THE ITALIAN PUBLIC ADMINISTRATION: IDEAS FOR INNOVATION

Eleonora Merlicco

A dissertation presented to the Faculty of Arts in the University of Malta for the degree of Master in Contemporary Diplomacy

July 2008

"Be the change you want to see in the world"

Mohandas Karamchand Gandhi

CONTENTS

Introduction	5
PART I – The Italian Public Administration	9
Chapter I – Current Status	10
- Prodi II Government' Action Plan	15
Chapter II – Structural Weaknesses	- The Italian Public Administration I - Current Status II Government' Action Plan II - Structural Weaknesses II - Structural Weaknesses II - Performance Management III - The Six-Sigma Initiative to create a and overcome cultural resistances III - The Six-Sigma Initiative applied to the Italian III - Resources rationalisation by the Production System IV - Resources rationalisation by the Production System IV - Employees empowerment and III - Structural Weaknesses IV - Employees empowerment and IV - Employees empowerment an
Contractual & rewarding system of public labourItalian multi-level system	
PART II - Performance Management and Process Reengineering	Public Administration tatus 10 nt' Action Plan 15 I Weaknesses 19 arding system of public labour system 23 ce Management cering Sigma Initiative to create a cultural resistances 28 Ex main characteristics ative applied to the Italian an Affairs 28 es rationalisation by the stem 41 cion of Made in Italy 45 es empowerment and by the Balanced Scorecard 46 I method anced Scorecard 56 I method anced Scorecard 64 n of the Balanced
Chapter III - The Six-Sigma Initiative to create a vision and overcome cultural resistances	28
- Six Sigma Initiative: main characteristics- The Six Sigma Initiative applied to the Italian Ministry of Foreign Affairs	
Chapter IV - Resources rationalisation by the Toyota Production System	41
- Study case: Promotion of Made in Italy	45
Chapter V - Employees empowerment and public accountability by the Balanced Scorecard	56
Balanced Scorecard methodHow to use the Balanced ScorecardThe implementation of the Balanced	
Scorecard in the public sector	67

PART III - Innovation & Change			
Chapter VI - The frontiers of informatisation in the PA	72		
- Leader countries in e-government performances- Informatisation and virtualisation in the Italian MFA- The m-government frontiers	75 82 86		
Chapter VII - European Awareness Scenario Workshop to integrate technological progress and social demand	89		
- EASW: a methodological approach- EASW: methodology application guidelines- EASW: successful cases	90 92 95		
Chapter VIII - Open Innovation Paradigm for a Public Administration socially integrated and constantly innovative	99		
- Open innovation: aspects and implications	101		
Conclusion	107		
References	110		
Declaration	117		

INTRODUCTION

In a context where modernization seems an irreversible, constant and rapid process ongoing and people have been acquiring a growing and deeper awareness of the social and civic dynamics in which they are directly involved, the public administrations of many countries in the world experience difficulties. Indeed, they appear unable to properly satisfy their citizens' increasing demands and face the actual technological challenges.

The Italian Public Administration, as in many other countries, has recently suffered from evident dysfunctions and inefficient efforts, due to its inner bureaucratic inertia. This recognized state of inertia has caused a climate of widespread distrust among Italian citizens which, in turn, has affected the economic and social development of the country and partially neutralized the efforts of the private sector in this regard.

The resistance of the public administration to change can be understandable. In fact, public institutions rely on external rules, given by the government and the legislative body, and customs, internally established

within each institution, all difficult to unhinge. But, the consequences of a useless protracting of obsolete schemes of action could not be so well grasped. As a result, the consequent withdrawal of the popular confidence in the public institutions may have negative effects in terms of legitimacy of government and practice of democracy.

Joseph Nye has given a clear and meaningful description of such direct interconnection. He said:

If people believe that government is incompetent and cannot be trusted, they are less likely to provide[...some resources such as] tax dollars, willingness of bright young people to go into government and voluntary compliance with laws. Without critical resources, government cannot perform well, and if government cannot perform, people will become more dissatisfied and distrustful of it. Such cumulative downward spiral could erode support for democracy as a form of governance. (Nye et al., 1997, p. 4)

An ideal public administration should be among leading forces of its own country able to coordinate resources, regulate and facilitate relationships, promote and support free initiatives of people and enterprises in the social, economic and political contexts. It is only in such a perspective that the public value generated by the public administration actions may be appreciated.

In order to attain these ends, the Italian public administration is called to big changes and even a re-conceptualization of its structure. It should try to make its hierarchical settings more flexible and citizen friendly, delivering higher quality services and also reducing its high costs through improvements of its productivity and effectiveness. The top-down propensity of its old operational system, which has provoked an actual monopoly of the government and separation between public servants and

citizens, should be replaced by a participatory and inclusive democratic system where the public institutions operate uniquely in favour of the citizens they represent.

The modernization of the public administration is also valuable in the context of the political, economic and social globalization ongoing. On the one hand, the public administrations of all states are called to more strictly cooperate on a basis of shared values, objectives and standards. On the other hand, they are exposed to a continuous comparison in terms of performance indicators and responsiveness to market challenges so that it can be affirmed that a *sui generis* competition between public administrations really exists. These two trends contribute to push the public administrations to achieve higher and higher standards and pursue a process of constant change.

In the pursuit of the ideal of modernity, effectiveness and efficiency of the public administration, this research is aimed to identify which good practices and methodologies could guarantee better performances and speed up innovative processes of change in the public sector. The answer to the question "how could the Italian public institutions overcome their consolidated bureaucratic inertia?" will be the Arianna's thread of the whole dissertation.

The first part is intended to present the profile of the Italian Public Administration in the light of the current legal framework in which some relevant weaknesses reside. The second part is dedicated to provide instruments for measurement and improvement of public performances

while the third and final part is destined to point out some practices of innovation and change management.

The whole discussion is based on the conviction that some of the performance management and change management practices, already developed and successfully implemented by the private sector, could be replicated within the Italian public institutions. It deals with a transfer of know-how and experience, however adapted and limited to the specific needs of the public sector, producing positive as well as tangible results in terms of performances and responsiveness to the Italian society demands.

As the change process which the Italian public administration is called to undertake should be initially profound and subsequently sustainable, a careful selection of methodologies will be taken into consideration. The argumentation about their effectiveness in the public sector will be further endorsed by the presentation of how other European and non-European Public Administrations have been innovating their structures and functions by the help of these methodologies. So, analysing some of the most convincing theories, easily adaptable to the public sector, this thesis will suggest the implementation of a combination of some guidelines.

A special focus will be given to the Italian Ministry of the Foreign Affairs for the importance of its diplomatic activities and the pre-eminence of the conduct of the international relationships among the public functions. Particularly, the cases related to the Ministry of Foreign Affairs can be considered even more interesting to study because such Ministry relies on special intangible assets often difficult to be assessed and enhanced.

PART I

The Italian Public Administration

CHAPTER I

Current Status

Currently, a wide debate on the current status of the Italian public administration is taking place. The results released by some international organizations about the Italian performances can help to understand the recent efforts of the public sector to produce some changes.

The OECD Review on the Regulatory Reform in Italy, released in 2001, evaluated a series of structural reforms occurring over the 1990s as remarkable. Italy showed to be aware of the necessity to take measures to guarantee market openness and transparent rules overcoming "administrative viscosity and immobility" and above all gradually reducing the power centralization and the state intervention inherited by the past decades.

Indeed, the European Union policies in favour of market liberalisation and competition law have pushed Italy to undertake a consistent regulatory

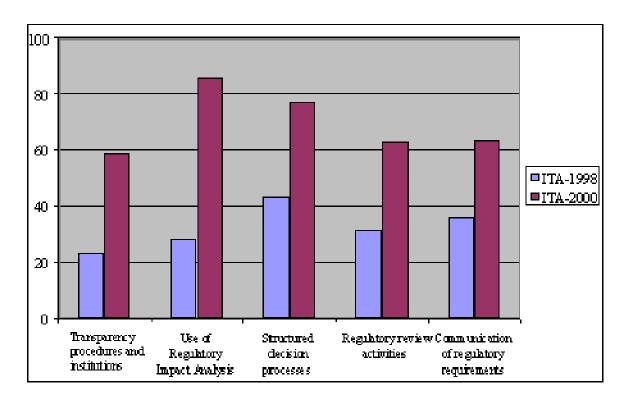
reform¹. The belonging to the European Union and the Euro Zone has required rigid fiscal and monetary rectitude but also channelled considerable funds for the development of the country. All that has greatly helped Italy to adopt the necessary measures.

Particularly, it was the "Bassanini" laws of 1997 that allowed a more incisive regulatory reform pursuing administrative simplification and balance of powers between central and local public authorities. OECD appreciated the related introduction of consultation mechanisms and the Regulatory Impact Analysis (RIA), considered effective tools². Positive results were soon evident in terms of transparency of procedures and institutions, as reported by the bar chart showed here below.

¹ It is opportune in the context of our discussion to point out the definition of "regulatory reform" as given by OECD (2001, Chapter 1, Box 1.1). The expression "Regulatory reform" refers "to changes that improve regulatory quality, [...] enhance the performance, cost-effectiveness, or legal quality of regulations and related government formalities. Reform can mean revision of a single regulation, the scrapping and rebuilding of an entire regulatory regime and its institutions, or improvement of processes for making regulations and managing reform". The regulations are distinguished in economic, social and administrative ones, depending on the specific area which they are applied to and the kind of objectives which they are aimed at.

² It is interesting to notice that RIA has a central role among the good practices listed by OECD for an effective regulatory reform. Some of them are: maximizing political commitment to RIA, allocating responsibilities for RIA program and integrating RIA with the policy-making process.

Figure 1.1. Progress in the use of regulatory quality tools in Italy, 1998-2000



Sources: OECD, Public Management Directorate, 2000 in OECD, 2001, Chapter 2, Figure 2.1.

The positive results were soon evident also from an economic point of view due to the fact that the regulatory reform was sustained by the use of information technologies. In the context of e-government initiatives, the "self-certification" programme, for example, permitted a reduction in number of certifications issued by the public administration consisted in more than 50% between 1996 and 2000. It was estimated that such programme allowed families and enterprise to save approximately 2.200 billion liras (corresponding to € 1,100 million around). As for the simplification of administrative procedures, 163 procedures out of 184

procedures were simplified between the entry of force of Law 59/97, the socalled Bassanini I, and February 2001.

The first exciting results of the regulatory reform pushed OECD to affirm in the 2001 Review that "the Italy of 2001 is far different from the Italy of 1990" and "the progress is impressive". Generally, it should be highlighted that all the positive results attained over the 1990s were so evident and profound because taking advantage of the contemporary fast development of internet and information technologies. Anyway, OECD predicted that "the explosion of e-government initiatives and other technological innovations could permit Italy to leapfrog other countries in terms of regulatory communications".

Actually, the upward trend of the Italian public reforms, including the use of IT in the public administration sector, occurring until 2000 has come to a standstill in the last years. An evident proof can be found in the recent performance indicators of the competitiveness level of the country showing that the market liberalisation in favour of citizens and enterprises is not fulfilled at all.

According to the "rankings on the ease of doing business" elaborated by the World Bank (2007) and released in the document "Doing Business 2008", Italy is the 53rd country after Mongolia, Botswana, Taiwan. What is important to underline is that the most advanced economies of the world, from the European and non-European areas, such as United States, Denmark, United Kingdom, Canada, Japan, Switzerland and Germany, occupy positions in the range of the first twenty ones.

Also some economic indicators related to the economic growth, public finance and level of the economic globalisation, particularly consisting in trade of goods, can be considered valuable data to assess the competitiveness level of Italy and, in turn, the effectiveness of the public administration's support to private sector. The following statistical data extracted by the "Country Statistical Profile 2008/Italy" published by the OECD (2008) highlight the current economic status of Italy suffering from an evident negative trend.

Figure 1.2. Statistical data of the Italian economic performances

COUNTRY ITALY										
Subject			2000	2003	2004	2005	2006			
Economic growth	Household saving	Household net saving rates	857367641	1037384623	1045843873	1009080937	880454276			
Public finance	Government deficits and debt	Government net borrowing/net lending	-0.86314538	-354.127.348	-354.633.219	-434.937.344	-447.385.876			
Economic globalisation	Trade in goods	Trade balance: exports of goods minus imports of goods	183180113	201376406	-194488511	-1269434996	-510571561			

Sources: OECD - Country Statistical Profile 2008/Italy

When these data are compared to other countries' data, the Italian situation seems even more worrying. As for the Italian public finance, for example, the percentage of "government net borrowing/net lending" on the GDP, as average of the period 2004 – 2006, which is -4,1%, nearly doubles the average of the Euro area countries in the same period, being -2,3%. And,

OECD has explicitly stated that the Italian growth is lagging behind that of the Euro region because of a drop in industrial production.

Such unhealthy trend of the Italian performances, which is expected to go on, appears in contradiction with the Lisbon European Council Strategy, formulated in March 2000 and designed to make the European Union "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion" by 2010 (European Union, 2008).

However, the Italian performances might improve following to the new EU provisions. Since October 2005 the European Commission, aware of the clear link between productivity, competitiveness and administrative burdens, has invited member states to join a common EU methodology to measure and reduce unnecessary administrative costs imposed by legislation. The methodology is based on the well-known "European Standard Cost Model" aimed at decreasing operating costs of each of the European countries and stimulating the coordination of their legal frameworks (Commission of the European Communities, 2005).

Prodi II Government' Action Plan

In line with the higher EU requirements and world standards, a Ministry for Innovation and Technologies has been created in Italy under Berlusconi II Government (2001-2005) which has soon promoted a campaign of digitalization of the Public Administration. Subsequently it has established a "digital constitution", in force since January 1st 2006 under Berlusconi III

Government (2005-2006), which lists all rights and obligations of citizens and enterprises in the context of the information society including the right to use digital technologies in their relationships with public institutions. Some of the most relevant practices already introduced deal with the digital signature and the electronic identity card necessary to use e-government services, the increasing use of e-mails instead of the expensive mail services from most of the public offices and even the use of the certified e-mail in substitution of the traditional registered letter with signed return receipt.

In order to put into practice the more specific EU provisions, the recent Prodi II government (2006-2008) has approved a proposal of law, presented in September 2006 by the Ministry for the Public Administration Reforms and Innovation, which is intended to guarantee a further and substantial simplification of procedures involving citizens and enterprises within the context of interactions between them and the public administration. In March 2007, the government (Ministry for Public Administration & Innovation of Italy, 2007) has finally launched an "Action Plan for Simplification and Regulatory Quality" whose main initiatives are:

- simplifying legislation and reducing the number of laws;
- improving the quality of the legislative proposals starting from a simplified version of RIA;
- administrative simplification for businesses with particular reference to measures such as single notification for business start-ups, simplified

administrative requirements for new production facilities and women's entrepreneurship;

- reducing burdens for citizens by adopting an IT system to manage current accounts in diplomatic and consular offices, expanding post-hospital care arrangements, reducing the time required to resolve disputes;
- simplification and re-engineering of procedures for immigrants as well as rationalising of procedures for granting Italian citizenship;
- regulatory and administrative simplification of the activities of regions and local authorities by the improving of the regulatory quality at the regional level and the definition of "basic minimum levels of simplification" and "maximum levels of bureaucratic burdens nationwide"³.

On the one hand, such Action Plan has been conceived as an integrating part of the European Union strategy of which an important achievement will be that to reduce the administrative costs of the European Union and national institutions of 25% by 2012, gaining 1,4% more of the EU GDP corresponding to an increase of 150 billion of Euro (Commission of the European Communities, 2006, p. 3). On the other hand, the Italian government has adopted this Action Plan also with the purpose to strengthen the competitiveness level of the country which may be proved by a considerable improvement of the Italian position in the international rankings.

_

³ Apart from any consideration of validity and effectiveness of this Action Plan, its implementation is currently subject to the willing of the new government formed after the anticipated elections of April 2008.

Actually, all these government initiatives are to be appreciated in the pursuit of the alignment to the EU provisions and in the light of the fact that any effort towards a rationalisation of administrative costs can easily produce in the short-medium term concrete savings in favour of the same public administration, citizens and enterprises. But long term strategies need to include considerations about structural weaknesses which differ country by country and require specific measures to be overcome. In this regard, the identification and awareness of these weaknesses are the first important steps to take for a substantial process of change.

The long term strategies are expected to include even some ideas to innovate the whole administrative apparatus by not only incremental innovations but also radical innovations. That is why it is acknowledged that the former allow just small improvements enough in a condition of few uncertainties and many rigidities, the latter permit big changes in a situation of many uncertainties and necessary flexibility, and thus more responsive to our modern times.

Structural Weaknesses

Despite the considerable steps ahead taken by the Italian governments in the last decade, the overall situation of the public administration is still suffering from some structural weaknesses that let an insidious form of bureaucratic inertia overstay at any level of the public institutions, delaying the implementation of innovative practices. Even the 2001 OECD Review on Regulatory Reform in Italy, however welcoming some impressive reforms, took the opportunity to point out that the Italian administration still was "a sea of inefficiency spotted by islands of excellence". Indeed, all regulatory quality initiatives introduced have been facing complexities and ambiguities due to the lack of adequate incentives and capacities of the civil servants as well as the overlapping of public responsibilities, which makes difficult an effective law compliance and accountability.

Contractual & rewarding system of public labour

Some signs of the Italian bureaucratic inertia are concerning with a lack of motivation and entrepreneurship from the public officials. The main

causes can be found in a weak form of human resources management, tied to particular labour contractual and rewarding systems for public administration employees. Recently, some laws have been approved in order to inaugurate a new trend in public employment but their full implementation has been encountering some practical difficulties.

The new trend is intended to develop a privatization process in the public administration legal framework. That has been undertaken by law in 2005, establishing that "Public Administration in adopting non authoritative measures, acts in compliance with the provisions of the private law, unless the law provides differently" (Italy, 2005, 11 February 2005 Law, nr. 15, Art. 1).

Over this process, a contractual system has been replacing the traditional career system. The main difference between the two systems deals with the rewarding criteria, being the traditional system based on automatic career advancements by seniority-related criteria and the new contractual system based on merit-related rewarding criteria.

Particularly, it is by the decree of 2001 – "General provisions on the labour law for Public Administration employees" (Italy, 2001, Decree nr. 165) – and the Collective Agreements for Local Autonomies and the Ministerial Sector occurring in the period 1998-2001, that new conditions for public employment have been established. Some of these are:

- the creation of organisational positions among which it is recognised the position of pre-eminence of public managers who acquire autonomous

powers of budgeting and expenditure for the human resources organization; moreover, thanks to this new legal framework, single individuals can be entrusted with temporary missions aimed to take on and fulfil high responsibilities tasks;

- the introduction of vertical advancement, namely going through different categories or areas of work; in conformity with what has been stated by the Constitutional Court, such vertical progression is permitted by public competition just as a the procedure of initial recruitment;
- the introduction of horizontal progression which is to be facilitated by training courses organised by the related public institution;
- the introduction of productivity criteria to evaluate the public service delivered and thus allow accountability and a more adequate rewarding system.

In spite of these valuable legislative efforts, the change in public employment results slow and complicated. That is due to many reasons. One of these is tied to the fact that a system based on the length of service still persists; an evident example can be seen within the Ministry of Foreign Affairs with regard to progressions of career diplomats and administrative officials. Besides, the diplomatic career is to be considered even a relevant exception compared to administrative career because it is possible to undertake the diplomatic career only from the initial level. Instead, as for the administrative career, it is theoretically possible to enter also directly at

higher levels. That makes the diplomatic career different from the rest of the Civil Service and requiring a specific regulation.

Another cause of the difficult implementation of the new laws is related to the supposed discretional power that public managers should have; Mr Federico Basilica, Head of the Department of Public Administration, has spoken about an actual dichotomy, produced by the new legislative provisions, between the right-duty to exert autonomous powers given to public managers and the required compliance with the public competition principle established by the article 97 of the Italian Constitution (Basilica, 2006).

Last but not least, Trade Unions play a central role in all collective agreements and, strong of such power, they can easily slow down trends of change when the latter might compromise some of the advantageous conditions enjoyed by the civil servants. Some of these conditions consist, for example, in the absence of links between retribution and quality of work carried out and the inexistence of sanctions to be applied in case of failures or not compliance with due obligations. In the attempt to preserve these and other similar conditions, the inhibitory pressures exercised by the Trade Unions are very powerful. And until now, the only result such a game of powers has produced is a trade-off between low salaries and a job-for-life for all public employees.

It is in such a context that a quicker implementation of legislative provisions already adopted is to be hoped along with the concerted establishment of new legal conditions, overcoming structural and even conceptual impasses. In this regard, capacities of human resources management become key factors of success and the Italian public administration is called to soon acquire them.

Italian multi-level system

Other than the inefficiencies related to public employment, the Italian public administration reveals another structural weakness in terms of a certain degree of fragmentation of public bodies and duplication of responsibilities between central and local authorities, which makes any policy-making effort and innovative process of change unable to produce relevant improvements.

In line with the main objective of the first reforms in 1990s, namely that to reduce the centralization of power and make the traditional hierarchical structure leaner and participatory, in 2001 the Italian constitution was definitely reformed by parliamentary approval and referendum confirmation⁴. According to the new constitutional article 117, the regions have acquired legislative and administrative power in all areas not expressly of central government domain. In this sense, it has been put into practice the EU principle of subsidiarity within the Italian normative framework. Some have affirmed that this reform has just constitutionalised an administrative devolution already previously occurred by legislative measures taken by the then Minister for Public Administration, Mr. Bassanini.

4 64% of voters in favour of the constitutional reform.

23

On the basis of this reform, a number of matters are subject to a concurring legislation according to which regions may exercise an autonomous legislative power in the respect of the state fundamental principles. The state is required to intervene when the regions' power is lacking or ineffective. The subject matters include the international and EU relations of the Regions, foreign trade, transport and navigation networks along with promotion of cultural activities, scientific innovation and technological research in support of productive apparatus and many other sectors and activities. In all areas of their responsibilities, Regions may conclude agreements with foreign states and/or local authorities of other states, though in the forms established by the State legislation. So, in a certain sense, it can be stated that Regions have gained the power to autonomously conduct international relations. That shows the wide devolution of regulatory powers at regional level and the growing importance of the debate on efficiency and effectiveness of the regions' administrative capacities⁵ and the harmonisation between central and local institutions as well.

The OECD has studied, on Italy's request, the regulatory reforms and practices as taking place within the newly Italian multi-level system. The review entitled "Regulatory Reform Italy: Ensuring Regulatory Quality across Levels of Government" and published in 2007, clearly highlights the weak points of this peculiar system. What has been focused as the major

_

⁵ A reform on federalism, or regional autonomy in subjects such as health and education, was proposed by the same government of centre-right political coalition in 2005 but rejected by referendum with 61,7% of voters in 2006. After a two years government of a left political coalition, a right-coalition government has been recently re-elected with a political programme including the establishment of the fiscal federalism. It is supposed that regions will acquire much more autonomy and consequently the debate on the effectiveness of the local public institutions is becoming of considerable importance.

problem is the complexity of this institutional setting from which a lack of coherence, clarity and accountability derives.

Firstly, the subsidiarity principle is not yet well acknowledged and thus over-regulation and duplication of functions and measures continuously occur between the central and peripheral powers. Secondly, because of the different statutes of the regions, they greatly differ in capacities for quality regulation so that some regions may boast of advanced administrative systems while others seem to take dangerous backward steps. Consequently, any action of harmonisation and control is exercised not without difficulty.

In order to fulfil an effective distribution of competences among the Italian multilayered regulatory system, a deep empowerment of the local authorities, their coordination and partnerships, the OECD has suggested the improvement of the definition of roles and responsibilities, the strengthening of the use of consultation and communication mechanisms as well as the adoption of RIA practices. Apart from these specific guidelines, it is evident the necessity for Italy and its institutions to begin to acquire experience, and thus benefit, from knowledge and performance management practices already used by the private sector.

Actually, many policy-makers and analysts are also convinced that any substantial and long-term sustainable reform is difficult to carry out because of the proportional electoral laws producing unstable governments, precarious relationships between majority and opposition parties impossible to reconcile even on themes of widespread interest for the country, and political-administrative clashes between central and local authorities when they are of different political factions.

Beyond any consideration of political nature, we are persuaded that, in absence of the implementation of the measures already adopted and the introduction of new measures more adequate to the Italian peculiar structural conditions, it will be unavoidable a worsening of the competitiveness level of the country and an increasing distrust by Italian citizens and foreigners in the public institutions. All that would continue to endorse the stereotypic reputation of the Italian public administration seen for long time as "a burdensome and inefficient bureaucracy" (OECD, 2001, Chapter 2, Box 2.1). Furthermore, what would be worse is that, in conditions of poor governance performances, cases of crimes and corruption including the so-called "white collar crimes" could continue instead of being definitely overcome.

PART II

Performance Management

and

Process Reengineering

The Six-Sigma Initiative to create a vision and overcome cultural resistances

In the previous chapters we have seen that the Italian public administration needs some relevant changes to achieve higher levels of effectiveness and efficiency as well as become more responsive to citizens' demands. It deals with implementing a form of management accounting change within central and local public institutions.

Such a change may take place with the help of a large number of practices which private companies have already fruitfully experienced. The choice to present some specific practices in this chapter and the following ones is not due to the conviction they are the most accredited and successful practices. They will be examined as they seem comprehensive practices whose study may help us to recognize which elements are necessary to make any change strategy successful. As confirmation of such an approach, we will not always study the business practices in the light of their most known objectives but we will analyse those behavioural schemes suggested by these practices that we consider particularly valuable to the public administration

change path.

Generally, change practices are characterised by several facets which are related to considerations about resources rationalization, process reengineering, use of information technologies, performance management and change management. It is thus evident that change is a complex phenomenon where many factors play a substantial role.

On the one hand the complexity of the change phenomenon is due to the endemic complexity of the organizational system where many people are called to cooperate and harmonise their various functions to attain common outcomes. If the harmonisation of such functions is most of time difficult to achieve, the further harmonisation following to relevant organisational changes might result even impossible. On the other hand, the complexity responds to the degree of uncertainty of the problem solving approach experienced by a decision taker or manager when he faces problems and unforeseen events in such a complex organisational system. In order to overcome these forms of complexities, organizations rely more and more on predefined models to create and shape the reality they need. To some extent, the practices which will be proposed over this dissertation could be intended as simplified patterns to follow.

With the intention to discuss many of the various facets of the organizational change within the Italian public institutions, this first part will focus on the management accounting change practice, presenting the model of the six sigma initiative.

-

⁶ About the complexity of management see Paoli, 2000 and 2006.

Six Sigma Initiative: main characteristics

Before implementing new techniques and re-designing roles within a system, any change practice should taken into consideration cultural and behavioural issues affected its members. Burns et al. clearly stated that any change will conflict with "existing routines and institutionalised ways of thinking" (2003, p. 15). And, the recognising of the specific nature of resistances occurring in a system called to implement changes is to be considered as a significant starting point. The authors list three kinds of resistance which are strongly interrelated, although different. They are:

- 1. "Formal and overt resistance, due to competing interests;
- 2. Resistance due to a lack of capability (knowledge ad experience) to cope with the change; and
- 3. Resistance due to a mental allegiance to ways of thinking and behaving that are embodied in existing routines and institutions". (Burns et al., 2003, p. 15)

So, the first step to take is to analyse conflicts of power between groups involved and become aware of the ways of thinking or "taken-for-granted assumptions", which is another expression used by the authors, occurring in the organization. Such initial investigation gives the chance to predict which further conflicts could arise from the implementation of new procedures and rules or at least to create a flexible *forma mentis* by which readily facing, in the course of the change process, problems and difficulties not foreseen.

Often, an organization may gain an effective advantage by the introduction of a cultural change. Over the last decades, all private companies have been required to move from a production oriented organization to a customer oriented organization. Not surprisingly, this is

the same challenge that the public administrations of all the countries have been facing now.

For instance, the production of a large amount of official documents and the continuous updating of official databases, which are two typical functions of any public institution, are expected nowadays to meet not only higher standards of efficiency with regard to time and economic resources to dedicate but above all be easily consultable by citizens. It is a sort of "just in time" procedure to be required to public institutions so that a piece of information introduced in the public information system is immediately available to citizens. In so doing, public officials are pushed to work at the service of people they represent, giving priority to the relationship with customer-citizen instead of only focusing on the practical performing of their specific functions. From a conceptual point of view, it is a revolutionary change of perspective for any public administration and the cultural impact of this change may be alleviated by the implementation of the six sigma initiative.

Six sigma⁷ (also represented as 6 σ), is commonly defined as a performance management philosophy or a business management strategy. It was developed in the 1980s by the managers of Motorola Company which was facing a stiff Japanese competition at that time. They felt the incapacity to make big relevant changes within the organization in the short period so that the company was in an evident condition of economic jeopardy. But,

_

⁷ We can read in the study of the Secretary of Defence of the United States, (2004, p. 41), the explanation on the choice of such a name. The study reports that: "Sigma is the Greek alphabet symbol used in statistical notation to represent the standard deviation of a population. A standard deviation is an indicator of the amount of 'variation' or inconsistency in any group of items or process. A low sigma number means more variability. Six Sigma is achieved when variability is measured at 99.99966 percent". So, the expression "six sigma" widely represents the whole approach, mainly focused on reducing the percentage of mistakes within business processes.

new rules were implemented giving them the possibility to attain surprising results and even go beyond their own expectations. Those rules were subsequently codified and standardized in an unified approach known as six sigma and many other companies have been able to benefit from that.

Six sigma initiative has been conceived to improve the quality of business processes by allowing to meet customer satisfaction and minimising process variability. It is based on re-design and monitoring of everyday business activities so that mistakes, defects and vulnerabilities of the processes occurring within the organization drastically decrease. The codified approach tolerates just 3,4 mistakes per million.

It consists of a set of statistical and non-statistical tools aimed at stimulating a problem solving process by the help of internal personnel, expert in such method. Six sigma initiative incorporates two key methodologies whose acronyms are DMAIC and DMADV.

The methodology DMAIC, acronym of Defining, Measuring, Analysing, Improving and Controlling, is focused on improving a business process already existing by five steps.

1) Defining is the first and most relevant step in this problem solving approach. In this phase a team composed of selected internal employees and managers, adequately trained for the implementation of the methodology, is required to clearly define the scope of the change project, recognizing the problem, giving definitions of defects as well as providing a definition of opportunities.

- 2) Measuring the width of the problem identifying short and long term process skills, process improvement objectives and process gages as well.
- 3) Analyzing all process data in order to understand dependent and independent variables and relationships between them.
- 4) Improving all the factors related to the independent variables, also called "variation sources". In so doing, it is possible to verify the impact of these variables on the vital process flow, note that the manifestation of vulnerabilities and mistakes continues to be the same or changes and finally highlight, on the basis of the statistical data produced, which variables are really critical.
- 5) Controlling that all improvements introduced keep being respected so that the newly process can be institutionalised.

While DMADV methodology, acronym of Defining, Measuring, Analyzing, Designing and Verifying, allows to re-create new process designs more suitable to develop new organization strategies and yield to customer demands. It is just the fourth and fifth steps to differ. During these phases, the six sigma experts are required to create many process alternatives, select the best one, plan for simulations and pilot projects, verify the results and finally implement the new process flow within the whole organization.

Both methodologies, based on the statistical analysis, are able to convert what is demanded by customers in actual assets of the organisation thanks to the identification of measurable factors. The approach calls "voice of the customer" (or VOC) all customer demands and "critical to quality variables" (or CTQs) the measurable factors. To satisfy the voice of customer

the measurable factors, object of the statistical analysis, are to be precise, reproducible and constant over time.

In order to effectively implement this performance management methodologies, the panel of selected employees plays a crucial role. Such employees are called to become six sigma experts, so well trained to be able to make and interpret all necessary statistical and non statistical measurements as well as involve and motivate other colleagues by proper internal communication means. The trained employees distinguished in different levels according to the certified expertise level attained. They can be called Yellow Belt, Green Belt, Black Belt or Master Black Belt⁸. All of them are selected on the basis of their own capabilities in managing financial and non financial data, commitment to team work and performing of leadership skills. Six sigma experts should include from one to three percent out of the total personnel of the organisation. High-level senior managers, such as vice presidents and general directors, are included in the panel of the six sigma experts and they are called "champions". The support given by the champions as well as the black belt, corresponding to senior leadership approval, makes the change possible and the cultural impact less destabilising. That is why they may dedicate financial and human resources enough to ensure all together a cohesive effort of the organisation and a perfect integration of the various departments involved.

_

⁸ The ranking terminology derives from the martial arts.

The Six Sigma Initiative applied to the Italian Ministry of Foreign Affairs

The presentation of the six sigma initiative, although concise, lets us glean some few points necessary to the success of any management accounting change and above all understand how it can be implemented in the Italian public administration, particularly in the Italian Ministry of Foreign Affairs. Firstly, this approach implies that it is the "voice of the customer" that claims the change. So, any sort of survey may really help to catch some valuable inputs to stimulate the change process.

In the case of a public administration, the "voice of the customer" corresponds to the voice of the public opinion and citizens expressing needs and wishes about services and functions to be performed by the PA. To such an end, the Italian Ministry of Foreign Affairs has recently published a survey showing the Italian public opinion's feelings about the Ministry's foreign policy and international role. The survey was conducted by the Political and Social Analyses Laboratory of the University of Siena and published as appendix to the MFA's report of 2008, entitled "Report 2020, Choices of Foreign Policy" (Dassù and Massari, 2008, Appendix II, pp. 88-103).

The survey⁹ comes to some significant conclusions, showing that the Italian public opinion has a growing interest in international policy matters and pays particular attention to their economic implications. The Italians interviewed have acknowledged among the most important tasks played by the Ministry all those directly involving the citizen's interests, such as control of illegal immigration flow, international relations related to energy supply,

35

⁹ The survey was conducted from February 3rd 2008 to March 7th 2008 on a sample of 938 Italian citizens over 18 years old. The sample was selected by the Random Digit Dialing system and people were interviewed by CATI (Computer-Aided Telephone Interviews) methodology.

fight against terrorism and support of the Italian export. The Italian public opinion believes that the Ministry of Foreign Affairs should increasingly direct its attention to the promotion of the Italian economic interests abroad and the managing of international relationships within the context of the European Union where binding decisions for the country are taken. Such tasks are perceived as prevalent compared to the traditional tasks of the Italian diplomacy consisting of international negotiations and diplomatic representation.

But, it is with regard to the Italian role within the EU area that Italians realize a serious lack of power and influence on the EU institutions due to the government instability and inefficiency of public administration. In order to alleviate such a perception, some changes in the processes could improve the transition towards a more citizen-oriented organization.

Listening to the voice of the customer-citizen helps to accomplish the first step of the six sigma methodology consisting of "defining". This first step, including the tasks of identifying problems and opportunities, requires the further important task of "creating a vision" which the organization will be able to put into practice providing itself with the necessary tools and resources. The "Report 2020"¹⁰ is a first step towards the definition of the Italian MFA's vision regarding its role in the domestic and international environments.

¹⁰ The "Report 2020, Choices of Foreign Policy" (Dassù and Massari, 2008) has been published by the Italian Ministry of Foreign Affairs – Analysis and Planning Unit along with the Group of Strategic Reflection. It contains a preface by Mr. Massimo D'Alema, former Foreign Affairs Minister belonging to the last Prodi government, which shows a link between the report conclusions and the policies of that government. However, the report is very interesting covering a large number of topics such as: the Italian presence within the European Union Institutions with reference to the economic governance in the euro area, defence European policies, reforms about European elections, as well as the Italian position within the current globalised context with regard to energy supply, immigration, regional policies for the Mediterranean and Balkans, financial issues and the role of the International Monetary Fund.

In the light of a careful study about the priorities of the multiform Italian society and the functions of the Italian bureaucratic apparatus, the MFA has launched 10 proposals (Dassù and Massari, 2008, pp. 77-80) on how to deliver better services and conceive its foreign policy in the future. These proposals are intended to satisfy the national interests related to the development of a "multilevel diplomacy" and the strengthening of Italy's political and economic system at regional and global scales. Two main priorities/criteria distinguish all the proposals, such as "resources" and "coherence". Some of them are here below listed:

a) increasing financial and human resources to be dedicated to foreign policy; unlike the MFAs of the main EU countries, the Italian MFA has a budget consisting of a small percentage on GDP, considered not sufficient to pursue its objectives.

Figure 3.1 - Italian MFA's Budget and its impact on GDP (values in million Euro)

COUNTRY	BUDGET	GDP	% on GDP
Italy	1.591	1.475.401	0,11%
France	2.690	1.781.122	0,15%
Germany	2.511	2.307.200	0,11%
Netherlands	1.477	527.916	0,28%
Poland	233	269.750	0,09%
United Kingdom	2.491	1.892.228	0,13%

Sources: National Data, Budget Laws 2007, EUROSTAT in Dassù and Massari, 2008, p. 78.

b) Re-organising the diplomatic and consular network on a basis of redistribution, enlargement, managing decentralization and informatisation¹¹. That has been considered not only a urgent priority for national interest but also a pre-condition for a further integration of the diplomatic and consular nets of the countries belonging to the Schengen area.

c) Strengthening of the Italian presence at international organisations such us EU, NATO and the United Nations. That is why it has been observed that Italian officials are under represented, particularly at medium level. To this aim, it has been proposed to improve the level of Italian candidacies by education and training courses, especially for internal public officials. Moreover, they should be put in a condition to temporarily leave their workplace at the internal public institutions to take on new tasks at the international organisations and then be easily re-integrated.

d) Achieving a higher degree of structural and functional coherence among the MFA, other ministries and EU institutions. To this end, the Report suggests the unification of the Ministry for International Trade to the MFA, the creation of inter-ministerial committees and a specific national committee for energy and environment, and finally the attribution to a minister-figure of the charge to coordinate all EU policies for the country.

In the pursuit of this well structured long term vision, able to re-gain the national consent, the Italian Ministry of Foreign Affairs ought to pay attention to the cultural resistances internal to the public institutions involved as well as present at the government management level. In this regards, a significant example is related to the controversial debate on the

38

¹¹ Decentralization and informatisation will be discussed thoroughly in some of the following chapters.

Ministry for the International Trade and its unification to other ministries such as the MFA¹². According to the lessons learnt from the study of the six sigma initiative, such resistances could be overcome by training a number of directors and internal employees who would be able, in turn, to motivate all the other employees¹³. As the success of a change process depends on those who have decision power and those who are committed to day-to-day activities, it would be crucial the constitution of committees where general directors and internal employees, experts of the change process, could discuss and share common lines of action. This point is very delicate because the hierarchical setting, based on the top-down instructions procedures, characterising all the Italian public institutions including the MFA does not conceive such a form of dialogue which is, on the contrary, very fruitful. But, it only in this way that the "champions", "black belts", "green belts" would be able to give the right support, coherence and effectiveness to the change, being fully aware of all the factors at stake, united in the decision process and personally responsible for that. The vision could be thus communicated throughout the institutions and departments participating to the change, and a common sense of belonging to it could be successfully developed.

¹² In 2006, the centre-left coalition government restored the Ministry for the International Trade which had been previously unified to the Ministry of Industry by the "Bassanini" reform. While the previous Berlusconi government considered trade-related policies strictly connected to the industrial policies of the country, justifying the unification of the two related ministries, Prodi' government conceived the restoring of the Ministry for the International Trade necessary to re-launch the competitiveness of the country. In the same time, Foreign Affairs Minister, Mr. D'Alema, (belonging to Prodi's government) proposed the unification of such ministry to the Ministry of Foreign Affairs in the pursuit of a better coordination of the Italian commercial presence abroad. Actually, the new Berlusconi government (elected in April 2008) has decided to unify the Ministry for the International Trade to the Ministry for the Economic Development, just in order to reduce the number of ministries and thus partially rationalise the resources.

¹³ According to the six sigma guidelines in regard to the number of change experts to train, the Italian Ministry of Foreign Affairs employees called to operate as change leaders should be up 160 out of 5000 employees, including general directors, diplomats and administrative officials.

Finally, we should also glean from the analysis of the six sigma approach the importance for the MFA to establish short and medium term targets able to concretise the general vision step by step as well as indicate related statistical and non statistical indicators to evaluate the implementing skills and consequent improvements. To this end, improvements in the public opinion's perception tracked by continuous opinion polls about the public functions management and an increase in number of the Italian public officials at the international organizations can serve as valuable indicators of the accomplishment of short and medium term targets. Actually, it is even advisable to fix a performance measurement indicator for each of the long, medium and short term targets.

All that is a general framework including principles and technical suggestions on how to manage a change process. People selected to activate this process are called to give significance to it with the specific contents and values of the public administration organization they represent.

Resources rationalisation by the Toyota Production System

The initial phase of a change process, consisting of leadership capabilities of sounding out stakeholders' interests, creating a vision for the future, establishing short and long run targets, overcoming internal employees' cultural resistances and fixing statistical and non-statistical indicators to measure the improvements following to the implementation of new performance practices, is to be supported by adequate organizational settings.

Before allocating a larger budget in favour of an institution, as claimed for instance by the Public administration, it is always a good practice to set up some forms of resources rationalization. That is why when an organisation is lacking of effectiveness for which it requires more funds and resources, generally it is firstly lacking of efficiency. And, inefficiency is

partially or totally caused by wastes and incorrect organizational interactions of which leaders might be unaware. The study of the Toyota system will help us to deepen such perspective, giving important suggestions on how to improve quality and efficiency of the public functions with unchanged budgets.

The Toyota Production System (TPS) is an integrated socio-technical system developed just after the First World War by the founders of Toyota, the Japanese leading automobile manufacturer. Many private companies have been successfully using its fundamental settings and some public institutions in Denmark, Canada and the United States have already started to adopt them as lean organization patterns.

The key concepts of this system are "added value" and "continuous process flow" in accomplishment to which the system pushes to find solutions to work overburden, process inconsistency and resources waste. According to the TPS, the process value delivery occurring in any form of organisation, should be optimised with the minimum employment of resources and the maximum reduction of waste.

In a public administration context, the concept of value can be well understood on the basis of the satisfaction level expressed by citizens and enterprises, which we previously called the voice of the customer-citizen, whereas the concept of flow remains more difficult to catch and assess¹⁴. That is due to the traditional *modus operandi* of the public functions which have usually ignored citizen-oriented practices as well as coordination initiatives,

this case which are, actually, beyond the scope of our dissertation.

¹⁴ Indeed, not all public functions can be subject to assessments in terms of added value and process flow. See, for example, the negotiating function of the Foreign Affairs Ministry in the context of international negotiations. The final result of an international negotiation with reference to the degree of efficiency and waste cannot be attributed to a single state. Other kinds of assessment may fit for

showing to be segmented, separated and auto-referential. So, flawed measures of functioning have created a massive bureaucracy and a huge amount of waste. The latter can be defined as employment of resources without a consequent creation of value. Indeed, it is by the identification of the functioning lines of a flow that some sources of waste are recognizable. To facilitate such identification, the TPS distinguishes seven kinds of waste, such as:

- 1. over-production
- 2. motion of operator or machine
- 3. waiting of operator or machine
- 4. conveyance
- 5. processing itself
- 6. inventory of raw material
- 7. corrections, meaning rework and scrap

All theses kinds of waste can be found within the public institutions:

- 1. They often overproduce amounts of documents before these can really serve for a precise aim; the overproduction can be also considered as a waste of paper documents which could be substituted by digitalised documents.
- 2. Public employees take too much time to carry out their specific functions because of a number of unproductive movements; some of the simplest examples are about moving from the writing desk to photocopier or looking for a document on the colleague's writing desk. If an operator takes 10 minutes to fulfil a task of which 4 minutes in unproductive movements, that means such task delivers value only for 60%.

- 3. Moreover, public functions are generally subjected to a wide range of useless waits of which a typical example is waiting for the boss's approval signature. Any time an employee cannot carry out his task because he is waiting for someone or something, then there is un unnecessary waste.
- 4. In the public administration, conveyance can be seen as a hidden source of waste because considered necessary and unavoidable. But that may be not true.
- 5. The identification of waste with regard to the process flow itself is crucial for a public institution which does not generally think in terms of "economic saving" as a private company does. Frequently, most of administrative and reporting procedures do not add any value to the service delivered, just denoting a lack of coordination between employees and departments and non-optimised functions as well.
- 6. For a public administration raw material mean documents. Inventory of documents is a task which takes most of the time within the public offices. Adequate informatisation systems may really help in such a critical task.
- 7. Finally, waste of time and waste of economic resources are due to the necessity to correct all those mistakes which, although they may naturally occur, may even compromise the quality of services delivered and the "good image" of the institution.

What is important to point out is that by reducing wastes and redesigning process flows the public institutions could really save up a consistent amount of economic resources which could be, in turn, destined to investments in innovation and widening of public functions. In this sense,

the implementation of the Toyota Production System principles could help not only to achieve higher levels of efficiency but also to pave the way for innovation (Galgano, 2006, p. 33).

One of the basic instruments of the TPS is the "value flow map". After identifying the function to improve, what is required to do is designing on a paper the interactions scheduled for that function or phases it passes through. Such exercise allows to recognize rapidly the critical points or the useless interactions so that such process will be re-designed on the basis of a more virtuous flow.

Study case: Promotion of Made in Italy

We could present some study cases dealing with operational functions within the Ministry of Foreign Affairs, such as registry and notary consular functions at consulates or the reporting procedures occurring between embassies and headquarters. For these functions it is relatively simple design and re-design the value flow maps given that some pre-defined procedures already exist and for that they may be rationalised. Moreover, their specific operational nature allows to evaluate the results following the change with precise numbers and percentages. For instance, it could be possible to affirm at the end of the process flow change that the time of shelving of a file has been reduced to 3 hours from 12 hours and the operators involved are 3 instead of 6.

Rather than studying these operational cases, we would like to apply the TPS instrument to a more complex function of the Italian MFA, which is the promotion of "Made in Italy" or "Italy System" abroad. Such function is considered complex for a number of reasons. Firstly, MAE claims to have not sufficient human and financial resources to accomplish this task appropriately. Secondly, it is not the only subject involved; in fact, many public and private subjects operate in the pursuit of this aim. Thirdly, citizens and enterprises have high expectations about timely and evident improvements which MAE and other public institutions cannot disappoint. Fourthly, for the peculiar nature of this function, there are neither predefined operational procedures to follow nor tangible results to consider as performance indicators.

The promotion of Made in Italy abroad is a central policy in the agenda of the Italian Presidency of the Council of Ministers and the last governments succeeding have widely debated on the matter, pushing many public actors to get involved with it¹⁵. Seven ministries have operated in the context of the internationalization of the country, including MAE, the Ministry of Cultural Activities, the Ministry of Public Administration and Innovation, the Ministry of European Policies - Community Policies Department, the Ministry of Regional Affairs, the Ministry of Institutional Reforms and Federalism and, finally, the Ministry for International Trade, recently unified to the Ministry of Economic Development. Besides, nine government bodies with different functions are directly involved in the promotion of Italy abroad. These are:

- SACE Group, credit management society;
- SIMEST, development finance institution promoting the activities of Italian businesses abroad;

¹⁵ The governments particularly committed to the matter have been Berlusconi III, Prodi II and the current Berlusconi IV.

- ENIT, Tourism National Agency;
- ICE, Italian Institute for Foreign Trade;
- BUONITALIA, National Agency promoting agro-business abroad;
- ANIE, National Federation representing electro-technical and electronics companies operating in Italy;
- UNCEM, National Union of Mountain Municipalities, Communities and Authorities;
- INFORMEST, Italian Agency for development and international economic cooperation;
 - FINEST, finance society for entrepreneurs in the North East of Italy.

Subsequently to the reform of Title V of the Constitution giving autonomy to the Italian Regions and because of the fact that the interest in internationalization is so widely felt throughout the country, regions, provinces and municipalities with their institutions and agencies, along with local chambers of commerce, have been taking direct contacts abroad, even establishing their own representative offices in foreign countries.

Considering that all these actors play autonomously, using public funds to undertake a multitude of activities not concerted at all, it is easy to grasp that no positive result is obtained in terms of strengthening of the country image as unified system abroad and actual and effective internationalization. Decentralization occurring in the Italian system, however welcomed as able to broaden the participation of local institutions and private citizens in the economic, political and social activities of the country, is seriously affected by a lack of adequate measures of coordination, which produces an impressive amount of economic waste.

Several attempts have been made in order to re-launch a more coordinated system of promotion abroad. An important initiative in this regard has been the creation of "one stop counters", called in Italian "sportelli unici" in Italian embassies. It deals with an agreement concluded in 2005 between the Ministry of Foreign Affairs, the Ministry of Productive Activities and the National Institute for Foreign Trade (ICE). The initiative has been intended to gather the public officials of the economic-commercial office of the embassies and the representatives of ICE and other national agencies present in foreign countries, in one only location per country under the respective Italian ambassadors' supervision. The one stop counter should facilitate those Italian enterprises interested in foreign markets to undergo all the necessary bureaucratic procedures as well as coordinate the Italian economic and cultural promotion activities. Despite of some positive examples of well functioning one stop counters as the one located in the embassy of Tel Aviv, most of them have not yet begun to properly function due to lack of resources.

Another important attempt of coordination is related to the establishing of the conference State – Regions, meant as a forum where the two levels of authority can meet and find common practices to improve their governance. Apart from some exceptions, like the coordination in programming and implementing of the Italian strategy towards China in 2007, the outcomes of the conference have not been up to the initial expectation.

Recently, in the pursuit of better performances in the economic and cultural promotion, the new Berlusconi government¹⁶ has introduced the new nominal charge of "Ambassador of Made in Italy" conferred to Mr. Luca Cordero di Montezemolo, president of Ferrari, chairman of Fiat and former president of Confindustria (the Italian employers' federation). Berlusconi has also stated his commitment to promote debates between the central, local institutions entrepreneurs coherence and to guarantee the internationalization programmes just as the previous government which had delineated the general guidelines in favour of the promotion activity in a three years programme, encouraging the public and private sectors to work together (Ministry for the International Trade, 2007; Caso, 2008, p. 3).

The "value flow map N° 1", here following, helps to display the current situation related to the "Made in Italy" promotion abroad, highlighting the actors involved¹⁷ and the areas of promotion which they operate for. We may note that it is just a list of actors between whom no form of coordination occurs. The Presidency of the Council of Ministers launches some inputs which any actor tries to develop according to their specific functions and above all on the basis of their direct stakeholders' interests.

¹⁶ The new Berlusconi government, Berlusconi IV, has been running since April 2008.

¹⁷ Compared to the previous government, the list of actors involved presents only few changes in terms of denomination of ministries (the Ministry for Institutional Reforms has become Ministry of Federalism Reforms) and unification of the Ministry of Economic Development and the Ministry for International Trade. These changes have not actually modified the overall promotion strategy of Made in Italy abroad.

Presidency of the Council of Ministers

Autonomous Actors Areas of promotion

Stakeholders

Ministry of Foreign Affairs political-

political- cultural- economic



Ministry of Cultural Activities cultural - tourism

Ministry of PA & Innovation political

Ministry of European Policies political - economic

Ministry of Regional Affairs political – economic

Ministry of Federalism Reforms political

Ministry of Econ. Development economic (and International Trade)

SACE economic
SIMEST economic
ENIT tourism
ICE economic
BUONITALIA agro-business
ANIE technical economic

UNCEM tourism
INFORMEST economic
FINEST economic

20 Regions economic – tourism and agro-business 110 provinces economic – tourism and agro-business Thousands of municipalities economic – tourism and agro-business

Chambers of commerce economic

In absence of coordination, overlapping of initiatives between ministries, government bodies and local institutions as well as inefficient allocations of public funds are unavoidable. So, even when the promotion activities seem to have positive results, they just satisfy the interests and expectations of few stakeholders taking part to the single initiatives. If some feedbacks about an initiative occur, the institution promoting could hardly considered them in order to further improvements because it does not benefit from the support of the other institutions and feel to have no funds enough to introduce innovations. The arrows of blue and pink colours, which are to be applied to each institution listed, show such auto-referential approach from which the "Italy system" is definitely far from taking advantage.

Many analysts (Quintieri et al., 2006) have already suggested some relevant changes necessary to re-launch the activity of the Made in Italy promotion in foreign countries. Mr. Beniamino Quintieri, professor at the "Tor Vergata" University of Rome, is convinced that the central state authority should re-gain the exclusive competence in the matter of international promotion. Whereas, regions and local institutions could openly participate to the activities of foreign investments attraction and territorial marketing. According to the Italian Ambassador to Riad, Mr. Eugenio d'Auria (Quintieri et al., 2006), this means that only one ministry should operate in behalf on the government as a direction cabin and thus coordinate the other ministries, government bodies and local institutions. Such central function could be well carried out by the Ministry of Foreign Affairs for its competences and organizational structure. Actually, it seems opposite to such proposal the decision of the new Berlusconi government to put the Ministry for International Trade in a subordinate position in respect to the Ministry of the Economic Development. But, even a public official of the old Ministry for the International Trade, Mr. Matteo Mariani (Quintieri et al., 2006), agrees on the Ambassador d'Auria's proposal. All the actors involved, including the representatives of the entrepreneurs, could openly collaborate each other and participate to the establishing of the operational guidelines within the direction cabinet.

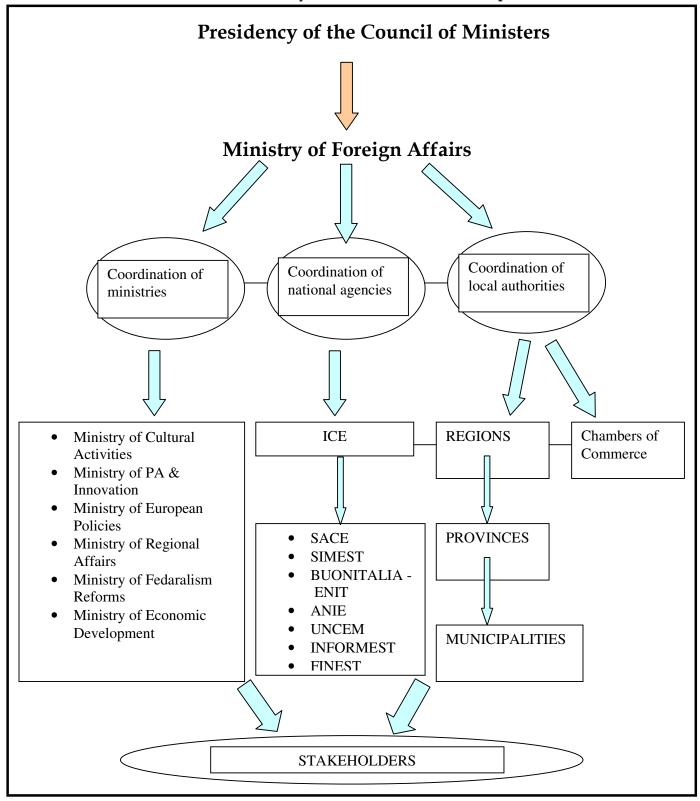
Furthermore, the National Institute for International Trade (ICE), could become a government agency acquiring the directional functions in the matters of trade promotion, Italian investments abroad, foreign investments attraction in Italy and tourism promotion. That would eliminate the overlapping of functions occurring, for instance, between Enit and Buonitalia and stimulate a virtuous form of coordination among all the national agencies.

Finally, the representative offices of regions, provinces and municipalities could be embodied within the one stop counters at the embassies in order to maintain the decentralization approach of their activities but on the basis of concerted measures with the central authorities and the other local institutions¹⁸. In this way, embassies could focus on the important economic diplomacy and just stimulate the commercial promotion and consulting activities to be carried out by the other "partners". Instead, until now, some embassies have been dealing with economic diplomacy and promotion activities at the same time, with a consequent work overburden and a misallocation of funds.

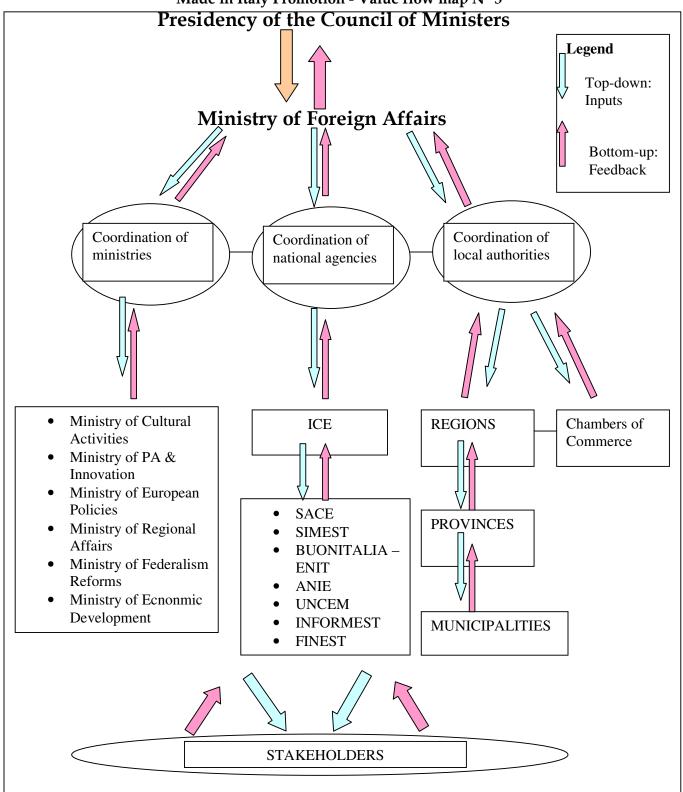
In the light of these possible changes and with the help of what we have learnt by the Toyota Production System, we have tried to re-design a theoretical value process flow.

decentralization is a common practice for all the member countries as the related regions have separate and autonomous representations. In such cases, the planning of concerted measures should take place by other means than the one stop counters.

There are cases, for example in Brussels at the European Union institutions, where regional decentralization is a common practice for all the member countries as the related regions have



Made in Italy Promotion - Value flow map $N^{\circ}\,3$



The value flow maps N° 2 and N° 3 display that inputs given by the Presidency of the Council of Ministers (arrow of orange colour) become actual guidelines (arrows of blue colour) that all the actors involved may endorse and develop firstly within the direction cabinet of the MAE and then in the exercise of their own functions. MAE ought to play the leading role to stimulate debates and promote coordination of all the players who remain free to choose their best initiatives on condition that these come to be jointly discussed and agreed on. The achievement of a higher level of stakeholders' satisfaction, including Italian citizens and enterprises and foreign investors as well, would become a valuable source of improvement and transfer of best practices already implemented. That is possible when stakeholders' feedback is collected by all the institutions involved and again jointly discussed (arrows of pink colour). Besides, in order to strengthen the coordination measures at the implementation level, actors operating in the same area of promotion could form panels within which discussing and monitoring the respective initiatives. So, the phases of formulation of the initiatives to undertake, their implementation and objectives verification would always occur on a common basis, which allows to eliminate overlapping of functions, work overburden and economic wastes generated, instead, by the autonomous operating of the central and local institutions. In this way, the common aim to present an unified "Italy system" abroad could have more chances of success.

Employees empowerment and public accountability by the Balanced Scorecard

In order to be widely comprehensive, a public performance change approach should include empowerment of employees and transparent accountability, besides the capacity to shape a strategic vision for the future and re-design internal processes so to deliver value to stakeholders. Indeed, what is required to public institutions is to become not only citizen and service oriented organizations but also knowledge driven organizations in such a way that internal employees' competences and skills can be recognized as the most important and appreciated resources within the public institutions. This is particularly relevant thinking about the foreign ministries' activities. According to the former Indian Ambassador, Kishan S Rana, "human talent is the only real resource in a foreign ministry. This is the

one area most amenable to application of management technique borrowed from the corporate world, with suitable adaptation" (2005, p. 14)¹⁹.

Furthermore, what is expected by the public institutions is to be accountable before the public and the media that increasingly investigate on how public funds are employed (Rana, 2005, p. 4). We may note in this a subtle difference between the necessary efficiency pursued in the effort of overcoming economic difficulties due to the lacking of adequate resources (the point previously examined) and the efficiency meant as well employment of public funds in order to ensure transparent governance and accountability. The interest in the improvement of governance and accountability has become a priority for many countries, for which they have adopted various measures. For instance, since 2006, France has been requiring - on the basis of a newly public finance law - that all ministries show the tangible and quantified results deriving from the public expenditure. Thailand has set up "public sector divisions" within each ministry responsible to undertake new performance management practices with a new Public Sector Commission being in charge of overseeing reforms introduced (Rana, 2005, pp. 14 and 3).

Balanced Scorecard method

In the context of our presentation of selected performance management practices to be borrowed from the corporate sector, the "balanced scorecard" method is able to support any public administration in

¹⁹ The Ambassador Rana particularly refers to the human resources management practices, giving as an example the case of Singapore MFA borrowing a "current evaluated performance method" from Shell. The method annually estimates the performance level reachable from officials after 10, 15 and 20 years, selecting the best officials for high offices.

putting into practice an effective governance by employees empowerment and transparent accountability. Indeed, the balanced scorecard can be presented as a very comprehensive strategic performance management system apt to attain a perfect alignment of the human and capital resources to the long term objectives of an organization on a day-to-day operations basis. Balancing its financial and non financial assets, the organization can become more responsive to external stakeholders involved an thus increasingly accountable.

Elaborated in the early 1990's by Dr. Robert Kaplan, professor at the Harvard Business School, and Dr. David Norton, management consultant²⁰, this management system is not aimed at implementing spot change projects as the Total Quality Management practices, such as the six sigma initiative and the Toyota production system which we have studied, may be usually intended to. But, for its own continuous basis functioning, the balanced scorecard may incorporate these practices.

What makes this method so inclusive is that its study approach takes into consideration four perspectives consisting of the four main operating and relationship areas which any organization has to do with. These are:

- 1. Learning and growth perspective;
- 2. Internal process perspective;
- 3. Customer perspective;
- 4. Financial perspective.

_

²⁰ A conspicuous bibliography can be presented about the authors' work. The knowledge background of our dissertation is particularly based on three of their books such as: Kaplan and Norton (1996), (2006a), (2006b), respectively concerning with the presentation of the method, alignment conception and strategy-focused organization model.

The care to collect and analyse statistical and non statistical data as well as establish performance indicators or "metrics", as called by this approach, should regard each of these perspectives so that the alignment to the organization strategy can be complete. The Balanced Scorecard Institute (2008a) provides in its website information on such method, including specifications about the four perspectives as here following reported.

The first area of study, "the learning & growth perspective", admitting that people are "the only repository of knowledge" and therefore the main resource, includes the development of cultural attitudes and training of skills for internal employees among the strategic practices to follow. In this way, employees are able to face the constant technological challenges being "in a continuous learning mode" and overcome possible decreases in productivity mostly due to "a decline in training". Some of the means more commonly used are employees surveys, by which complaints and questions about daily activities are investigated and duly taken into consideration, and analyses of training courses data offering valuable information and measurement indicators of the learning and growth process improvement. important to remark is that Kaplan and Norton conceive "learning" conceptually and practically more inclusive than "training". That explains the fact that in an ideal knowledge-driven organization not only training courses for employees should take place but above all some figures like "mentors" and "tutors" should operate in order to help employees to competently and faultlessly perform their functions and advance in their careers. Such work perspective is endorsed by the necessary "easy of communication among workers that allows them to readily get help on a problem when it is needed" (Balanced Scorecard Institute, 2008a) and adequate, or better high performance, information and communication technology instruments which permit a considerable simplification of work functions. In this way, it is acknowledged that human capital, with the help of information capital, constitutes the knowledge apparatus of the organization and its onward development represents an actual, although intangible, strategic asset.

According to a very influential economic literature (Gilley et al., 2000; Manz et al., 2001; Gollin, 2008; Drucker, 2007), the two most important principles on the basis of which this continuous development can be guaranteed are creativity and entrepreneurship. Employees should be put in a condition to be creative beyond their usual repetitive tasks. Some circumstances may naturally stimulate creativity or signal that it is the right time to exploit it. The circumstances may be unexpected successes or failures, incongruities between assumptions and actual events, need to change processes, changes in external stakeholders' attitudes and perceptions, new and advanced technological knowledge (Gollin, 2008, p. 122; Drucker, 2007). Despite these suitable circumstances may occur, creativity cannot be caught and implemented without the help of entrepreneurial capacities. Actually, on the contrary of what is generally believed about entrepreneurship as belonging to leaders' exclusive competence, every employee should be endowed with it, working in autonomy, with responsibility and freely expressing his ideas on the possible organizational improvements. In this sense, the concept of entrepreneurship should not be assimilated to that of leadership, being the first just a qualitative specification of the second. The value of entrepreneurial capacities is already appreciated in the public sector including the foreign affairs ministries where, in the light of increasing economic diplomacy tasks and forms of decentralization, diplomats are required to behave as the most dynamic and innovative entrepreneurs²¹. The point is to spread and make growing the seed of entrepreneurship in every public official and administrative employee. In this regard, what the balanced scorecard suggests is that well trained and mentored employees could help to make the learning culture prevailing and, consequently, the ideal of the "learning organization" (Senge, 1994) pursued.

The second area of study, "the internal process perspective", is mainly related to what we have already analysed in the Toyota production system, namely the re-designing of internal processes and workflows. The additional help that the balanced scorecard gives is about the distinction between mission-oriented process and support process. The method recognises that the mission-oriented process, which characterises most of the government functions, generally finds some difficulties to manage change because a number of unexpected challenges may occur over the mission. For that, some further means of coordination and networking building may really enhance mission performances. What we have studied about the function of "Made in Italy" promotion endorses such perspective. While, the method acknowledges that the support process, developed on the basis of repetitive and technical operations, can be much more easily assessed and properly reorganised.

²¹ The redefined role of diplomats, particularly ambassadors, in the contemporary international relations context, as assimilated to the role of high ranking business people, has been proposed by Rana (2004).

The third area of study, "the customer perspective", is conceived by Kaplan and Norton as one of the crucial aspects of the management system. Such importance is felt within the corporate sector where improved customer satisfaction brings about higher market share and customers' loyalty. But, in the public sector, that is even more important because the customer-citizen is the taxpayer and thus the shareholder of the public company which he has democratically legitimized. Furthermore, if private companies offer products and services which people could not need and choose not to buy, the public administration offers, and it is under obligation to provide, essential services for the citizens (Rizvi, 2008, p. 17), such as education, security, postal services, energy and water supplying. What the balanced scorecard does is to determine the citizen value proposition, identifying the focus areas and goals to work on. The determination of citizens' needs and wishes is expected to include the quantitative and qualitative features of products or services to offer, the kind of relationships to establish or improve and the institutions' qualitative image to release before the public (Rohm, 2002). Within a Ministry of Foreign Affairs, a possible and interesting example is related to the consulates' "customers" - national and foreign people - particularly sensitive to the consulates' image and services.

Finally, the fourth area of study, "the financial perspective", allows to give substance to the strategic vision and re-designed operations by allocating budget available. Organizations are guided to analyse the financial data moving:

- from the traditional perspective of cost & risk towards the new perspective of benefit & value;

- from a low risk/low benefit investment assessment to a high risk/high benefit investment assessment and
- from a diagnostic measurements perspective towards a strategic measurements perspective (Arveson, 2003).

In such a renewed perspective, the classic financial indicators, which are ROI (return on investment) and ROCE (return on capital employed) for the private sector, and NOR (net operating results) and IOH (operating costs or overhead) for the public sector (Berndt, 2004, p. 112), acquire new meanings. They are not more sterile numbers to balance but values appreciated in the light of investments in service innovation and reorganization undertaken. By the financial perspective, the balanced scorecard allows the private companies to focus on growth, profit and market share and the public institutions on efficiency, productivity and financial accountability.

The four perspectives are strongly interrelated on the basis of a cause-effect logic. Kaplan and Norton affirm that knowledge and skills of employees is the foundation for innovation and improvements. The employees empowerment permit to ameliorate the quality and efficiency of their work. Better work processes lead, in turn, to an improved customer satisfaction. Finally, an increased customer satisfaction leads to better financial results. The following diagram well expresses and summarizes all the basic principles of this strategy management system.

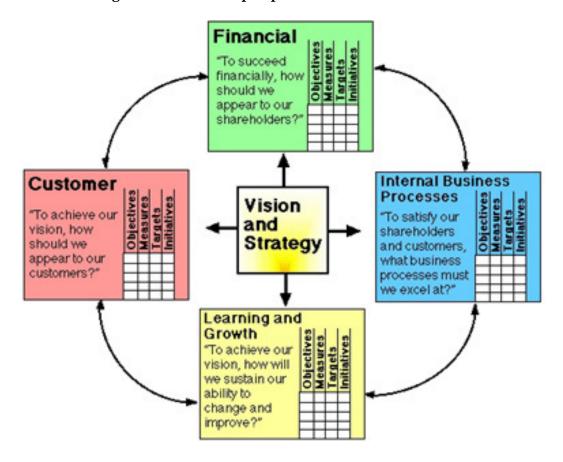


Figure 5.1 - The four perspectives of the Balanced Scorecard

From Kaplan and Norton (1996).

How to use the Balanced Scorecard

Management consultants using the balanced scorecard are used to set up the change process following nine steps here below specified.

1° step - Building the balanced scorecard: that means making an assessment of the organization's principles, objectives and opportunities. The ability required is to create a vision for the future, which is very similar to what we have studied about the six sigma initiative. As the analysis should be as wide as possible, the identification of strengths, weaknesses, opportunities and threats (SWOT methodology), could be useful at this step.

2° step - Development of the business strategy: it deals with the focus macro-area where organization wants to make improvements. Howard Rohm, Vice-President of the Balanced Scorecard Institute and Director of U.S. Foundation for Performance Measurement, affirms that:

"strategy is a hypothesis of what we think will work and be successful. The remaining steps in the scorecard building phase provide the basis for testing whether our strategies are working, how efficiently they are being executed, and how effective they are in moving the organization forward toward its goals" (Rohm, 2004, p. 4).

3° step - Defining objectives: objectives translate the main strategy in goals to achieve and consequent operations to do. For example, a strategy focused on an effective and efficient governance can be translated in objectives such as improvement of technology capacity, increase of the use of partnerships and decrease of reliance on taxes. At this stage, it is important that each of the four perspectives obtains the due attention in order to create a comprehensive strategy.

4° step - Defining strategic map: the strategic map is ready when the organization fixes the cause-effect connections between the desired outcomes and the related activities to undertake it deems appropriate and necessary. The organization can, thus, become aware of how some objectives (effects) depend on another ones (causes) and together constitute a strategic objectives/activities net. Here below a representation of a strategic map:

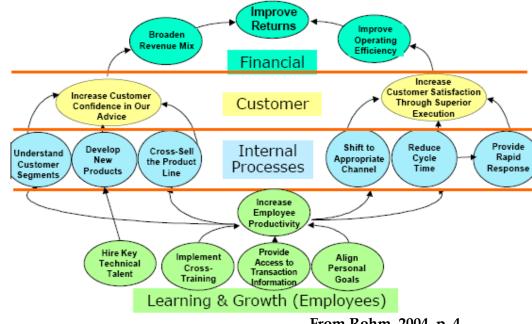


Figure 5.2 - Strategic Map according to the Balanced Scorecard approach

From Rohm, 2004, p. 4.

5° step - Establishing performance indicators: the linkages identified between strategy, objectives and activities help to establish the performance indicators on the basis of which the organization will monitor the change path. Probably, some few performance indicators or key performance drivers are critical to the overall change process.

6° step - Reviewing the strategic map: at this phase of the scorecard building, managers could discover some initiatives much more strategic than those present in the strategic map. That would reveal the method is well functioning as mangers' strategic ways of thinking get better.

7° step - Introduction of automation: automation of some practical operations can be greatly helped by software and information technologies. In particular, the operations related to data warehouse are subject to automation.

8° step - Cascaded Scorecards Support Strategy: it is aimed at developing a capillary participation by any member of the organization, starting from the management level towards the single individuals going through the main operational units and departmental and interdepartmental team. That relies on a great communicative effort which is to reach all employees who thus become empowered to act in the direction communicated.

9° step - Evaluation and change: this phase occurs many times in the change path in order to modify the direction any time new challenges arise. And, it is in the final evaluation phase that accountability of all the inherent activities of the organization is made full and transparent.

The implementation of the Balanced Scorecard in the public sector

Public agencies and institutions of many countries in Northern Europe, South-Eastern Asia and the United States have been adopting the principles of the Balanced Scorecard in order to give a methodological support to the reforms undertaken.

The case of the Foreign Affairs Ministry of Denmark is particularly interesting. This Ministry has launched a campaign of modernization to modify its foreign policy from "reactive" to "proactive" policy, as stated by the Danish Permanent State Secretary, Friis Arne Petersen, and Ambassador Poul E. D. Kristensen in Ottawa (Petersen and Kristensen, 2005). Decentralization, empowerment of employees and more communicative

public policy are the *leit motiv* of this campaign, which is not expected to have a concluding phase but to be carried on continuously. The focus is on the innovative capacities generated by human resources. While managers pursue a "professional discipline", administrative staff are subject to "individual competence development contracts" following the example of the best private companies. The performance contracts annually negotiated for all missions and departments are assessed on the balanced scorecard basis and with reference to the strategic objectives centrally planned. On the basis of a re-formulation of internal network processes and with the intention to overcome the traditional hierarchical setting, two cross-departmental task forces have been created which coordinate all other departments and refer directly to the senior leadership.

Decentralization is fulfilled giving missions abroad relevant autonomy in the matters of "policy programming and spending levels". Finally, the Danish Foreign Ministry can already boast a successful implementation of the information and communication technologies tools within the organization and in the context of public diplomacy (Petersen and Kristensen, 2005).

Also the Swiss Development Co-operation agency gives a significant example of a possible implementation of the balanced scorecard. It concerns a ten-year strategy issued in 2000 and aimed at linking all the country strategies to targets, results and indicators. This has been possible thanks to:

- "annual detailed planning programmes, focusing on measurable output and clear responsibilities [...] issued by each unit, in particular by resident missions abroad" (OECD, 2002, p.18);

- Two-year evaluation programme made at the management level about the degree of effectiveness and efficiency registered during the operations ongoing, with the consequent possibility to apply modifications to the programmes.

A results-based tool, named MOSTRA and inspired to the balanced scorecard, helps to regularly monitor the so-called "strategy 2010" and all the initiatives undertaken. Thanks to that, positive outcomes have been clearly formulated and verified, best practices highlighted and even a fruitful common language between stakeholders developed. So, a highly participative approach of monitoring and evaluating, along with a wider dialogue with partners and other agencies involved, has been guaranteed producing a higher level of partnership and ownership.

According to a study of OECD, "Managing for Development Results and Aid Effectiveness" (2002, p. 27), the use of the balanced scorecard is to be greatly appreciated and considered as one of the best practices to follow. This system reveals to be instrumental to put into practice efficient and effective procedures internal to the organizations involved in the development cooperation, which in turn improves the actual well-being of the beneficiary populations. In order to this, also the African Development Bank has started to implement the balanced scorecard since 2002, becoming more focused on selectivity and result-oriented development of its programmes (OECD, 2002).

It is not only the international relations context that can take advantage of the balanced scorecard method. In principle, every area of the public administration and every public service delivered may benefit from this strategy management system including, for instance, health care centres, education institutions, energy supplying public societies, security and military institutions. Many successful examples occurring in the United States might be reported in this regard²².

What can we glean from our analysis is that having a strategy and an effective management tool is a fundamental and indispensable asset for any organization which seeks to implement a broad range of reforms. The reforms are to be constantly monitored and assessed. To this end, the balanced scorecard, as a comprehensive management tool, is a pattern which can be adopted step-by-step or just taken as an example to develop unique tools more adequate to the specificities of the organization as well as integrate other performance practices already implemented.

The Italian public administration, currently committed to plan a series of reform programmes in many of its areas, could really benefit from a sort of benchmarking about the best examples of the management tools implementation in other public administrations. It could pay particular attention to the cases where the balanced scorecard has been adopted. In so doing, it could appreciate its methodological completeness and then decide to implement it.

²² The Balanced Scorecard Institute (2008b) lists among the US government organizations successfully adopting the BSC system: the Defense Financial Accounting Service, the Federal Aviation Administration Logistics Center, the Department of Energy Federal Procurement System and the Department of Energy Federal Personal Property Management Program. See also Rohm (2004).

PART III

Innovation & Change

The frontiers of informatisation in the PA

Nowadays, informatisation can be seen either as an opportunity or as a challenge for the public administration. It is a challenge for two main reasons. The first one is that public officials are not always open to accept the changes informatisation poses. The second one, is related to the fact that if public institutions want to implement information and communication technologies they have to invest a lot in terms of financial resources. We already know that some performance management and business reengineering practices help public administrations to face such a challenge by employees alignment to a scheduled outcome and rationalization of the resources to employ. So, in this chapter, we will focus on uncovering all those opportunities which the PA may benefit from, through an *excursus* of the most advanced ICT applications in foreign countries and the recent

reforms and reform proposals in terms of ICT by the Italian PA and MFA. Finally, we will seek to project ourselves beyond the frontiers of the current technological implementation and understand how much possible and rapid a passage from the advanced e-government to more advanced m-government could be.

All those public administrations which have integrated ICT in their structures have actually taken the opportunity to re-shape and develop their public functions as well as strengthen the relationships with their direct stakeholders such as citizens, enterprises and media. First of all, it is known that the use of ICT tools increases effectiveness and efficiency of the business and information processes. On the one hand, ICTs are seen as the "fertile ground" on the basis of which any process reengineering may take place, by designing an re-designing working procedures and internal and external information flows. On the other hand, the consequent standardization of simplified business and information processes reduces costs, time and risk of mistakes. Within a foreign affairs ministry, for example, the huge amount of bureaucratic practices related to consular activities may be more easily managed by integrating databases of consulates abroad with those of national institutions, eliminating duplications and reducing transaction costs between agencies. In this way, the information technology tools really enhance the quality of knowledge generated, the flexibility of its use and the cost-effectiveness of its sharing.

ICTs support the information/knowledge management also in terms of communication. Communication channels and tools like internet, intranet and

ICT application software make more rapid all the formal and informal information exchanges between the public officials belonging to the same institution. Particularly, it is the diplomats' skills that may be greatly improved by informatisation and, to some extent, virtualisation. Firstly, a faster communication occurring between embassies and the headquarters makes the decision process more rapid, timely and thus effective. Secondly, in the light of the new forms of communication including video conferences, envoys and their administrative staff come to be treated as closer, though virtual, members of the network of the foreign ministry and not more as units external to the headquarters, as was the traditional conception. The overall ministerial institution comes to be far more integrated (Rana, 2007). Thirdly, decision process can increasingly rely on much more sophisticated instruments such as virtual simulations, policy exercises and scenarios. That is possible linking data files, integrating media, combining information systems and properly using scenario software (Frissen, 1999).

The ICT advantages related to information management may be equally experienced in the context of external networks management. In the world of multilateralism where many actors including governments, international organizations, corporate sector and civil society, play substantial roles, ICT tools can consistently support a ministry in its relevant function of taking and keeping contacts with the various actors at stake²³. That is particularly true for the foreign affairs ministry whose networks are further enriched. In fact, its

-

²³ We will analyze the importance of social networks management for an innovative public administration in the chapter VIII.

embassies are expected to take contacts with the civil society and media of the countries where they are located.

Last but not least, the public administration is able to really become citizen-oriented by exploiting all the potential of ICT. Through ICT a MFA can offer a number of innovative and responsive services to citizens and enterprises as well as take the opportunity to develop a proper domestic public diplomacy.

Leader countries in e-government performances

In 2005 the United Nations, Department of Economic and Social Affairs - Division for Public Administration and Development Management, published a very interesting report entitled "Global E-government Readiness Report 2005, from E-government to E-inclusion" (United Nations, 2005). The survey assessed more than 50,000 features of the e-government websites of 191 UN Member States in order to ascertain the state of readiness of the Governments in employing the opportunities offered by ICT. On the basis of a weighted average index representative of website assessment, telecommunication infrastructure and human resource endowment, the report rankings saw the United States the world leader, followed by Denmark, Sweden and the United Kingdom. Italy was the last of the top 25 e-ready countries, after the Republic of Korea, Singapore, Iceland, Estonia, Malta and Chile.

Figure 6.1 - E-government readiness index 2005: top 25 countries

Country		Index
1	United States	0.9062
2	Denmark	0.9058
3	Sweden	0.8983
4	United Kingdom	0.8777
5	Republic of Korea	0.8727
6	Australia	0.8679
7	Singapore	0.8503
8	Canada	0.8425
9	Finland	0.8231
10	Norway	0.8228
11	Germany	0.8050
12	Netherlands	0.8021
13	New Zealand	0.7987
14	Japan	0.7801
15	Iceland	0.7794
16	Austria	0.7602
17	Switzerland	0.7548
18	Belgium	0.7381
19	Estonia	0.7347
20	Ireland	0.7251
21	Malta	0.7012
22	Chile	0.6963
23	France	0.6925
24	Israel	0.6903
25	Italy	0.6794

From United Nations (2005). "Global E-government Readiness Report 2005, from E-government to E-inclusion", p. 41.

According to the report results, a number of good practices adopted by the then world leader in e-government readiness could be highlighted. Indeed, it is the US web portal http://www.firstgov.gov that was considered the best one because providing enormous amount of information well collected, categorized and easily and effectively consultable. Some of the main tools used are: a useful search engine covering 51 million government pages, a proper frequently asked questions (FAQ) tool, a listing of the "Especially for Specific

Audiences" portals²⁴, a Spanish version to facilitate the accessibility from Spanish speakers and a recent implemented podcast initiative providing a list of all available government podcasts²⁵. Moreover, since 2003 some active online discussion fora between citizens and public institutions, such as the Department of Education and the White House, have been launched²⁶. This kind of interaction, based on a procedure which releases on-line all questions and answers given, allows the current public administration to keep continuously in touch with the citizen in a transparent way. It is even possible to consult the previous sessions archives, which could be a valuable help for the next coming administrations. In definitive, thanks to the US experience analysis, the report reckons that the key of success in e-government is the ability to effectively manage a large magnitude of information and services by ICTs for the full convenience of users.

The same study, conducted in 2008 and entitled "UN E-Government Survey 2008, From E-Government to Connected Governance" (United Nations, 2008), tends to emphasize not only the functional technological infrastructure of governments like their websites but also and above all their ability to completely involve citizens in the e-world. The three main focuses, of which indexes are representative, are:

- E-information, whose assessment is based on the analysis of national websites and portals including the verification of the use of electronic

²⁴ Available at: http://www.firstgov.gov/Topics/Audiences.shtml [Accessed 23 June 2008].

²³ Available at

http://www.firstgov.gov/Topics/Reference_Shelf/Libraries/Podcasts.shtml [Accessed 23 June 2008].

Department of Education forum available at: http://exchanges.state.gov/education/citizens/; White House forum available at: http://www.whitehouse.gov/ask/20061018.html [Both accessed 23 June 2008].

notification mechanisms, listings of opportunities for online participation and on-line publishing of policy documents;

- E-consultation which assesses all the interactive methods by which citizen opinion is solicited, such as formal online consultation, bulletin boards, chat rooms/instant messaging, weblogs (blogs) and informal polls;
- E-decision-making which evaluates the actual commitment of governments to take into consideration inputs that citizens give by e-participation tools.

The Northern European countries - Sweden, Denmark and Norway - occupy the top three positions in the report ranking. While Italy drops to the 27th position.

Figure 6.2 - Top 35 Countries in the 2008 e-Government Readiness Index

Rank	Country	E-Government Readiness Index
1	Sweden	0.9157
2	Denmark	0.9134
3	Norway	0.8921
4	United States	0.8644
5	Netherlands	0.8631
6	Republic of Korea	0.8317
7	Canada	0.8172
8	Australia	0.8108
9	France	0.8038
10	United Kingdom	0.7872
11	Japan	0.7703
12	Switzerland	0.7626
13	Estonia	0.7600
14	Luxembourg	0.7512
15	Finland	0.7488
16	Austria	0.7428
17	Israel	0.7393
18	New Zealand	0.7392
19	Ireland	0.7296
20	Spain	0.7228
21	Iceland	0.7176
22	Germany	0.7136
23	Singapore	0.7009
24	Belgium	0.6779
25	Czech Republic	0.6696
26	Slovenia	0.6681
27	Italy	0.6680
28	Lithuania	0.6617
29	Malta	0.6582
30	Hungary	0.6485
31	Portugal	0.6479
32	United Arab Emirates	0.6301
33	Poland	0.6117
34	Malaysia	0.6063
35	Cyprus	0.6019

From United Nations (2008), "UN E-Government Survey 2008, From E-Government to Connected Governance", p. 40.

The three countries seem to have the same web-strategy, having a very informative and well integrated website which are also gateways for e-services. E-decision making is accomplished by the establishing of e-participation or e-democracy commissions and any kind of document, finding and publication is

on-line available. Norway and Denmark show to be definitely committed to exploit all the advantages of ICTs. They are going to digitally handle all relevant communications between citizens and public institutions in the next few years, by the use of a technology commonly used in commercial activities and allowing online banking and shopping. The most recent initiative of the two countries is called "My-Page" which is a functionality providing the citizen with a personal digital space where to put and find personal data related to the public sector. Such functionality is expected to strengthen the cross-agency cooperation²⁷. Besides, such a type of functionality can be used as a single trusted credential for all online public services. In practice, a single change of address or other personal details would be available to all government agencies (Microsoft, 2006, p. 18)²⁸.

Generally, among the three Northern European countries, Denmark can be definitely considered the best performer. According to another interesting report, the "Global Information Technology Report 2007-2008", conducted by the World Economic Forum (2007), Denmark is the best prepared nation to participate in and benefit from ICT, confirming its position for the second consecutive year. The report has assessed for the seventh consecutive year since 2003, the impact of ICT on the development process and the competitiveness of

-

²⁷ Examples of My Page functionality are available at: http://www.norway.no/minside/Default.asp? and http://www.borger.dk/ [Both accessed 24 June 2008].

²⁸ In the same context, Microsoft points out also the necessity to make safer the security and privacy domains. In fact, the use of a common universal identifiers, as the case of almost all integrated systems, may raise some problems of frauds as experienced by the USA with the use of Social Security Number (SSN). Acknowledging such danger, Canada has re-engineered its government system avoiding to use a single common universal identifier.

nations. 127 economies have been analysed on the basis of the Networked Readiness Index (NRI), measuring:

- the country environment for ICT;
- the readiness of the economy's key stakeholders individuals, business and governments;
 - and the usage of ICT by these stakeholders.

The top ten countries following Denmark are respectively: Sweden, Switzerland, United States, Singapore, Finland, Netherlands, Iceland, Korea and Norway. Italy is 42nd. The Report gives evidence that e-skills could not belong only to IT specialists but they are necessary in all sectors, including the public one and in all levels of activity for which creativity, innovation, and interdisciplinary teamwork are indispensable tools of competitiveness (World Economic Forum, 2007, p. 4).

What is stated about Denmark is that its high level of networked readiness has to do with the clear government ICT vision and leadership. Apart from some important aspects, such as highly developed ICT infrastructure, high penetration of PCs, internet and broadband, leadership in research & development in many sectors, the Danish example is characterised by an outstanding level of e-government which is at the cutting edge of ICT performances. Such vision ahead has pushed the Danish government to make the electronic transacting of some public services obligatory, which generates in turn an increasing public demand for e-government.

In the context of Denmark' achievements in terms of modernization and informatisation, the Foreign Affairs Ministry plays a central role because such ministry has the overall responsibility for the government portal, www.denmark.dk, which is the official website of the country, technically supported by National IT and Telecom Agency. And, it is since 2004 that the Danish MFA has fostered the digital leadership of middle managers, including ambassadors and heads of departments, targeting on the strengthening of their skills in managing ICTs (OECD, 2005).

Informatisation and virtualisation in the Italian MFA

Compared to the leader countries in e-government performances, the Italian government' efforts can be appreciated even though ICT integration between its public institutions has not yet been fulfilled. According to the UN Report 2008, Italy is among those countries that have promoted forms of identity management with, for instance, the electronic identity card initiative. Currently, Italian public administration is using some e-information tools such as newsletters and e-mail notifications. And, the websites of some Italian public institutions have implemented RSS (Really Simple Syndication) function which pushes information automatically to user's PC, letting the user be informed on website updates or allowing to customize the information the user wants to receive. Very recently, some forms of e-consultation have been also implemented, particularly online surveys and community fora²⁹.

٠

²⁹ Some online surveys and fora can be found in the "National Portal of Citizen" <u>www.italia.gov.it</u> related to all services offered by public administration, available at the page:

The Italian Ministry of Foreign Affairs is aligned to the government efforts in terms of increasing ICT implementation. The MFA uses web-based programmes, VOIP and video-communication systems as well as the digital signature. The new strategy, as presented to the Forum of Public Administration held in Rome in May 2008 (Forum PA, 2008) and released on the ministry's website (Ministry of Foreign Affairs of Italy, 2008), includes many valuable initiatives.

The first innovation regards the "Digital Consulate", which is expected to operate since 2009. It deals with an information platform for the integrated management of consular data and functions (S.I.F.C.) as well as for online providing of consular services including the use of electronic identity card, simplified procedures or passports and certifications, online registration to the registry of Italians living abroad, online verification of ongoing proceedings, online request of meeting with consular officials. The Digital Consulate is supposed to facilitate the relationships with citizens and reduce transacting and procedural costs.

The second proposal, named "@doc project", targets to digitally handle all the enormous amount of written communications occurring within the Ministry, between Ministry and embassies and between Ministry and other public administrations. Consequently, new techniques of digital filing, contents automatic research and creation of digital case files will be implemented. The implementation of this proposal is scheduled for the end of 2009.

Other innovative initiatives include:

- The multimedia newscast of the Italian diplomacy called "Esteri News", created in collaboration with CLASS CNBC, digital broadcast channel of finance and economic news, and available also online at the MFA portal www.esteri.it.
- The newsletter of the Italian Economic Diplomacy and the newscast "Radiocor-Farnesina" for enterprises and individuals interested in the economic diplomacy of Italy.
 - Improvement of the Customer Relationship Management.
- Widening of the information system "ExTender" supported by the information nets of economic offices of embassies, Italian consulates, Italian chambers of commerce and ICE offices abroad. The initiative is worthwhile for enterprises looking for information about tenders abroad.
- The innovative service of "Telemedicine" at disposal of Crisis Unit Department. It deals with the use of satellite PC bags by which it is possible to make distance-diagnosis, in connection with some Italian hospitals specialised in telemedicine operating on the 24 hours basis, like the San Raffaele Hospital in Milan.

Figure 6.3 - A picture of a satellite PC bag



From Ministry of Foreign Affairs of Italy, 2008, p. 16.

- The initiative "Invest your talent in Italy" which is intended to attract foreign students and professionals in the sectors of information technology, management and design.
- The opening of the 91st Italian Institute of Culture in Second Life in order to exploit alternative means for cultural promotion of the country.
- Finally "sms" notification on updates of the portal and its mobile consultation.

Farnesina is applying innovation and creativity to consistently contribute to competitiveness of the country taking advantage of the collaboration with the Department of Innovation and Technologies of the Presidency of the Ministers Council (DIT) and the Information National Centre for Public Administration (CNIPA).

Some of the initiatives launched by the Italian MFA, such as those of sms notification, website mobile consultation and telemedicine by satellite communication, implemented also by other public administrations, let us reflect on the possible wide applications of the mobile technology in the public services.

The m-government frontiers

Nowadays, people from all over the world use a number of mobile devices - laptops, mobile phones, personal digital assistants namely palmtop computers - whose interconnection and interoperability could be widely exploited by public sector leading from e-government to m-government. Mobile government can consist of the interactions between mobile state administrations, mobile officials and mobile citizens, meant as three areas of application and development of mobile and satellite technologies.

As for state administrations, such technologies may be used for communication scopes facilitating simultaneous transmission of information between wide networks linked by satellite and communication lines in case of emergency. Public administrations may use them for positioning purposes on the basis of which accurate information about where ships, aircrafts and land vehicles are located can be obtained. It is evident the great usefulness of positioning when disasters occur. The list of possible applications is very long, including supervision of the territories under the jurisdiction of states, production of accurate maps, help to the implementation of environmental

agreements and so on. Further applications are related to the capacity of earth observation by satellite. State administrations may supervise agriculture plantations, fishery resources, state of atmosphere, oceans and earth surface. Currently, Europe has been creating its own satellite network, known as Galileo, by which European countries will be able to autonomously develop safety strategy and navigation systems, becoming thus independent by other GPS (Global Positioning System) networks, such as GPS from United States, Glonass from Russia and Beidou from China. Other related technologies like surveillance technologies called CCTV and Echelon and radio frequency identifiers (RFID) find other important applications in the administration of a state. Some countries reveal to be very creative: the city of Rotterdam has introduced RFID tags to the public transport so that it is not more required to directly contact the apparatus in metro or autobus. United States use them to identify passports; Japan guide visually handicapped and to detect supervisors in case of disasters. Germany and Great Britain use RFID and sms alert in the context of criminal hunt, contacting all citizens present in a certain area where security threats occurring. Embassies and consulates, for example, might use such technologies to take contacts with citizens travelling abroad in case of emergency.

With reference to mobile officials, GPRS (General Packet Radio Service) and UMTS (Universal Mobile telecommunication Service) may really facilitate the officials tasks. In fact, transferring data via mobile nets, officials in outdoor can access to databases of their home office. Many applications can be found

such as inspections, outdoor health care and missions abroad especially for diplomats. Some examples of "m-diplomatic activities" could be: "m-amendments" to texts produced within the context of multilateral negotiations, "m-directions" given by the headquarters to diplomats in mission and quite all the consular activities and consultations.

Also mobile citizens perspective can be a wide field of implementation of these technologies. For instance, tourists may receive on their mobile phones information on the country they are visiting including parking, traffic regulations, opening hours, weather forecasts. In the effort to be citizen-oriented, embassies and cultural institutions may invite tourists and subscribers to cultural events by mobile messages.

So, m-government seems to be far more advanced and customizable than e-government which perfectly integrate. Interoperability of technological devices improve effectiveness, efficiency, quality and accessibility of and to public procedures and services. The potentialities of such technologies really are endless and greatly favour the relationship PA-citizen. Barriers and challenges that can be found are mainly related to the fact that technical interoperability is to be supported by organizational interoperability, which endorses the main thesis of our discussion³⁰.

³⁰ Snellen and Thaens (2008). This interesting paper, from which all the relevant information about m-government here presented have been drawn, reports the current state-of-art of m-government and investigates on several and various areas of its possible application.

European Awareness Scenario Workshop to integrate technological progress and social demand

In the era of decentralised power centres and the technological progress, public administrations could take the opportunity not only to face the related challenges in the best possible way implementing management practices but also to stimulate and accelerate the innovative processes in which they are involved. Performance management practices could give to the public administrations the chance to introduce more efficient organizational changes, plan successful strategies and translate them into actions. In such a perspective, the further methodology we are going to present, the European Awareness Scenario workshop (EASW), has the great advantage to create a balanced relationship between institutions, no-state actors, environment and technology.

Considered as an effective instrument of dialogue, collaboration and participatory decision-making, EASW is particularly apt to find new forms of

application of technologies in respect to social demands and, based on a set of debates and best practices exchanges, it is able to initiate dramatic change processes. The implementation of EASW has been for many public and private organizations the first important step towards the organizational change and technological innovation.

EASW: a methodological approach

European Awareness Scenario Workshop Initiative was launched by the European Commission DG XIII D in 1994 in the context of its Innovation Programme called to stimulate in Europe a social environment strongly inclined towards innovation. Previously, the scenario workshop methodology was tested by the Danish Board of Technology, the Agency for Innovation and Technology of the Danish Parliament, which was committed to explore possible improvements in ecology and in the spreading of innovation by participatory planning. Then, the methodology was supported by the European Commission. The first pilot project started on 1993. With the participation of an international team of researchers and four European cities - Ede (NL), Mulhouse (F), Corfu (GR) and Preston (UK) - the project investigated new possible actions in order to reinforce the contact point between citizens' needs and technological progress and launched social experiments in the perspective of "sustainable cities". The success of the project, entitled "Sustainable urban living in the coming decades" or "urban ecology", has definitely proved the effectiveness of the methodology and for that the range of its applications has been broadening, covering a number of cases in public and private sectors.

EASW is a rigorous methodological tool-kit aimed at raising public awareness and helping all stakeholders involved in a project of economic, social and cultural development to formulate a common vision and articulate demand around scientific, technological and organizational options they need. The methodology creates a participatory consensus and supports a democratic governance, even when bad relationships occur between the parties represented, because of their different interests. In fact, hostilities and bargaining over positions (Fischer et al., 1991) are widely mitigated thanks to the organization of all participants in role and theme groups, assignments to do in a participatory way and regular opportunities of feedback. All these elements give them added motivation and drive (Research European Commission, 2008a).

The actors of innovation, like cities, regions, state institutions as well as enterprises and associations, may benefit from a network of well trained national monitors and facilitators accredited to the European Commission. They are professional moderators able to manage group dynamics and guide participants through all the processes of the workshop. They are experts and able to select the best techniques to adopt during the sessions and at the same time they are flexible enough to change practices when the group dynamics so require. A number of case studies have revealed that moderators may bring

about relevant modifications to the methodology in order to better serve the stakeholders' interests and obtain results (Gnaiger & Schroffenegger, 2003).

EASW: methodology application guidelines

The methodology is composed of two main phases and developed in a very short time, generally taking two days.

A) Vision making

The first step consists of creating a vision. To facilitate this, the participants are gathered in four role groups:

- residents group (including direct stakeholders such as citizens and last beneficiaries of the changes);
 - decision makers group (including politicians);
 - technical experts group;
 - business sector group.

Each of the groups consists of 6 to 8 participants, so that the total number of participants in the scenario-workshop may be 32 at maximum.

The four role groups are pushed to imagine some different scenarios, namely pictures of a possible future, using some inputs and techniques such as inspiration, point of criticism, frame of reference, double-interviewing, brainstorming and making of drawings.

The four future visions produced are presented in a plenary session with the help of a catchy slogan and any possible visual aid to make the presentation as attractive and dynamic as possible. They are thus discussed and what becomes crucial in this phase is the action of listing all the aspects in common of the four visions. "This forms the basis for a commonly shared future vision, the so-called common ground" (Research European Commission, 2008b). All the participants should acknowledge that the practical reality is not necessary to be considered because it could limit possible creative solutions and the far visionary feature of such exercise.

B) Idea generation

The presentation, clarification and discussion of the role groups' visions and the consequent identification of the common ground vision represent the point of departure for the theme groups' work. They are asked to think about how the common future vision can be realised and develop ideas on what has to be done. The task of reminding the common ground is apt to the role of facilitator.

Participants are re-organised in thematic groups. The themes depend on the workshop subject and are chosen for their relevance to it. At the beginning of the workshop the themes are generally fixed but during the first phase relevant results may arise so that the moderator can decide to change the thematic groups. The European Commission' pilot project, for example, selected four main domains of action relevant to the topic "sustainable cities" and "urban ecology" such as:

- energy;
- water and waste water;
- waste and recycling;
- living.

Besides, it is advisable to allocate people to theme groups according to their own specific expertise.

For the idea generation, groups may use several techniques even if the EASW prefers to use the so-called 'snow-carding' technique. According to that, each participant has 15 minutes to write down their best ideas which, implemented, could fulfil the future vision in respect to the theme dealt. The rule is writing down one idea per small card also called "snow card". Each participant has some few minutes to present their ideas to the other group members and together discuss and prioritize all the ideas.

The action of ideas-prioritising is very important and produces a short list of the "best" ideas per theme group. The groups, subsequently, make a presentation in the plenary session of their "top-5", pointing out the relevance of their ideas to the common ground vision. And finally, after the four presentations, participants select and rank by a voting procedure the "best" 5

ideas taking into consideration some criteria like innovation, feasibility and degree of involvement. In such a way, all the participants who are representative of different stakeholders categories put into practice a fruitful exchange of experience and knowledge³¹.

EASW: successful cases

The use of the European Awareness Scenario Workshop is currently widespread and the success of several economic and social initiatives in many European countries continue to prove its merit. Apart from the pilot project of the European Commission, since 1996 a vivid example of its successful implementation has been the articulated plan of development for the Bilbao city in the Basque region. Among many "visionary ideas" implemented to overcome the industrial decline of the region, the Guggenheim Museum and the Euskalduna Music Hall represent the most emblematic projects in terms of new economic image and cultural modernity. The ideas of change generated within groups of politicians, architects, citizens and entrepreneurs have dramatically and positively modified the quality of living in the city and its tourist attractiveness. Some of the several changes carried out are about a nicer image of suburban areas, effectiveness of the transport services technologically advanced and many cultural initiatives³².

-

³¹ All the information about the EASW here presented are drawn from the websites of the Research European Commission (2008a and 2008b), the Danish Board of Technology (2008) and CIPAST – Citizen Participation in Science and Technology (2008). The related documents provide many other detailed information on scenario workshop techniques.

³² In Bilbao Rìa 2000 (2008) a comprehensive outline of the development plan of Bilbao city can be found.

We find another valuable example about the EASW implementation, still ongoing, in Italy, in the Province of Florence. The province has decided to use such methodology in order to put into practice the principles of Agenda XXI, the programmatic document of Rio de Janeiro Conference of 1992. It deals with the intention to activate a series of participatory actions and agreements between social and institutional parties to accomplish a social and environmental sustainability within the province's territory. The methodology has been aimed at:

- 1. selection of practices, instruments and projects able to increase the value of environmental resources, assessing the impacts of policies and sector programmes on environment.
- 2. shared analysis of public and private management for the environmental quality, social and economic well-being, and technological innovation with reference to production and consumption modes.
- 3. strengthening of participatory planning on the basis of a common ground vision.
- 4. integration between objectives of environmental sustainability and objectives of social cohesion, wealth and equity in the light of some indicators such as the "ecological footprint" and the European common indicator ECIP.

The four role groups have been:

- a. group of politicians and local public officials including representatives of the province and some municipalities;
- b. group of civil society including representatives of WWF,
 Legambiente (National Environmentalist Association), CGIL (Italian General
 Confederation of Labour) and some NGOs.
 - c. Group of experts in the fields of energy, geology, and architecture.
 - d. Group of local entrepreneurs.

The four thematic groups include:

- production and consumption;
- resources and territories;
- mobility and pollution;
- tools for fulfilment of Agenda XXI provisions.

Under the guide of Paolo Martinez, National Monitor EASW, all stakeholders have found a solid common ground and generate fruitful ideas mainly focused on resources rationalization and energy efficiency. The strengthening of dialogue between social and institutional parties consequent to the implementation of such methodology has made the province of Florence

and, in turn, the Tuscany Region, among the best performing and most innovative ones in Italy³³.

The examples mentioned above suggest that this methodology can be applied at any level of governance. State institutions including any single ministry could thus be able to play a central and primary role in gathering their direct stakeholders and partners, promoting a more effective dialogue between them and undertaking shared projects of development. The public administration may be actually facilitated in accomplishing its important tasks and satisfying the higher standards of social demand because the thematic areas of development are really endless and inputs of creativity and innovation that methods like this stimulate are numerous and various.

-

 $^{^{33}}$ All details about the implementation of the EASW in the Florence's province can be found in Martinez (2003).

Open Innovation Paradigm for a Public Administration socially integrated and constantly innovative

Our dissertation cannot be considered completed without some reflections on what innovation means in the long term for the public administration. In fact, any change deriving from the implementation of performance practices and patterns of development should be intended to help the public administration to catch the momentum and make it able to follow continuous trends of innovation occurring in the long run. This is due to the expectation of socio-cultural evolution, which the civil society is supposed to pursue and the PA to endorse, based on prospects and behaviours future oriented, despite some path dependencies may be experienced. If public

institutions deny such a viewpoint, any organizational and technological challenge they face becomes a great, even intolerable, burden to bear. Lucius Annaeus Seneca, the Roman Stoic philosopher and statesman (Cordoba, 4 BC – Rome, 65 AC), said:

« Ignoranti, quem portum petat, nullus suus ventus es » (Seneca, 62-65 AC, VIII, LXXI, 3)

[If one does not know which port one is sailing to, no wind is favourable].

This ancient "dictum" portrays the situation of ignorance and disorientation in which the public administration was more than one decade ago while civil society and private sector were making progress ahead of the then usual standards of life and work. At the same time, the "dictum" sheds light on the importance of foresight which we have to consider as an invaluable asset for decision-makers (politicians and high-ranking public officials) who lead the modern public institutions. According to the foresight best practice project of the European Union, called FOR LEARN, foresight is defined as: "a systematic, participatory, future-intelligence-gathering and medium-to-long-term vision-building process aimed at present-day decisions and mobilising joint actions. Research and innovation policies are based on (implicit or explicit) visions of the future of science, technology and society" (JRC European Commission, 2008).

Generally, decision-makers may rely on a number of exercises and practices to accomplish their task such as: analysis of historical trends, in-depth examination of the current problematic issues, trends and anti-trends, expected

future scenarios and forecasting as well as detecting of weak signals and seeds of change. It is particularly this last practice to be considered the most innovative and upward one (Santonen et al., 2007, p. 14). That deals not only with investigation of changes in people's habits and tastes but also with detection of technological innovations which may find new, various and also unexpected applications. In such context, the private sector has made its first and important steps ahead, recognizing to operate in "the era of open innovation" (Chesbrough, 2003).

Open innovation: aspects and implications

The expression "open innovation" was coined in 2003 by Henry Chesbrough, a Berkeley professor at the University of California and has soon conquered the interest of many researchers and practitioners. That has been conceived to describe a shift occurring in the private sector from a closed innovation model to an open innovation model, and now it has been acquiring relevance even for public policies and administrations.

Chesbrough demonstrated that some organizations are prone to miss a number of opportunities falling outside their businesses and are thus unable to unlock their potential because lacking of external technologies. That is the case of the organizations focused internally, making long term investments in research & development and controlling all innovative processes inside their organizational structures, which reveal a closed innovation approach based on self-reliance (Chesbrough, 2003, p. 37).

Instead, thanks to the new model of open innovation, the same companies may experience an incredible increase of R&D-driven results exploiting their own ideas as well as innovations coming from external research centres and firms, and deploying pathways outside their current businesses to bring their in-house ideas to market (Chesbrough, 2003, p. 37).

It is a revolutionary conception which does not more believe that competitiveness depends on internal assets which any organization would tend to keep jealously secret. Actually, the key point of this new paradigm resides in the social networks and the constant interactions among them.

The subjects of the innovation network are generally engaged in different areas of activity, primarily distinguished in funding, generating and commercialising innovation. Among funding actors, "innovation investors" and "innovation benefactors" are identified. The former include venture capital firms, angel investors³⁴, corporate entities, private equity investors and small business investment companies, which are endowed with large budgets to dedicate to R&D and their capital helps to move ideas from corporations and universities towards the market. The latter, which includes government bodies, national research centres and private philanthropic foundations, intervene in the early stage of research through their economic support, awards and grants programs, determining the field and topic of study.

The group of actors generating innovation is composed of:

business organizations (usually business start-ups) in exchange for ownership equity or convertible debt. The business angel invests his own funds, unlike a venture capitalist who manages a pooled fund of other people or organizations.

An angel investor (also known as "business angel") is a rich individual who provides capital for

- "innovation explorers", generally consisting of corporate R&D laboratories;
- "innovation merchants", experts of a narrow field of technologies codified in intellectual properties and sold on the market.
- "Innovation architects", able to translate complex technologies into concrete services to deliver.
- "Innovation missionaries", consisting of "people and organizations that create and advance technologies to serve a cause. [...] This is characteristic of many community-based nonprofits and religious groups but also occurs in the software industry" as, for example, the case of open-source software (Chesbrough, 2003, p. 39).

Finally, some actors are "innovation marketers", namely devoted to commercialising innovation³⁵.

The role of public administration within the open innovation paradigm is important in the light of four main perspectives. Firstly, it is implicit in the original expression of the paradigm but subsequently explicated that the support of public policies and a correct public governance are a necessary asset. It is conceptually evident that the practice of innovation within a wide net of social actors cannot be developed without the public administration endorsement. And, it is to the end of supporting civil society and enterprises to pursue scientific and technological innovation that the governments of the most competitive countries, such as Denmark, the Netherlands, and the United States have undertaken a large number of reforms about their structures and

103

³⁵ Information about open innovation network drawn from Chesbrough (2003) pp. 38-41.

procedures and adopt many relevant policies to attract foreign investments and favour nationals' investments in the field of research. Generally, what the PA may do is focusing on policies regarding modernization of universities, management of intellectual properties, promotion of free competition among national and foreign firms and allowing that basic research results move to the industry as well as university professors are directly engaged with industry (Chesbrough, 2006, pp. 35-36).

Secondly, public institutions may be a "direct shareholder" in generating innovation as described by the same open innovation model. We have already reflected, in the fourth chapter with reference to resources rationalization in the case study of the made in Italy promotion abroad, on the importance for the public administration to check how the public funds are spent. Moreover, the PA may promote excellence and meritocracy award criteria when it funds research (Chesbrough, 2006, p. 36).

Thirdly, the public institutions are becoming one of the best customers of innovation. That is already showed by the development of e-government practices all over the world and will be increasingly confirmed if m-government performances are put into practice. In so doing, public institutions may rely on expertise of innovation architects, specialised in ICTs for public management as well as shape a new group of innovation missionaries encouraging the best practices exchange and sharing public management open source software. In such a perspective, open innovation is a great opportunity

for the improvement of the public service and inter-institutional relations as well.

Fourthly, thanks to its preferential relationships with all the levels of civil society, the public administration could fruitfully play the role of facilitator of the social networks on the basis of which the open innovation paradigm takes place. Coordination, stimulation of information exchange and overall support to networks of universities and knowledge institutes, business clusters and industry-science relationships are what the public administration is required to do in this regard³⁶. Probably, this last perspective is not developed at all because the public administrations of many countries have not yet realized their important role in such a context.

Over the last years, the Italian public administration has showed interest to networking inside and outside the country. Obviously, globalisation has made the external networking prevalent to the other one and, for that, the ministry of foreign affairs' activities far more relevant and known. Some emblematic initiatives of the Italian MFA like "invest your talent in Italy" and the constitution of a database of experts in the development cooperation field to which all the professionals interested in that could enrol themselves, confirm such interest. But, what appears overall is that Italy has not yet deepened the study about the dynamics of the open innovation paradigm unlike the Northern Europe countries. If Italy was aware of that, it would realize the

-

³⁶ Hjelt et al. (2008). This is a very interesting paper produced within the context of VISION Era-Net which is a network of nationally leading innovation policy agencies, focused on the joint research theme of Innovation policy future governance. The members countries are: Austria, Denmark, Estonia, Finland, Flanders (Belgium), Ireland, the Netherlands, Norway, and Sweden.

necessity to undertake a series of concerted initiatives to better comply with each of the four over mentioned perspectives and advance the levels of country competitiveness and integration within the globalised world in a sustainable manner.

CONCLUSION

The Arianna' thread of our dissertation, concerning the investigation of possible management practices allowing the Italian public administration to overcome its bureaucratic inertia, has conducted us to analyse some aspects of its organizational structure and have an idea of the operating dynamics occurring inside and outside that. The Italian PA, as in many other countries, have been required to achieve higher standards of governance. On the one hand, that has been imposed by the international regime based on intergovernmental cooperation and internationalization of economics and politics lead by new principles such as market differentiation and country competitiveness. On the other hand, it is the power decentralization of its internal institutions, more aware of social demand and technological progress that has been requiring a change in the public sector. Despite all efforts done over the last decade, we have argued that more remarkable achievements could be accomplished through the implementation of some management practices already developed at corporate level.

Across the study of a selected group of methodologies (the Six Sigma Initiative, the Toyota Production System, the Balanced Scorecard and the European Awareness Scenario Workshop), the examination of information

and communication technologies until and beyond the frontiers of their actual application in the PA and the presentation of the new open innovation paradigm based on social networking, we have been persuaded that a modern and sophisticated bureaucratic system has to operate following some important principles. They are:

- 1. Effectiveness all country development programs should have a strategic focus on results, which requires that multi-annual plans represent a vision future oriented and participatory developed. Besides, the overcoming of cultural resistances by employees would be necessary to fulfil mid and short term objectives which put into practice the visionary strategy.
- 2. Efficiency acknowledging that the public administration of a democratic country is fully subject to the authority of citizens, the PA has the responsibility to rationalize the available resources and efficiently perform its functions within reasonable time-frames. To this end, performance management practices and financial-economic analyses are very useful.
- 3. Transparency and accountability the responsibility about resource rationalization is complemented by the commitment to make any public performance transparent and accountable. Usually, the same performance management practices offer a number of monitoring tools based on the evaluation of performance indicators.
- 4. Citizen orientation it deals with the business principle of customer orientation which well portrays the PA's necessity to be responsive to social demand with regard to a large number of public services to deliver. Informatisation processes can really facilitate relationships between public institutions and people so that procedures come to be simplified and citizens,

enterprises and foreigners find the public support they look for. Furthermore, the citizen oriented practices should include public communication campaigns able to let people know about public initiatives and be consequently involved in.

- 5. Networking the acknowledgement of the existence of social networks and the acquiring of expertise in the networks management are invaluable assets for a modern public administration which operate in contexts more and more decentralised and open to non-institutional actors. Once again, informatisation seems to be one of the most important assets for a less hierarchical public organization.
- 6. Professionalism de-localised power centres impose a high standard of empowerment and professionalism by decision makers and employees. Hence, a balanced human resources management based on the performance and potential assessments and incentive systems is fundamental.

In the light of these principles and the best practices already experienced by some advanced public administrations, it is possible to state that the potential of the public institutions is very rich and composite. The major awareness of citizens and the constant technological progress are not actually a challenge but an opportunity which, if taken, will let the public administration become a leading force.

REFERENCES

Arveson, P. (2003). A Balanced Scorecard for city & county services [online]. Balanced Scorecard Institute. Available from:

http://www.balancedscorecard.org/Portals/0/PDF/BSC_for_City-

http://www.balancedscorecard.org/Portals/0/PDF/BSC for City-County03.pdf [Accessed 17 June 2008].

Balanced Scorecard Institute. (2008a). *About the Balanced Scorecard* [online]. Washington DC: Balanced Scorecard Institute. Available from: http://www.balancedscorecard.org/BSCResources/AbouttheBalancedScorecard/tabid/55/Default.aspx [Accessed 17 June 2008].

Balanced Scorecard Institute. (2008b). Examples & Success Stories [online]. Washington DC: Balanced Scorecard Institute. Available from: http://www.balancedscorecard.org/BSCResources/ExamplesSuccessStories/tabid/57/Default.aspx [Accessed 17 June 2008].

Basilica, F. (2006). *The change toward the contractual regime in the Italian Public Administration* [online]. Italy. Available from: http://www.funzionepubblica.it/docs_pdf/Rel_lisb_ing.pdf [Accessed 25 April 2008].

Berndt, R. (2004). Competitiveness und Ethik, Springer.

Bilbao Rìa 2000. (2008). *The transformation of Bilbao* [online]. Bilbao: Bilbao Ría 2000. Available from:

http://www.bilbaoria2000.org/ria2000/ing/bilbaoRia/bilbaoRia.aspx?primeraVez=0 [Accessed 1 July 2008].

Burns, J. et al. (2003). The Challenge of Management Accounting Change; Behavioural and Cultural Aspects of Change Management. Oxford: Elsevier.

Caso, R. (2008). "The necessary collaboration: state, regions and local bodies to promote the Made in Italy" [online]. Milan:, Italian Institute for the International Politics Studies (ISPI). [Italian paper whose original title is: "La collaborazione necessaria: stato, regioni e enti locali per promuovere il Made in Italy"]. Available from:

http://www.ispionline.it/it/documents/PB_86_2008.pdf [Accessed 5 June 2008].

Chesbrough, H. W. (2003). *The era of open innovation*. MIT Sloan Management Review, vol. 44, No. 3.

CIPAST - Citizen Participation in Science and Technology. (2008). Scenario Workshop and European Awareness Scenario Workshop [online]. Bonn: CIPAST. Available from:

http://www.cipast.org/cipast.php?section=1012 [Accessed 30 June 2008].

Commission of the European Communities. (2005). Assessing administrative costs imposed by legislation, Annex to the Manual of the EU Standard Cost Model [online]. Brussels: Commission of the European Communities. Available from:

http://ec.europa.eu/governance/impact/docs/sec 2005 0791 anx 10 en.p df [Accessed 14 April 2008].

Commission of the European Communities. (14 November 2006). Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions; A Strategic Review of Better Regulation in the European Union [online]. Brussels: Commission of the European Communities. Available from:

http://ec.europa.eu/enterprise/regulation/better_regulation/docs/docs_admin_b/en_689.pdf [Accessed 20 April 2008].

Dassù, M. and Massari, M. (2008). Report 2020, Choices of Foreign Policy [online]. Rome: Ministry of Foreign Affairs of Italy. [Document in Italian whose original title is "Rapporto 2020, Le Scelte di Politica Estera"]. Available from: http://www.esteri.it/mae/doc/Rapporto2020_SceltePoliticaEstera_090408.p df [Accessed 2 June 2008].

Drucker, P. (2007). *Innovation and Entrepreneurship*. Butterworth-Heinemann.

European Union. (2008). *Growth & jobs* [online]. Summaries of legislation. Brussels: European Union. Available from: http://europa.eu/scadplus/leg/en/s02315.htm [Accessed 13 April 2008].

Fisher, R. et al. (1991). *Getting to Yes: Negotiating Agreement Without Giving In.* Houghton Mifflin Books.

Forum PA. (2008). *Ministry of Foreign Affairs of Italy* [online]. Rome: Forum PA. Available from: http://www.forumpa.it/forumpa2008/landing/espositori/ministero_esteri.html [Accessed 25 June 2008].

Frissen, P. H. A. (1999). *Politics, Governance and Technology, a Post-modern Narrative on the Virtual State*. New Horizons in Public Policy, General Editor: Wayne Parsons.

Galgano, A. (2006). The Toyota system for the PA, reducing waste and improving the quality within the public bodies. Milan: Angelo Guerini e Associati SpA Editions, Gruppo Galgano and Guerini e Associati. [An Italian book whose original title is: "Il Sistema Toyota per la PA, ridurre gli sprechi e migliorare la qualità negli Enti Pubblici"].

Gilley, J.W. et al. (2000). Beyond the learning organization: creating a culture of continuous growth and development through state-of-the-art human resources practices. Perseus.

Gnaiger, A. & Schroffenegger, G. (2003). *Tool-Kit Scenario Workshop* [online]. Interacts, Improving Interaction between NGOs, Universities, and Science Shops: Experiences and Expectations; A project funded by the European Commission/DG 12 under the Fifth RTD Framework Programme. Available from:

http://members.chello.at/wilawien/interacts/interacts_toolkit.pdf [Accessed 30 June 2008]

Gollin, M. (2008). *Driving Innovation: Intellectual Property Strategies for a Dynamic World*, Cambridge University Press.

Hjelt, M. et al. (2008). *Major challenges for the governance of national research and innovation policies in small European countries* [online]. Helsinki: Tekes & Vision Era Net. Available from:

http://www.visioneranet.org/files/395/Major_challenges.pdf [Accessed 1 July 2008].

Italy. (2001). 30 March 2001 legislative decree, nr. 165, General normes on labour system for employees of public administrations [online]. Rome: Gazzetta Ufficiale nr. 106 of 9 May 2001. [Original title: "Decreto legislativo 30 marzo 2001 n.165, Norme generali sull'ordinamento del lavoro alle dipendenze delle amministrazioni pubbliche"]. Available from:

http://www.parlamento.it/leggi/deleghe/01165dl.htm [Accessed 28 April 2008].

Italy. (2005). 11 February 2005 Law, nr. 15, Modifications and integrations to 7 august 1990 Law, nr. 241, concerning general normes on the administrative action [online]. Rome: Gazzetta Ufficiale nr. 42 of 21 February 2005. [Original title: "Legge 11 febbraio 2005, n. 15, Modifiche ed integrazioni alla legge 7 agosto 1990, n. 241, concernenti norme generali sull'azione amministrativa"]. Available from: http://www.parlamento.it/leggi/050151.htm [Accessed 28 April 2008].

Kaplan, R. and **Norton**, D. (1996). *The Balanced Scorecard*. Harvard Business School Press.

Kaplan, R. and **Norton,** D. (2006a). *Alignment, using the Balanced Scorecard to create corporate synergies.* Isedi. [Consulted Italian translation].

Kaplan, R. and **Norton**, D. (2006b). *The Strategy Focused Organization. How Balanced Scorecard Companies Thrive in the New Business Environment*. Isedi [Consulted Italian translation].

JRC European Commission, FOR LEARN. (2008). Support to mutual learning between foresight managers, practitioners, users and stakeholders of policy-making organisations in Europe [online]. Brussels: JRC European Commission. Available from: http://forlearn.jrc.es/index.htm [Accessed 1 July 2008].

Manz, C. C. et al. (2001). *The New Superleadership: Leading Others to Lead Themselves*. Berrett-Koehler Publishers, Inc.

Microsoft UK. (2006). Transformational Government: The Microsoft Response [online]. Microsoft. Available from:

http://download.microsoft.com/documents/uk/government/Transformational_Government-Microsoft_Response_Final.pdf [Accessed 24 June 2008]

Ministry for the International Trade of Italy. (2007). *Guidelines of the promotion activity, 2008 – 2010* [online]. Rome: Ministry for the International Trade. [Italian official document whose original title is: "Le linee direttive per l'Attività Promozionale, 2008 – 2010"]. Available from:

http://www.mincomes.it/sviluppo/linee08_10/linee08_10.pdf [Accessed 6 June 2008].

Ministry for Public Administration & Innovation of Italy. (2007). Action Plan for the simplification and quality of regulation [online]. Rome: Ministry for Public Administration & Innovation. [Italian Document whose original title is: "Piano per la semplificazione e la qualità della regolazione"]. Available from:

http://www.innovazionepa.gov.it/ministro/pdf/Piano_dazione_07_07.pd f [Accessed 20 April 2008].

Ministry of Foreign Affairs of Italy. (2008). *Protagonists of Innovation"*, Forum *PA* [online]. Rome: Ministry of Foreign Affairs. [Italian document whose original title is: Protagonisti dell'innovazione]. Available from: http://www.esteri.it/MAE/doc/ProtagonistiDellInnovazione.pdf [Accessed 25 June 2008].

Nye, J. S. et al. (1997). Why People Don't Trust Government. Washington DC: Brookings Institution Press.

OECD. (2001). OECD Review of Regulatory Reform in Italy [online]. Available from:

http://www.agcom.it/oecd/default_eng.htm [Accessed 13 April 2008].

OECD. (December 2002). *Managing for Development Results and Aid Effectiveness* [online]. DAC Development Partnership Forum. Available from: http://www.oecd.org/dataoecd/51/39/33670293.pdf [Accessed 17 June 2008].

OECD. (2005). *OECD Peer Review of E-government in Denmark, Pre-publication Draft: version* 2 – 29 *September* 2005 [online]. Available from: http://modernisering.dk/fileadmin/user_upload/documents/Projekter/Internationale_undersoegelser/OECD_Peer_Review_of_E-government_in_Denmark.pdf [Accessed 24 June 2008].

OECD. (2008). Factbook 2008: Economic, Environmental and Social Statistics - ISBN 92-64-04054-4, OECD Country Profile 2008, Italy [online]. Available from: http://stats.oecd.org/wbos/viewhtml.aspx?queryname=469&querytype=view&lang=en [Accessed 14 April 2008].

Paoli, M. (2000). Paths for producers of stars; Reflections about the complexity arising before the management. Pescara: Libreria dell'Università Editrice. [Italian book whose original title is: "Sentieri per fabbricanti di stelle; Riflessioni sulla complessità che si erge di fronte al management"].

Paoli, M. (2006). *Management of Complexity and Complexity of Management; Innovation of the Multi-technological Systems*. Franco Angeli [Italian book whose original title is: "Management della Complessità e Complessità del Management; L'Innovazione dei sistemi Multitecnologici"].

Petersen, Friis Arne and **Kristensen,** Poul E. D. (October 2005). *Meeting The Challenge: The Modernisation of The Danish Foreign Service* [online]. Ministry of Foreign Affairs of Denmark: Embassy of Denmark in Ottawa. Available from:

http://www.ambottawa.um.dk/en/menu/AboutUs/TheEmbassy/SpeechesAndPublications/Meeting+the+challenge+The+modernisation+of+the+Danish+Foreign+Service.htm [Accessed 16 June 2008].

Martinez, P. (2003). Agenda XXI of the Province of Florence, ideas and actions for the sustainable development of the province's territory, EASW final report. [online]. Province of Florence. [Italian document whose original title is: "Agenda 21 della Provincia di Firenze, idee ed azioni per lo svilupposostenibile del territorio provinciale, rapporto finale EASW"]. Available from: http://server-nt.provincia.fi.it/ambiente/ps/a21/pdf/doc/FI21-EASW-Rapporto-Finale.pdf [Accessed 1 July 2008].

Quintieri, B. (June 2006). *How to promote Italy and Trade* with related comments by D'Auria Eugenio and Mariani Matteo [online]. Lavoce.info. Available from: http://www.lavoce.info/articoli/pagina2216.html [Accessed 8 June 2008].

Rana, K. S. (2004). *The 21st Century Ambassador, Plenipotentiary to Chief Executive*. Malta and Geneva: DiploFoundation.

Rana, K. S. (2005). *Foreign Ministries, Change and Reform* [online]. Working Paper. Malta and Geneva: Diplofoundation. Available from: http://www.diplomacy.edu/conferences/MFA/ForMin.pdf [Accessed 16 June 2008].

Rana, K. S. (2007). *The Re-invented Embassy*. Post-graduate course in "21st Century Diplomacy", Lecture 6. Malta and Geneva: DiploFoundation.

Research European Commission. (2008a). *A brief history of the EASW methodology application* [online]. Brussels: Research European Commission. Available from:

http://www.intrack.org/index.php?option=content&task=view&id=129&It emid=166 [Accessed 30 June 2008].

Research European Commission. (2008b). The structure of the scenarioworkshop method [online]. Brussels: Research European Commission. Available from: http://www.intrack.org/index.php?option=content&task=view&id=132&Itemid=169 [Accessed 30 June 2008].

Rizvi, Gowher (2008). *Innovations in American government: some observations and lessons learnt* [online]. Research Giannini-Formez II, Promotion seminars "Administrative innovation, International context and growth". Bologna: Spisa. Available from:

http://unpan1.un.org/intradoc/groups/public/documents/CAIMED/UN PAN028993.pdf [Accessed 15 June 2008].

Rohm, H. (2004). A Balancing Act [online]. Washington DC: Balanced Scorecard Institute. Available from: http://www.balancedscorecard.org/Portals/0/PDF/perform.pdf [Accessed 14 June 2008].

Rohm, H. (2002). *Improve Public Sector Results With A Balanced Scorecard: Nine Steps To Success* [online]. Washington DC: Balanced Scorecard Institute. Available from: http://www.balancedscorecard.org/Portals/0/PDF/BSCFinalPresentation. pdf [Accessed 14 June 2008].

Santonen, T. et al. (2007). *Introduction to national open innovation system (nois)* paradigm, a preliminary concept for interchange [online]. Helsinki: Finland Futures Research Centre and Turku School of Economics. Available from: http://www.tse.fi/FI/yksikot/erillislaitokset/tutu/Documents/publications/eBook_2007-8.pdf [Acessed 1 July 2008].

Secretary of Defense of the United States, Department of Defence. (10 June 2004). *Performance Transformation Utilizing Lean and Six Sigma* [online]. Corporate Fellowship Program. Cleveland, Ohio: McKinsey & Company Available from:

http://www.ndu.edu/sdcfp/reports/2004reports/McKinsey04Final%20.do c [Accessed 1 June 2008].

Seneca, L. A. (62-65 AC). *Epistolae morales ad Lucilium*.

Senge, P. M. (1994). The Fifth Discipline: The Art and Practice of the Learning Organization. Currency.

Snellen, I. and **Thaens,** M. (2008). From e-government to m-government: towards a new paradigm in public administration? [online]. Ricerca Giannini-Formez II fase, Promotion seminars "Administrative innovation, International context and growth", Spisa, Bologna, January 2008. Available from:

http://unpan1.un.org/intradoc/groups/public/documents/CAIMED/UN PAN028992.pdf [Accessed 26 June 2008].

The Danish Board of Technology. (2008). *Scenario Workshop* [online]. Copenhagen: The Danish Board of Technology. Available from: http://www.tekno.dk/subpage.php3?article=471&toppic=kategori12&language=uk [Accessed 30 June 2008].

United Nations, Department for Social and Economic Affairs. (2005). *Global E-Government Readinesss Report* 2005, *From E-Government to E-Inclusion* [online]. Available from:

http://unpan1.un.org/intradoc/groups/public/documents/un/unpan0218 88.pdf [Accessed 22 June 2008].

United Nations, Department for Social and Economic Affairs. (2008). *UN E-Government Survey 2008, From E-Government to Connected Governance* [online]. Available from:

http://unpan1.un.org/intradoc/groups/public/documents/un/unpan0286 07.pdf [Accessed 23 June 2008].

World Bank, International Bank for Reconstruction and Development. (2007). *Doing Business* 2008 – *Comparing Regulation in 178 Economies* [online]. A copublication of the World Bank and the International Finance Corporation. Available from:

http://www.doingbusiness.org/documents/FullReport/2008/DB08_Full_Report.pdf [Accessed 14 April 2008].

World Economic Forum. (2007). Global Information Technology Report 2007-2008 [online]. Geneva: World Economic Forum, IN SEAD, Cisco Systems. Available at:

http://www.weforum.org/en/initiatives/gcp/Global%20Information%20Technology%20Report/index.htm [Accessed 24 June 2008].

DECLARATION

I hereby declare that this dissertation is my own original work.

Eleonora Merlicco 31 July 2008, Cerignola (FG), Italy