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Unveiling E-Government and Development¹

Governing at a distance in the new war

Claudio U. Ciborra

ABSTRACT

E- government is being promoted by international agencies and G-8 nations as a means to obtain efficiency, accountability and transparency in the governance of developing countries. In particular, the model for good governance is the one advocated by New Public Management: the minimal, service-delivery state. The paper shows first through the case of Jordan, how e-government is difficult to implement, given the characteristics of the local administration, the socio-economic context and the dynamics of the technological infrastructure.

Next, it asks whether the marketisation of the state embedded in e-government makes sense as the paramount approach to improve democracy and foster development. Indeed, even the new institutional economics would point out that the whole idea of the service-delivery state has shaky foundations. The transformation of citizens into customers is problematic; and the correlation between good governance and minimal state with development can hardly be demonstrated historically.

A complementary explanation of the current rush to promoting and building e-government plans in less developed countries focuses on the emerging, intimate link between aid and security (as spelled out in the US National Security Strategy).

To wit, e-government appears to be a means for the rich metropolitan states to govern “at a distance” (through sophisticated methodologies and technologies) the potentially dangerous, weak borderland states. But such an approach, as many other IT fixes for the private sector, may fail and backfire.

IT applications will drift away from the set targets and global, durable disorder within and between states may obtain intact. New approaches are desperately needed.

¹ This paper is the text of Professor Ciborra’s inaugural lecture at LSE on 24 October 2002

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1. INTRODUCTION

Heidegger (1978), one of the continental philosophers most concerned with the role and essence of technology in our modern world, suggests that trying to figure out whether technology is a bad, good or neutral means is just a technical, instrumental quest. If one wants to get to the essence of modern technology, he or she should avoid falling into the trap of a technical discourse. The essence of a tree is not something vegetable. Thus, the essence of modern technology is not something technical.

We can retain from Heidegger's investigation two basic ideas on the essence of modern technology. The first is that technology is a way of revealing, a revealing that challenges nature, people, society, the world. Second, that the challenge posed by modern technology has a very special and consistent form, captured by the German word *Gestell*. In a way, *Gestell* has the characteristics of what we would call in information systems an infrastructure, enabling and aligning all the processes in an organization. But the idea of infrastructure has a static connotation (structure...), while the German word has the more dynamic component of the challenging. The word *Gestell* contains the root of the verb *stellen*, which means ordering and aligning.

The essence of modern technology is a way of revealing that challenges the world by ordering it, that is by ordering resources, processes, people, and relationships. All are made present, available through order, calculus, and formalization. So that they can be recombined, aligned, aggregated and made ready for ...further ordering.

The interplay between ordering and revealing can guide our investigation on the deployment of information technology in the public administration and can help us in unveiling the complex phenomenon of e-government models, methodologies and policies deployed today by many governments and international agencies, with a special focus on the less developed countries (LDCs).

E-government is information and communication technology (ICT) applied at ordering at least three kind of processes. First, the relationship (transaction) between the administration and the citizen (customer) and the related re-engineering of the activities internal to the administration. (Bellamy and Taylor, 1998) A second level regards the way in which the boundaries between the state and the market are redrawn, by the creation of an electronic, minimal state, more transparent, agile and accountable. (Heeks, 1999; Stiglitz, Orszag and Orszag, 2000) A third level deals with the purpose of aid policies aimed at introducing e-government into developing countries. Better accountability and improved transparency are the characteristics of good governance, and the latter becomes the *conditio sine qua non* for the rich states and international agencies to supply aid to the LDCs. (UNDP, 2001) The study of the way in which e-government becomes a technology of ordering at these three different levels unveils at the same time hurdles, risks and inner contradictions. The composite analysis of the ordering and revealing effects of ICT in government can offer a new picture of this phenomenon.

In Section 2 the Kingdom of Jordan as a case study of an innovative and extensive application of e-government ideas and models provides a paradigmatic example of how ICT are being introduced in a LDC and what are the risks of failure in implementation. Section 3 examines the implications of e-government and New Public Management in the transformation of the relationship between the state and the citizen. Section 4 deals with the more general re-orientation of the administration towards the model of the service delivery, minimal state idea and points to its inner contradictions. The next Section analyses the new emerging order linking aid policies and the new style of governance “at a distance” that rich, metropolitan states want to establish by funding e-government projects in LDCs. Again, attempts at increasing the levels of order and control may backfire and maintain the present international regimen of durable disorder. Concluding remarks follow, including ideas for further research.

2. A CASE STUDY: E-GOVERNMENT IN JORDAN

As a point of departure let us consider a case study related to the implementation of e-government systems, services and applications in the special context of a developing country, The Kingdom of Jordan.²

C. Barrett,(Reach, 2001) Intel CEO, has declared during a meeting in the region that:

“Jordan has set a precedent for change in the Middle East region. It has demonstrated the achievements that can result from strong cooperation between the public and private sectors, particularly in the field of information and communications technology.”

Indeed, Jordan is a textbook case for its vision to become the Singapore or Bangalore of the Middle East in the adoption of new information and communication technologies. In its attempt to follow some of the best practices indicated by international agencies, from the World Bank to the UN, and the donors of various leading Western and Far East countries, combined with the commitments expressed by the top of the State (the King himself and the newly created Ministry of ICT (MoICT)), Jordan incarnates the new thinking and practice on how to introduce ICT to enable rapid social and economic progress. (MoICT, 2000) There is a variety of initiatives that may attract the interest of the observer: they regard the creation of new jobs in the ICT sector and the launch of a software industry;(Reach, 2001) second, the diffusion of ICT in rural areas and the promotions of e-learning (projects like “Connecting Jordanians”; or broadband to the schools), and last but not least the establishment of e-government. (MoICT, 2001) The e-government initiative is significant for a number of reasons. First, in Jordan the public sector is still the largest employer, thus representing a very important economic organization. Second, one can find in this domain many of the actors also present in the other projects: donors; public and private partnerships; foreign governments wanting to provide help, and so on. Third, there is the possibility to study the deployment of a new infrastructure inside a large, complex administration in the context of improving its efficiency but also to support the growth of the nation. This allows us to extend to the government organization in a developing country what we have learned in previous

² This is part of a research project carried out together with the Centre for the Analysis of Risk and Regulation at LSE, and funded by PricewaterhouseCooper. The project investigates the multiple risks of implementing complex ICT infrastructures in a variety of large organizations, both public and private. The case is based on more than twenty interviews were carried out at all levels of the Jordan administration; the consulting firms; the systems integrators and the aid agencies. Many project documents were consulted. Data was gathered on the field during June 2001. The help of Daniele Navarra is gratefully acknowledged.

research projects about the strategic deployment and management of ICT infrastructures in the corporate world. (Ciborra and Associates, 2001)

2.1 The e-government strategy spelled out

Jordan's e-government plans are aimed at using new technologies to facilitate inter and intra-agency communication and cooperation, as well as provide information and services to its citizens more efficiently.

The program relies on four foundations: introduction of e-services, infrastructure development, education and training, and legal change. It focuses on the following broad objectives:

- Increasing information accessibility
- Improving government performance and efficiency
- Reducing costs
- Enhancing the competitiveness of government
- Ensuring transparency and visibility
- Promoting the ICT sector
- E-skilling the public sector
- Boosting e-commerce activities

The e-government initiative is being implemented under the direction of a task force, an 8-member public/private committee headed by the newly formed MoICT. The new Ministry has been created through the privatisation of the postal services and what was the Ministry of Post and Telecommunications. It is responsible for setting the telecom policy and coordinating the e-government initiative, besides attracting investment in the ICT sectors, and setting the ICT policy and strategy plan for the telecom and postal sector. In particular, the Ministry will issue the technical standards and articulate the policy for the various government agencies to bring their data, services and transactions on-line. (MoICT, 2001)

A number of Fast Track projects have been launched in 2001. They include motoring services, taxation (income and sales) services, and land registry. Next will be the G2B and G2C portals and a Government Personnel Directory. A new network is envisaged to enable government introduce knowledge management, empower and connect government staff. A Program Management Office will establish standards and protocols for interconnecting government services - together with the system integrators. Ditto for the development of a holistic view of a security strategy.

The following government departments are involved in the main Fast Track Projects:

Income Tax Department (ITD)

Drivers & Vehicles Licensing Department (DVLD)

General Sales Tax Department (GSTD)

Department of Land & Survey (DLS)

ITD, GSTD and DLS are under the umbrella of the Ministry of Finance.

Deloitte & Touche is the consulting firm awarded the contract for the analysis and design of the various processes and information requirements.

Here are the principles guiding the consulting firm in this particular contract:

- Establishing proper governance structure for coordinating and promoting e-government initiatives in Jordan;
- Identifying and implementing e-services which can be deployed rapidly and provide visible benefits to citizens as a “proof of concept” for e-government;
- Implementing a common infrastructure whose services could be leveraged by all governmental entities;
- Considering using multiple channels (beside the Internet) for providing services, based on the level of their accessibility in Jordan;
- Identifying and applying the changes necessary in Jordan’s existing legislation system for enabling e-service delivery;
- Using a phased approach for implementation;
- Monitoring citizen feedback and continuously evolving e-services based on users requirements;
- Raising government employees and citizens awareness about e-government by proper communication and educational programs;
- Planning for and managing change.

In some cases, like ITD and DVLD, all the front office activities were analysed by the consulting firm. In the other two projects only a selection of front office services were studied due to time constraints.

Based on the projects’ final recommendations, the MoICT will issue a Request for a Proposal (RFP) to select partners for the purpose of creating the detailed functional and technical design, carrying out the implementation and launching of the relevant e-government services. (MoICT, 2001)

2.2 Risks

“ Beyond the Internet...e-Government requires an unprecedented degree of organizational agility - an agility that really involves enterprise transformation in the fullest sense. On the most basic level, this means that an organization is able not only to optimize the value of relationships with customers, but also to build a culture capable of making sharp turns at a moment’s notice – not once, but over and over again...In other words, the outcome will be a true linking of front – and back-offices.” (Deloitte Research, 2001)

Since in general e-government is about the deployment of a complex ICT infrastructure, it faces a number of risks relative to implementation, project management and policy, all

risks that have to be appropriately managed. (Donk and Snellen, 1998; Fountain, 2001; Heeks, 2002)

It is still too soon to investigate into the actual risks of the Jordan implementation effort. The Fast Track projects are just completing the analysis and design phase. But already at this early stage a few difficulties, some of them unexpected, have emerged. Whether they are going to be just momentary hurdles, or severe obstacles is too early a call. Here is a flavor of the most important ones, those that in the private sector and corporate world have often proven to be cause of major disruption or at least significant drift in use. (Ciborra and Associates, 2001) Then, we narrow down onto a specific project, the one concerning the Department of Driving Licenses and Motor Vehicles, in order to show some of the hurdles in greater detail, and the more general problems regarding the prevailing style of e-government projects both in developing and advanced countries.

The Jordan public administration is not a green-field site as far as IT is concerned. Rather, each Ministry, department and agency has been implementing over the years a number of applications. All these efforts come to represent the “installed base” of existing systems and applications with which any new e-government initiative has to deal with. There are Ministries or areas more advanced than others and a variety of infrastructures, often incompatible or plainly not integrated or networked. Thus, when considering the Fast Track projects, the one at ITD is relatively more advanced, or ranks higher on the “technical readiness” scale. In other services (e.g. Sales Tax) new systems have been introduced just at the time of the analysis, but due to lack of involvement and user participation, there is a resistance in acceptance. The DLS uses a database that does not support spatial techniques. Thus an upgrade is in order. These and others are stand-alone systems. The analysts have found duplications, redundancy and low quality of data. Note that these negative aspects have been observed not in relation to manual procedures and files but in connection with the already automated ones.

In sum, the IT readiness is uneven: it is a matter of technology (old and new platforms coexisting and being implemented all the time, often independently from the e-government projects); the de facto independence and autonomy of the Ministries; the different practices in systems implementation; sometimes inappropriate user involvement and training; the need for a deep culture change towards the new ways of working, and so on.

2.3 The case of DVLD

We can see the interplay between the three dimensions of technology, practices and culture at work in one specific Fast Track project: the Drivers & Vehicles Licensing. This is a very much-heralded application in the consulting reports celebrating e-government in the US (web services in Nevada, Arizona, Pennsylvania and Alaska). (Deloitte Research, 2001) Stiglitz, Orszag and Orszag (2000) cite it as an instance of how government can improve the efficiency of its services: a case where policy should encourage governments to undertake the redesign of internal activities through the use of ICT.

It is a quintessential application where the idea of e-service comes to the fore: better service to the citizens, decreased transaction costs; and opportunity for streamlining old-fashioned office operations. And a show case application. Though the analysis was not yet finished at the time of our study, a number of unexpected, potential risks have emerged, which seem to indicate that this application will be much more complex to implement than originally planned for. But not only that, the DVLD case is in itself a “hologram” which enshrines many of the crucial problems of transferring e-government

models and methodologies from advanced private and public organizations in developed countries to organizations operating in LDCs.

First, the existing platform and software will be hard to convert: we deal with a non-centralized architecture, with non-systematic updating of the local and central databases, and mostly COBOL (old fashioned) programs. The databases are not relational, hence it is cumbersome to run queries and give instructions. Overall, there is a low technical readiness; also employees are not very computer literate. If the technical backwardness was expected, it came as a big surprise that the sheer number of "dependencies" of the services surpassed the planning targets of the analysis phase. A straightforward application turns out to be decomposed into over 130 services that need to be documented. The list of "dependencies" is also impressive (about 35) and casts a shadow on the easiness of implementation. Having a driving and other type of transport or vehicle licenses involves internal transactions with the Prime Ministry (specifically, the General Intelligence Department), The Public Security Department, the Chamber of Commerce, the Ministry of Exteriors, the Ministry of Industry and Trade, The Ministry of Health, the insurance companies, the local municipalities, and so on. Of course, dependencies vary according to the product or service (public vehicles; trucks; buses; private vehicles etc.).

All this is making the analysis job very complex. Add the fact that the analysts need many statistics on the actual state of things, and the statistics are unavailable, unreliable and late. Some processes have kept an uncertain description because their unfolding is hard to identify in a reliable manner. Add next the angry orphans phenomenon: the IT specialists threatened by the new application which will entail dropping COBOL (the old software language standard) and creating obstacles that make the analysis work very difficult and incomplete.

Also, the new system must decrease the duration of the transaction between the DVLD and the various dependencies. If this is not achieved, the mere speeding up of the procedures internal to DVLD will not have a significant impact on the overall service delivery time (made of the internal time combined with the dependencies time). Finally, a basic requirement is the possibility of shuffling documents between Departments, electronically. This is difficult until the DVLD adopts the Electronic Transaction Law and its recommendations. (MoICT, 2002) Once this problem is solved, then one has to tackle the electronic integration through 35 different organizations, with many of those dependencies not being computerized or having different computing systems. On top of it, integration will entail interlinked accounting practices, since citizens have to pay for some of the dependencies involved. Now they pay each Ministry or agency separately, while an integrated procedure would require redistributing separate payments for a global price for the service.

In such a maze, the ways out chosen by the analysts might further endanger the implementation process:

- They get the information and authority they need by bypassing the Department altogether; typically, they would turn to the Public Security Department; in due time this might worsen the animosity between the designers and the DVLD Department.
- Missing a reliable standard documentation (the "raw processes" are hard to access), MoICT design standards and global best practices imported by the consultants are made to replace the missing or lacking identification of the activities.

These moves will solve the problem of the analysts in meeting their deadlines, but may render implementation more risky, in the sense that new processes will be grafted upon unclear, poorly understood activities.

In this respect, the final worries concern change management. It is to be expected the need for huge efforts of change management and training: to overcome resistance; to educate the computer illiterate; to change the management model. The latter will imply a radical cultural transformation: moving from a rigid, control oriented management style to a process organization servicing the customer. (Caldow, 2001) Note that the transition is not from a public bureaucracy to a market organization (what all the new public management talks about) but from a military culture to a business/market culture.

The high risks and complexities of such a transition point to what may be the dangers hidden in this apparently banal application. Put in a nutshell: successful implementation and delivery of e-services demands the transformation of some parts of the Jordan state from a security apparatus into a transparent (democratic?) service agency, where a driving license is not a public security or general intelligence document, but just a quasi commercial product.

In sum, a mundane application, chosen because of its low risk and high yield in terms of buying the citizens into the idea and experience of e-government, turns out to be already in the analysis phase a hologram in the small of the difficulties of e-government in a developing country: extremely complex; high risk; and calling into question the role of the state in relation to its citizens: a service provider or public security?

From this perspective, the Electronic Transaction Law requires among other things that its provisions be interpreted according to the international trade conventions (Article 6). (MoICT, 2002) This may be easily adopted by a Department providing certificates to citizens, and thus transform its administrative acts into market services, but it may be much more difficult to implement by a security or intelligence arm of the State.

Finally, note that the case shows the two effects of modern technologies: ordering and revealing. E-government allows an unprecedented ordering of transactions within the administration and between the administration and outside institutions, firms and individuals (citizens as customers). At the same time, though, its deployment can proceed only by revealing the nature of the administration, and more in general of the Jordan state, and the contradictory requirements for its transformation.

3.CUSTOMER SERVICE?

“ The change is equally enormous for government itself, especially in this new view of citizen as customer...In this sense, the Internet represents more than just a new channel for service delivery. On its deepest level, the Internet is a catalyst that challenges age-old assumptions about how governments operate...In fact, in just a few short years, the Internet has started to shift the organizing logic of government from a product or process-centric approach to a customer-centric model.” (Deloitte Research, 2001)

The epochal transformation of a government department from a public security/military culture into a market-like service is just one extreme instance of the changes implied by most e-government applications. (Cabinet Office, 2000)

This is part of a wider shift whereby citizens become customers, as recommended by the New Public Management movement. (Ferlie et al., 1996; Barzelay, 2001) However, such a move has wide-ranging implications (Fountain, 2001b), which can explain the difficulties today's prevailing style of e-government applications are encountering.

First, the notion of "customer" entails a number of market mechanisms, which cannot be completely transferred to a public administration possessing a monopoly of the service. For one thing, on a competitive market the customer has choice, which is not always the case for the citizens/customers (who else does supply driving licenses besides the DVLD?) Also, citizens have no real exit option and prices do not reflect the matching of supply and demand for this service.

At a closer look, another difference stands out: firms try primarily to satisfy shareholders and not customers. Customer relationship management does not have a value per se, but only as an instrument to increase shareholder value. And in order to do that, firms proceed to segment the market; to implement various forms of price discrimination, all tactics that can increase the inequality among customers. But equality of service is in principle the goal of an administration providing a universal service...

Furthermore, any attempt to govern transactions through market-like mechanisms implies a certain degree of standardization of the service provided. The less such a service can be standardized, the more the bureaucracy, especially the one facing directly the customer/citizen (the so called "street level bureaucracy"), will be involved in stereotyping, simplifying, and basically serving those clients who are easier to serve (given also the fact that the bureaucracy is subject to internal performance monitoring). This will generate a new form of discrimination not based on price, but on access and relative ease of interaction.

In the private sector service quality, customer service and handling of voicing customers correlate with socio-economic status. In the public sector the more service provision and customer complaint handling is market-like, the more it will end up reflecting citizens status inequalities.

More in general, the perfunctory equivalence between citizens and customers place them in a special role, the one of rational choice theory consumers. Whether this fiction works in actual markets or not is of secondary importance, given the fact that the variety of roles played by citizens cannot be reduced to the one of consumers with clear preferences influenced by prices and quality. The public administration operates in areas where goals and preferences are ambiguous, and hard to be identified and expressed. Especially for those vulnerable citizens lacking scope for choice.

Customers making choices within a market context tend to be involved in transactions of a narrow scope and instantaneous nature. The market is a wonderful means to aggregate such spot encounters between demand and supply. However, the more a transaction is specific, sticky and long term, the more markets tend to fail and must be governed by long term, integrative arrangements. (Williamson, 1975) The citizen, member of a democracy, a community or even a police state, is in for a long-term relationship, which cannot be fully split down into transaction bits to be aggregated. The expression of political, long lasting obligations and the development of a polity are hard to obtain through purely aggregative relationships. Such processes become possible only in the context of a participatory democracy, where popular sovereignty matters more than consumer sovereignty. State governing bodies and administrative apparatuses are all part of the effort to "govern" the population. (Dunleavy and O'Leary, 1987) They are the arms of politics, seen as the art of conflict resolution. But the latter is at odds with market segmentation and demand aggregation. (Fountain, 2001b)

It is then not so obvious that by introducing more efficient electronic transactions, a bureaucratic, or military administration will become more transparent, efficient and market-like. First, it will maintain its monopoly. Second, it will be compelled to standardize services so as to be able to offer them electronically. But such a standardization will entail stereotyping, segmenting, and privileging those segments of the population that can access the services more easily. Democracy will not be increased nor competition; and favouritisms and bribery might simply be offered to new intermediaries. Is it all about agencies as efficient e-service providers or political institutions as instruments of democracy? As shown in the DVLD case, the irony is that the two cannot be disentangled, and the provision of efficient e-service may require dramatic transformation in the governance of the population (an issue of governmentality, as Foucault would point out (Burchell, Gordon and Miller, 1981)).

In the case of the Jordanian public administration the e-government initiatives begin to reveal the incongruence of some aspects of the organization and institutions which are not conducive to the implicit tenets of the new models. But more in general, e-government will further unveil the contradictions, already embedded in New Public Management, that is how the re-ordering of citizens as customers and the re-shaping of the administration as a firm operating on a market are bound to encounter institutional mismatches.

4. E-GOVERNMENT AND THE MINIMAL STATE

“ Our goal is an information and technology sector in Jordan in which the free market is given the widest possible scope to contribute to the economic development of the country.” (Reach, 2001)

At a closer look, technology puts into question the wider context and logic within which it is being applied. Does the model of state enabled by e-government really support development?(Heeks, 2001)

In fact, e-government is supposed to be conducive to development, by sustaining good governance. And in the strategies of the international organizations like the World Bank and the IMF (gathered around the so called Washington and Monterey consensuses) good governance is delivered by a specific model of “minimal” state, or the service delivery model, of which the marketisation aspects analysed above are a major feature. (Kahn, 1997)

The model is supposed to address state failures due to governance breakdown, corruption, rent seeking, distortions in markets and absence of democracy.

In particular, the service delivery state can provide law and order; enforce property rights; deliver public goods and services to the customers/citizens. It is minimal, transparent and accountable. The model comes with the idea that development is enabled by a well working market economy, where contracts can be enforced; property rights are clear and stable; corruption is low; there are few restrictions on competition (markets are rent free, with few monopolies; no subsidies; ubiquitous access to information); and investors are confident because property rights are stable.(North, 1997)

To be sure, such a model of service-delivery, minimal state embeds the style of governance present in advanced Western economies. E-government together with other institutional reforms is aimed at helping nations to leapfrog underdevelopment and attain a final governance configuration, which is similar to the one of developed countries.

Still, any e-government initiative should entail a due consideration of the problem of governance and development, especially of their dynamic interaction.

Namely, (Kahn, 2002)

- The few states which actually have experienced a high-growth economy are not ranking high on the various dimensions of good governance (corruption; democracy; transparency etc.).
- The institutional reforms needed to transform the developing country into an advanced one portray only the end “state”, but do not tell us anything on how to actually undergo the transition from the initial to the end state.

In particular, it is hard to establish a clear correlation between the service-delivery state and development (Kahn, 2002). Actually, the few high growth economies in Asia show that their earlier decades were characterized by a much more interventionist role of the state (Wade, 1990), for example with states actively manipulating property rights (land reform) and allocating rents to growth enhancing activities and groups (e.g. training entrepreneurs). Also, they had only slightly better governance quality than many poorly performing countries. The same applies for corruption levels: not significantly different and in some cases even worse than average (Thailand).

Furthermore, even if the service-delivery, minimal state is characterized by low transaction costs, the idea of such a state says nothing about the transition towards its attainment, how to manage the process and how to lower the “transition” costs.

This is a drawback common to much new institutional economics *a’ la* Williamson (1975): institutions and organizations to compete and survive need to lower transaction costs, but unfortunately, this recommendation is not enough to explain why certain institutions or organizations are able to make such moves, while other are unable to implement them. Embedded in the new institutional economics there are very naïve ideas about change, political transition costs and learning, since they are assumed to be frictionless processes.(Ciborra, 1990)

In the small of the DVLD case, it is apparent how having in mind an efficient model of delivering driving licenses through the Internet may clash with the entrenched ways of working of the administration, and in general with the model of state and the nature of the relationship between state and the citizen. In other words, the consensus policies, while focussing more on good governance, minimal state and e-government, tend to underestimate what it takes to imitate, change and learn new conducts, procedures and practices.

Looked at in this perspective the role of ICT is less clear-cut, less significant and most probably irrelevant. First, what matters are transformation and learning capabilities, which are not necessarily supported by efficiency-enhancing applications. (Fukuda-Parr, Lopes and Malik, 2002)

The distinction is subtle but of great importance. E-government for good governance is simply a description of the applications one could get in order for an efficient government to serve its “customers”. The flaw is that this strategy may work where the state has already a typical advanced country configuration. It does not help the transition, or probably might even hinder it. Indeed, a few economists point out that:

- a) There is no historical example of a country that first improved governance and then attained advanced country levels of pro capita income;
- b) Rises in per capita income seem to precede the emergence of democracy, and not the other way round.

We can conclude that the present range of applications and systems that usually are labelled e-government is attached to a model of state, the service delivery one, which resembles closely the state form in advanced Western economies. However, there is the suspicion that such a model may be irrelevant to actually triggering development. At the limit, the reverse can be true: once an economy is fully developed, then the service delivery model makes sense and e-government can function, as some, but not all, applications of service delivery in the UK, US and other advanced countries show. (Fountain, 2001; Dunleavy et al., 2001)

As the Jordan case points out, though in a very embryonic form, seeking the implementation of efficient service delivery will lead at best to the point where a radical transformation is required to make the applications function, but ICTs do not enable such changes per se: they presuppose them.

What about, then, developing countries getting trapped in spending resources to push major reforms like e-government on the basis of models, which may not work in contexts that are significantly different from the advanced ones? (Heeks, 2002) The risks could be of more cynicism, disillusion, and investments in ICT could turn into some form of growth-reducing rents.

More specifically, why do countries like the Kingdom of Jordan get trapped in facing high enforcement costs of policies to renew the state through e-government and other new public management reforms? And why do donors and international agencies seem to be driven into the same tunnel vision, of promoting and supporting designs that are unrealistic, since they tend to ignore the complex problems of transformation, and are linked to an idea of state, the e-service delivery one, that actually may not be conducive to development? (Wade, 2002) In sum, technology introduced to order the state apparatus according to a precise model and organization, which also entails the re-alignment of its functions and relationships with the outside markets, leads us to question whether the models inscribed in the technology of e-government will deliver economic and social development. In trying to address this puzzle we touch the limits of the e-government, good governance and service-delivery state consensus.

5. ON DRIFT, AID AND DURABLE DISORDER

The trajectory of e-government in developing countries cannot be identified and understood by looking at the technological features only, or the dynamics of the local public administration in isolation, or development as a separate issue. Rather, it needs to be “reconstructed” bottom up by observing the interplay between the various actors involved in the automation initiative. In the case of the Kingdom of Jordan, they are the various international agencies; foreign governments; consulting firms; software and hardware vendors, and so on. For example, with the assistance of the Amir Program, the MoICT plans to enable “build-own-operate” and “build-own-transfer” relationships between public and private sectors to introduce the new e-services. (MoICT, 2001)

We have seen the inner contradictions and the limitations of the models and methodologies the main actors pursue, propose and deploy. To be sure, they invest into and support on an ongoing basis the idea of e-government. They are driven by the promises of the technical innovation, the key tenets of the New Public Management manifesto, and the marketisation of the state as the paramount means to achieve economic growth and social progress. (UN, 2001; Kirkman et al., 2002; G8- DOT Force, 2002) But, we have observed, they seem to be blind: their blindness prevents them to appreciate the risks and pitfalls of implementing the new models.

One wonders, then, what keeps their thrust and gives meaning to their attempt at aligning development and governance through technology.

Our final analysis of the phenomenon of e-government initiatives for LDCs needs to place the specific tactics of the various actors into a broader framework, able to offer a new interpretation to their projects, initiatives and concrete actions. We find the elements for a new interpretation of the issues emerged so far in a document, the National Security Strategy of the USA (White House, 2002), which summarizes the fundamental traits of the present world economic and political order. It is this meta-order, which is set to frame the reforms such as e-government and envisages a common model of national governance centred on the idea of the minimal state and free markets:

“ ... the United States will use this moment of opportunity to extend the benefits of freedom across the globe. We will actively work to bring the hope of democracy, development, free markets, and free trade to every corner of the world. The events of September 11, 2001, taught us that weak states, like Afghanistan, can pose as great a danger to our national interests as strong states. Poverty does not make poor people into terrorists and murderers. Yet poverty, weak institutions, and corruption can make weak states vulnerable to terrorists networks and drug cartels within their borders.”

In the National Security Strategy the link is established between the danger posed by “weak states” and what can happen within their borders, and the need for a countering influence, based on the ideas of free markets, trade, democracy and development, to be pushed across the globe, in every corner of the world. Throughout this document aid, reform of the state, and free markets are intimately connected with the issue of security. (Duffield, 2001)

Let us, then, take the issue of security seriously, as the source of this White House document warrants, and look at the current efforts of e-government initiatives in developing countries according to this different, more global perspective.

Any successful technical and organizational innovation requires a stable alignment of the actors, from the designers, the vendors, the users, the sponsors etc. (Latour, 1993). The successful implementation of e-government is no exception. In this respect, what is striking for the Jordan case, as well as other cases of e-government in LDCs, is that the implementation of the projects takes place through multiple interventions of ministries and departments; aid agencies; consulting firms; NGOs; multinational companies; multilateral financial bodies; foreign states; regional entrepreneurial associations, and a variety of alliances between them. (Reach, 2001)

Note that many of these actors are private organizations, and a first, superficial reading of the alignment required today by e-government consists of complex and articulated forms of private-public partnerships, where the presence of powerful intermediaries like

the computer vendors, or the global consulting firms, indicates that aid in this domain is more and more delivered by non state entities. (Sassen, 2003)

This would be yet another sign of globalisation: the weakening of the traditional influence of the national states, in favour of a more fragmented, overlapping set of private and public intermediaries. And one could conclude that states are handing over, if not outright subcontracting their tasks and resources dealing with aid to more specialised and professional agencies. This would be part of the increasing externalisation of activities traditionally performed by states, now delegated to multinationals and NGOs.

The US Security Strategy document is important in this respect because it suggests a different interpretation. The public-private networks and contractual regimes of aid practice are the new means by which “metropolitan states” want to achieve security on a global scale. (Duffield, 2002) Underdevelopment is now dangerous, not only for the people directly immersed into it but for us as well. Under the rubric of human security the concerns for stability of the metropolitan states have been made to merge with the social agenda of the aid agencies. If poverty and underdevelopment encourage conflict and instability, then sustainable development, of which e-government initiatives are an essential factor, can also play a security role. The networks of aid practice become the ways for the metropolitan states to cross the borders of the marginal, weak states and implement flexibly new forms of governance, both of the economy and the state. (Duffield, 2000)

Typically, e-government and its counterpart, the self-regulating market, are technologies of control (Beninger, 1986) able to shape the networks and systems of opportunity within which LDCs operate. In this way, control by the metropolitan states is not direct or centralized but flows through a network of open circuits that are non hierarchical, but rhizomatic. (Rose, 2000)

Note, also, that behind the notion of “good governance”, as supported by e-government, a subtle shift has taken place: underdeveloped, potentially dangerous states are now monitored and regulated as a social body. Through free markets, accountability, transparency, and corruption curbing policies, it is the very culture and conduct of people that needs to be impacted. In other words, through ICT and New Public Management ideas what one tries to affect is the governmentality of the weak states, that is the way they think about their own functioning and reform, by providing a very specific approach to regulate the conduct of citizens, e. g. by transforming the latter in rational choice customers.

More in general, modern regulatory techniques create the possibility of modulating the behaviour of populations through controlling processes and networks, rather than disciplining individuals like in the old colonialism. And this takes place at a distance or with little territorial presence (of experts and functionaries), rather than through territorial occupation (as it used to happen with colonialism).

Like the computer & network-based systems they end up implementing, such techniques involve continuous measurements of conduct, risk and readiness. You “invest” in aid where you get the fastest and most reliable return. So, you need to measure throughout. The same applies to the management of the projects and the comportment of the experts. (Duffield, 2001) Information technology represents a driving force in allowing for the new way of accounting and risk analysis to take place. (Power, 1997)

The new flexibility and accountability of the development aid practice are valued because of the changing geopolitical situation. From a political landscape made of strong states facing each other competing through political alliances, nuclear deterrence and arms

superiority, and where aid was a means for strong states to seek alliances with weak, but strategically positioned states in the less developed parts of the world, we move to a landscape characterized by low intensity regional conflicts; glocal terrorism, where the old forms of alliance and deterrence are not effective any longer. The present situation has been described as one of “durable, endemic disorder”.

We submit that e-government initiatives are part of that new portfolio of aid projects, for which “a new possibility of achieving security has emerged in which non state organisations now provide innovative forms of mobilisation, means of intervention...in the interest of global liberal governance. But far from solving in this way durable disorder, the latter continues to subsist as a side effect of the very way metropolitan states try to address the new security dilemmas and develop the new public-private systems of influence.” (Duffield, 2002)

A number of elements seem to support this interpretation. First, the changing nature of war and security in the last few years and the well-known events happening in various parts of the globe. In the borderlands nations conflict destroys the social fabric; widespread human right abuse and the fact the civilians are deliberate targets become organic components of the new stile of war; ethnic cleansing provides a strong justification for intervention and a stronger than before “will to govern”. Except than for the extreme cases like Afghanistan in the most recent past, this will to govern through reform cannot find an expression in a direct intervention. Rather, it becomes the engine animating the new style of governing at a distance through the public-private networks of aid and the reforms programs such as e-government.

There is a strong parallelism between modern technology as understood by Heidegger (see above) and development. Indeed, development has always involved some form of mobilisation for order and security. (Escobar, 1995; Cowen and Shenton, 1995) Today, order is achieved by allowing the archetypal self regulating process, the market, to install itself and expand, by creating and enacting those institutions that allow the free market to emerge. The minimal state accompanied by new public management and e-government ideas is the typical reform that the public-private network of aid practice seeks to deliver. (Kahn, 2002) Such networks set up originally as short-term remedial interventions tend to become a permanent framework giving coherence and linking aid and political actors. (UNDP, 2002) In Jordan, for example, the public-private network includes actors in the names of UNDP, USAID but also Cisco, Microsoft, EDS, besides the key Ministries.

While on the surface the issues raised by the G8 Digital Opportunity Task Force (G8-DOT Force, 2002) cover the relative e-readiness of a developing country, the digital divide, higher levels of efficiency through marketization, and more transparency, the present study of e-government applications suggests that the G8 agenda may be a façade of what the phenomenon of e-government policies for developing countries is not. Below the surface, the driving forces are order and security in a new war context; the market as achieving self-regulating order without direct intervention; aid as a technology of control and ICT as a technology enabling such strategies.

Development, here understood as a technology for governance, a way of ordering the relationship between people and resources to produced desired outcomes, meets the paramount modern technology for control: ICT. The meeting is triggered by the dangers of the new war and the ensuing concerns for security. E- government is linked to the idea of good governance and thus the two projects converge within a framework that wishes to reduce the role of the state, to encourage non – state mechanisms of regulation through privatisation, markets, private enterprise and techniques of new public management. Development and e-government: two technologies for ensuring order and

control join forces to face the threats to security posed by the new war. Will this marriage deliver?

As shown for the case of sophisticated information infrastructures in large multinationals, (Ciborra and Associates, 2001) the deployment of ICT as a technology for control is never fully effective, and tends to generate a variety of side-effects and out of control dynamics that threaten the very management control strategy that dictated their introduction. We submit that the same may happen at the global, geo-political level. (Walsham, 2001) The metropolitan states wanting to control at a distance the borderland states through reforms and new infrastructures implemented through the flexible network of private-public aid agencies may fail, and their attempts backfire leading to more systems unevenly distributed within administrative departments and agencies, knowledge spread unevenly in the population, more autonomy and scattered resistance. The collateral effects of the new alliance may then contribute to procrastinate the durable world disorder, as well as corporate and administrative disorder, that is reinforcing a system of governance where systemic collapse is avoided through the constant crisis management and relentless introduction of sophisticated technologies, and at the same time not addressing root problems and creating new occasions for drifting of institutions, states and technical infrastructures. (Duffield, 2002)

6. FURTHER RESEARCH AND CONCLUDING REMARKS

A whole range of promising research topics related to e-government emerge from the last, more comprehensive perspective. What follows is a first selection.

6.1 ICT in actual development

Forget the dubious links between ICT in government, free markets and development. A new study of the role that ICT can play in developing countries should focus instead on the link with the “actual existing development”. (Duffield, 2002) New scattered wars generate a variety of businesses: transregional supply and service chains transporting arms, people, documents, and so on generate a shadow economy opaque and non-territorial of impressive proportions, according to some observers. Organized, scattered violence generate an informal economy, labelled the actually existing development. The latter has emerged not because of “official” development: it has arisen despite of it. There are no statistics about the extent and quality of the use of ICT in this shadow sector of the economy. But whatever is being deployed, that would be an important evidence to illustrate the multiple roles played by technologies for coordination and information in actual development.

6.2 Risk analysis and other technologies of ordering

The vast deployment of the new technologies of control and governance at a distance is supported by the systematic adoption of the new public management models, whereby professional experts are substituted by managers and administrators, and new extensive accounting systems and performance monitoring techniques are applied. In particular, consider the logic of risk analysis (Power, 1997) through which every aspect of a complex reality is ordered and made calculable so as to be amenable to control and governance, from the degree of danger of a war zone, or the hazard posed by a rogue state, up to the e-readiness of a nation, the chances of success of an aid intervention and the risks of a

systems development project. (Kirkman et al., 2002) Risk analysis in itself is a technology aimed at ordering reality to set it up for calculation, reduce uncertainty and colonize the future. (Dean, 1999) But this way of proceeding creates new dangers, new ignorance, new uncertainties and...new risks. (Beck, 1987)

6.3 The new knowledge frontier

The increased ordering of resources and relationships made possible by the techniques of new public management, project management, quality control etc. may clash with the local, idiosyncratic knowledge which characterizes the scattered territories and communities in the new war. (Avgerou, 2002) Frequent knowledge gaps are bound to appear whenever the two logics meet or most probably stumble upon each other. These are the new zones of uncertainty, and hence risk. These are the pockets that keep disorder alive and thriving, where new knowledge is created, which flows outside the circuits of securitized development aid, and e-states. What are the characteristics and dynamics of these knowledge flows? How are they managed? What innovations at the margins does it generate?

If the analysis so far captures at least in part what is going on in this domain, it is highly likely that in the world of durable disorder institutions and organizations, both state and private, despite, or rather because of the relentless action of ordering, calculation, planning and control, end up operating more and more as pasted up assemblages. They do deliver governance and knowledge; and they plan and influence the allocation of resources and the conduct of people, but with much less overall coherence and consistency. They resemble as Foucault, and lately Rose (2000) remind us, a Tinguely's sculpture machine, full of parts that come from elsewhere, strange couplings, chance relations, cogs and levers that do not work as expected, but that produce nevertheless policies, actions and social dynamics. Its precise mechanical components and its disordered assembly create multiple zones of uncertainty, platforms for imagining new combinations and enacting local improvisations. It is towards these interstices that attention should be given to identify those natural experiments, transgressive initiatives, and alternative practices in technology design and use. (Ciborra, 2002; Heeks, 2002) These could represent the seeds of models alternative to those based on the pursuit of order and control, being today deployed uniformly across the globe in private as well as public organizations, in developed as well as LD countries.

In a more normative sense, one would need not only to understand how many of the present models, methods and solutions contribute to durable disorder in corporations and states, but also to find out and actively cultivate all those instances of alternative designs and approaches, present in the knowledge-intensive business within the metropolitan states and in the communities of the borderlands states where new practices and models emerge daily.

Again, it was Heidegger (1978) to suggest, in discussing the danger represented by modern technology, that where the greatest danger lies, the all encompassing ordering effect of Gestell, the same essence of technology must harbour a "saving power".

Along the fragmented knowledge frontier traced by the advancing technologies of ordering and the resisting idiosyncratic practices, a frontier that cuts across organizations, states and communities in advanced as well as in LDCs, lies today the new laboratory for critical research on the dynamics of e-government, and more in general of complex ICT infrastructures.

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