazisi.
- Mason, R. O., Mckenney, J. L., & Copeland, D. G. (1997). Developing an historical tradition in MIS research. *MIS Quarterly*, 21(3), 257-278.
- Mouzelis, N. (2002). *From reform to modernization*. (in Greek). Athens: Themelio.
- Mouzelis, N. P. (1978). *Modern Greece: Facets of underdevelopment*. London: Macmillan Press.
- Mouzelis, N. P. (1995). Greece in the twenty-first century: Institutions and political culture. In D. Consta & T. G. Stavrou (Eds.), *Greece prepares for the twenty-first century* (pp. 17-34). Washington, DC: The Woodrow Wilson Center Press.
- Peters, B. G. (2001). From change to change: Patterns of continuing administrative reform in Europe. *Public Organization Review: A Global Journal*, 1(1), 41-54.
- Peters, B. G. (2008). The Napoleonic tradition. *International Journal of Public Sector Management*, 21(2), 118-132.

- Rustow, D. A. (1968). Modernization and comparative politics. *Comparative Politics*, 1(1), 37-51.
- Sotiropoulos, D. A. (2004). Southern European public bureaucracies in comparative perspective. *West European Politics*, 27(3), 405-422.
- Spanou, C. (1996). Penelope's suitors: Administrative modernisation and party competition in Greece. *West European Politics*, 19(1), 97-124.
- Spanou, C. (2008). State reform in Greece: Responding to old and new challenges. *International Journal of Public Sector Management*, 21(2), 150-173.
- Tsoukalas, C. (1995). Free riders in wonderland; or, of Greeks in Greece. In D. Conostas & T. G. Stavrou (Eds.), *Greece prepares for the twenty-first century* (pp. 191-219). Washington, DC: The Woodrow Wilson Center Press.
- Tsoukas, H., & Papoulias, D. B. (1996). Understanding social reforms: A conceptual analysis. *Journal of the Operational Research Society*, 47(7), 853-863.
- Tsoukas, H. K. (2007). *The articulate voice. Critical interventions on public rhetoric.* (in Greek). Athens: Kastaniotis.
- Van de Ven, A. H. (1992). Suggestions for studying strategy process: A research note. *Strategic Management Journal*, 13(Strategy process: Managing corporate self-renewal), 169-191.
- Walsham, G. (1993). *Interpreting organizations.* New York: John Wiley.