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#### Introduction

The Public Administration Reform, that has been taking place in Italy for 15 years, is characterized by the effort to increase productivity, ability and quality, despite the cuts in available financial and instrumental resources. Of course, this target is reachable only through a strong change of managing policies, based on the valorization and protection of the available resources; within this meaningful change of perspective, the management is asked to be leader, both in the decisional process and in the promotion of innovations, adjusting the managing style towards the burden of responsibility which, considering the dynamicity of the Public Administration, could rapidly change.

The managers, hence, become the drivers of change within their own structure and they are evaluated not only for the productivity and the savings made through their activity, but also for the way they react to and face obstacles that endanger the objectives of the organization. The success of an Administration, therefore, does not only depend on the strategic lines or the consistency of the professional assets, which strictly is linked to knowledge spreading, but also on the capacity of managers to anticipate possible critical issues of the productive process.

These attitudes can hardly be identified during recruitment because the latter is based on the evaluation of past experience and technical knowledge; it is necessary, therefore, to organize initiatives to measure these aspects in order to benefit from them, to strengthen possible weaknesses, and to assign the right person to the right place.

In the Italian National Institute of Statistics (Istat) the events organized over the past three years for the development of organizational behaviors involved many and different structures of the organization, in particular those dedicated to professional training and management innovation. Aim of this paper is to describe the main initiatives that most have contributed to the growth of the managerial culture, e.g. training program addressed to Istat management, self-assessment through the "360° feedback" method, risk management system implementation.

# Section one: From competence to awareness. The role of management

# 1. Which training for managers?<sup>4</sup>

Managers have to be the drivers of change in a context characterized by lack of resources, uncertainty, new policies, new rules, innovation of technologies available.

So how do they have to play such a role, which competences do they need, how training can support them in winning the challenges they have to face?

Of course, managers are required to have a sound professional know how: knowledge of their "core business"; knowledge of the steps of the production process; knowledge of what happens outside their own organization, in similar contexts. In fact, for a manager having a sound professional know how is the pre-requisite to be recognized as a leader.

However, it is not enough: moving from the traditional bureaucratic organization to what is called post-bureaucracy, in order to act their leadership managers have to be able to transform that professional know how in new products and services, spending their skills in changing processes and rules, in pursuing innovation, in motivating their employees, in enhancing the learning process throughout the whole organization.

On managers' side, the challenge is to integrate the growing of their professional know how with the development of their managerial competences. On the training side, the challenge is to balance training programs addressed to professional updating with personal development paths aiming at the growing of the skills managers are required to have. This is why training has to be thought as a global approach, focusing on mutual interrelations between the human and the technical environment, aiming at developing both individual and organizational capability.

In order to achieve that, in order to support both integration and development of people and the change of the organization as for its processes, its products and services, training has to take managers throughout their professional life continuously, with no breaks between work and learning. Within this framework of "continuity", the training for managers becomes more and more modular: training pills, alternated along a period of time with different activities (project work, coaching sessions...). It's not only a matter of costs; it's also a matter of (lack of) time: managers cannot stay too much time far from their work, from that complex system of connections and interrelations which an organization is made of. A "work centered", continuous training is so - as Peter Drucker said - the only way training fits the requirements and needs of knowledge workers.

Such an approach strictly affects the didactic methods to choose. Methods have to be strongly connected to the working context, while at the same time involving participants, making them the main actors of the training (better: learning) set, and enhancing exchange of experiences and cooperative learning. Project works and laboratories; case studies; storytelling; action learning and coaching: these are the didactic tools which turn out to be the most effective ones in a "work centered" learning set like the one to be designed for managers. More than the outdoor training (too expensive, and – above all – too far from

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the actual work), while e.learning packages are making room for advanced technology based environments such as communities and social networks.

In fact, a "work centered" learning set seems to be the most effective way to meet the managers expectations: they don't want to waste time, first of all. They don't want to spend time listening to theoretical frameworks they can find elsewhere (on the net, in a book...): they want to talk each other about their work, share experiences, learn from best practices, avoid the same mistakes.

They have to feel their training as useful. This is why they have (they want, often) to be involved since the design phase of the training, by actively collaborating with the training staff to draw learning solutions suitable to their requirements and needs. More and more often they are also involved (and required by their peers) as trainers and coaches; more than experts from outside, in fact, they seem to be trustworthy in spreading knowledge and conveying patterns, values, behaviors consistent with the organizational culture. From this point of view, it is also crucial a strong, explicit, visible commitment of top management towards the training activities. The message to be given is that top management wants managers in the organization to develop their competences, it trusts in the training activities to carry out and invests money and time on that.

At the end, we can say that training addressed to management requires the following "ingredients":

- interrelations between the human and the technical environment
- continuity
- modularity
- involvement of managers in co-design and in training
- top management commitment

We have tried to use all of them in our managers' competence development activities.

# 2. The competence development of Istat's management<sup>5</sup>

In order to enhance the development of Istat's management, since 2010 activities were carried out to increase competences supporting on-going innovation processes and organizational changes.

Such actions followed two axes:

- training addressed to Istat's management
- self-assessment through the "360° feedback analysis".

#### 2.1 Training activities for Istat's management

The training path was planned and developed according to a many years perspective, aiming at:

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- supporting management in connecting Istat's strategic objectives with their own operational objectives, also with regard to the on-going performance assessment process;
- providing management with tools in order to effectively share with their employees objectives, values, commitment;
- raising in the management a higher awareness on the organizational wellness issues, in order to improve the working atmosphere within their units;
- increasing the attention towards safety-at-work issues and towards management's duties in taking care of their employees' health.

In 2010, the training programme was designed in order to meet an Istat strategic objective ("To strengthen the training for managers") and was planned with the purpose of support management in the innovation of institutional and organizational structures. The aim was to update Istat's management on issues related to evolution of ICT in the field of organization of knowledge (web 2.0, social networking and process re-engineering within Public Administration) and to draw attention to mobbing and sexual harassment issues; moreover, courses were delivered on risk management and on uneasiness at work. Training contents were delivered according to a step-by-step increasing methodology: in a first step, topics were dealt with in short modules; in a second step, topics were deepened, according to specific requests made by participants, in longer modules.

In 2011, the general objective of training was to strengthen management's competences in planning and programming their activities, with the aim of providing participants with tools to manage their own work and improve the way of communicating their objectives to the employees, also with respect to the new performance assessment system.

In order to achieve this goal, the learning path was based on the development of competences connected to:

- definition and sharing of the objectives of the organization
- planning of activities
- effective communication of objectives to the employees
- assessment of organizational behaviors.

The training methodology was based on the principle of the "learning path", carried out through project work activities and support at-a-distance, also through a blog dedicated to managerial training.

The project was developed along two phases, the first being a pilot addressed to a small group of managers (10). The didactic program was focused on the following issues:

- definition of objectives and performance indicators
- assessment of employees' organizational behaviors.

Such issues were tackled in 6 half-days, during which managers lived their participation as a chance to reflect on the their own planning activity. Supported by the trainer (a consultant from a company), managers analyzed their planning tools and focused on their weaknesses and strengths. In particular, the debate around the assessment process was so rich and relevant, that the conclusions were taken to the attention of the Conference of managers held after the course. A report on the main critical issues raised during the course was then

presented to the Top management of the organization; a grid to support the assessment process was produced as well, and made available to anyone wants to use it.

After the pilot phase, three other editions of the course – based on a 2-days program – were carried out at the beginning of the 2012, involving other 60 managers of Istat.

For the remaining part of 2012, the training activities for the management have been planned along two axes:

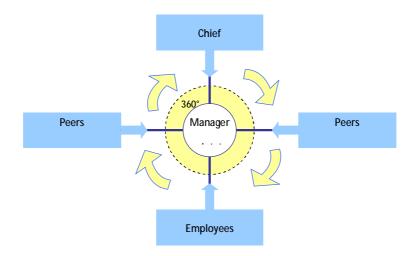
- the role of the manager at Istat, after the deep internal re-organization which affected our Institute from the last months of 2011 to the early months of 2012;
- the development of the competences related to the areas of improvement highlighted by the 360° feedback analysis on organizational behaviors (see below).

The programme (which will cover also the whole 2013) includes topics going from the role of a manager in the Civil Administration to the human resources management, from leadership to the organizational wellness, from process re-engineering to the code of digital administration.

These topics will be dealt with in a variety of learning settings: brief seminars (3 hours), base and advanced course (10- 20 hours), on the job training (20 hours) activated on demand from participants.

#### 2.2 The 360° feedback analysis

Together with the training activities above mentioned, from 2010 to 2011 sessions of self-assessment on organizational behaviors were held, involving 64 people (top and middle management). The project, stemmed from a strategic objective of the Institute, aimed at supporting managers in reflecting about their own individual effectiveness, through the analysis of the organizational behaviors in their management activities. The method used was the "360° feedback", an assessment tools which compares feedbacks about a manager at different levels (his/her chief, his/her peers, his/her employees) with the self-assessment carried out by the manager him/herself, in order to provide him/her with a picture of his/her features, strengths, weaknesses, and of the actions required to improve his/her way of acting within the organization.



The 360° feedback analysis was carried out in two steps, the first being a pilot phase involving 13 volunteer managers.

All the process was based on the filling in of a questionnaire made of 42 questions, describing different organizational behaviors. Each question was referred to one or more competences assumed as relevant to the role of managers: for example, strategic vision, attitude to change, attitude to quality, innovation, decision making... All these competences were taken from the competence system of the organization. Competences were described through three standard-behaviors: the feedback provider had to answer how often (seldom, sometimes, often, always) the manager acted in the way described. The questionnaire was filled in on line and in anonymous way.

The choice of the feedback providers was a crucial step of the process: all managers had to choose their feedback providers among people with which they had had meaningful work relations in the past. This was not always easy, in particular as for the employees: sometimes the number of 15 employees set as minimum was hardly reached. It went better with the choice of peers (the minimum number was set to 7): in this case it often happened that the same manager was chosen as a feedback provider by a large number of peers, even 10.

The communication phase was decisive for the success of the process: informative sessions on the project were organized involving managers, their peers and their employees: it was a great chance to explain the actual aim of the 360° feedback (not an "evaluation", but a tool to improve one's managerial competences) and the way the process worked (the answers given in anonymous way, and given back to the manager in an aggregated set of data). A lot of people approaching sceptically to the method, changed their mind after these meetings; at the end, we got 1.537 feedbacks out of 1.726 feedbacks required (89%).

At the end of the process, each participant received a gap analysis report, in order to compare his/her self-assessment with assessment from the other people involved.

The report was deepened at an individual stage with an external consultant, in order to focus on the improvement areas.

Also the Institute received a final report, in which the feedbacks were described in an aggregated way, giving a picture of the management as a whole as far as areas of competences development and improvement are concerned.

The results of the project were remarkable from two points of view:

- from the perspective of individuals, since managers had the opportunity to become aware of their weaknesses and strengths, through a comparison of their self-perception with the perception of other people in the organization; in addition to that, managers appreciated the chance to discuss with a "third part" (the external consultant) about their personal effectiveness in acting their role.
- for the organization, the final result was to have a map of areas of improvement of its management, and of the training needs on which to work to organize competences development paths.

Section two: The increase of organizational culture for risk management<sup>6</sup>

# 1. From problem solving to the organizational risk management

Managers, for them skills, expertise, professional knowledge and responsibilities, must demonstrate the ability to manage, address and resolve organizational or technical critical situations, revealing the limit (or extent) of their ability to problem solving, i.e. (or namely) the ability to decide what action to take to achieve a desired state or a given objective, from a given condition and the resources at its disposal; in this sense, problem solving can also be interpreted as the 'set of processes for analyzing, addressing and resolving positively critical situations or really risky.

Instinctively, the approach to problem solving tends to develop in a pattern that starts from the intuitive perception of a problem, to get a more precise definition, until the analysis and division into sub-problems, the formulation and testing of hypotheses for solutions, and concludes with an assessment of the possible choices and the application of the best solution. In practice, the problem is defined by an analysis of empirical data and a research of reproducibility of the problem, to analyze it almost automatically. In essence, the problem is before identified, then assimilated to previous experience to use the solution already implemented, but not cataloged, or made archetype of a new condition.

This is especially true in the case of stable market and environmental conditions. However, experience shows that the causes of a problem are hardly repeated in an identical and repetitive sequence, much less in the current climate, full of political, economic and social turmoil, that require to the public and private organizations to adapt their organizational dynamics. In unstable condition, the behavior of individual managers tend to change the search for effective solutions against the march of events, feared or hoped (for the effects they can produce), the occurrence of which is uncertain: the organizational "risk". Changing, therefore, the approach to problem solving, are used, primarily, standardized techniques that pragmatically address the criticality and facilitate the sharing of results and experiences. Such methods include, first, the selection of priority issue among those included in a list (Focus), then the collection of baseline data and relevant and critical factors (Analyze), to proceed to choose a solution among the possible alternatives (Fix), and finally passed to implementation of monitoring and evaluation of the chosen solution (Run).

To search for better solutions in critical situations, a developed ability to problem solving can mean the difference between a winning organization and an other in danger of bankruptcy: it becomes an added value that the company can draw upon in deciding under uncertainty. It is understood, therefore, the importance of measuring and supporting, even with training tools, the consistency of this wealth of knowledge to the interior of each organization, so as to "tame" the risky situations that could be envisaged.

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# 2. How risk management can enhance the organization

The general climate of uncertainty that pervades the scenario in which the Local and Central Public Administration work, amplified by pressing constraints imposed by the fiscal consolidation policies for the States belonging to the European Community, forces the public institutions to maintain a dynamic organization, high quality of services and outstanding productivity, even under scarcity of resources.

This has raised the strong need to enhance and protect tangible and intangible heritage at its disposal; in this context, in fact, their own assets, exposed to the turmoil of predictable and unpredictable events, which may damage functionality, become the most valuable asset to be protected; so it would be necessary that: (i) the top management can take a deep awareness of the incidence of harmful and dangerous events on the production processes, (ii) it is spread across the organization a clear view of the treatment and risk acceptance policies; (iii) it is encourages transparency, both with respect to the most significant business risks, and to the attribution of responsibility for the risk management function.

The awareness of the need for formal frameworks for risk management is also boosted by several factors, including:

- § The ease of access to data and applications and the expansion of relations with stakeholders (customers and suppliers), combined with the speed of economic change, make the risks intersected of each other in a complex and difficult way to manage;
- § The exponential increase of regulatory makes the compliance with laws a talkedabout subject, so, on the one hand, the PA must meet a series of obligations, often complex, contained in legal regulations, on the other, the responsibility of business leaders has become direct and personal;
- § The increasing "globalization", which requires to many government organizations to take in account of corresponding Community and international institution (consider, for example, Istat and Eurostat), which implies the need to manage risks beyond the boundaries of the State of origin;
- The increased visibility to the citizens, who increasingly exposes PA to reputational damage and loss of reputation, because of the ease of disseminating news and the multiplicity of information sources.

The way in which risk management is covered in the public sector is substantially different from what happens in the private sector, because different are the goals that involve the adoption of appropriate measures for risk management; in the first case, the ultimate goal is to optimize the service for the citizen, in the second, the maximization of shareholder income.

However, both the cases have in common the satisfaction of its key stakeholders and in both cases the organizational approach, tended to regard risk analysis as the cornerstone of the strategic choices of any production company, assumes a leading role.

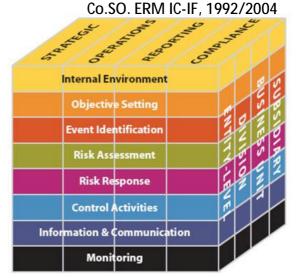
The Internal Control - Integrated Framework, prepared by the Committee of Sponsoring Organizations of the Treadway Commission (Co.SO.), published in 1992 and updated in 2004, represents the most widespread and popular international standard for the system of internal controls and risk management.

This framework, applied in some public institutions in Italy, defines the risk management business as "a process put in place by the board of directors, by management and others in the corporate structure used for the formulation of strategies throughout the organization, designed to identify potential events that may affect the company, to manage the risk into the limits of acceptable risk and to provide reasonable assurance regarding the achievement of corporate objectives."

According to this usage, the ERM is not only an isolated event or a static environment, but a series of actions that interact with one another and pervade the entire organization.

A summary of the contents of the ERM system is shown in the figure below along the 3 dimensions of the cube:

- 1. The interactions among the strategic, operational, reporting (i.e. reliability of the information and how they are represented) objectives and compliance with legislative and regulatory provisions;
- 2. The 8 system components:
  - i. The internal environment, i.e. style of the organization, risk perception by staff, philosophy of risk management, integrity and ethical values;
  - ii. The objective setting, that comes from a process of choice, by the top management, in line with the mission and philosophy of business risk;
  - iii. The critical event identification, i.e. the internal and external events that threaten the achievement of objectives;
  - iv. The risk assessment, according to the probability of occurrence and the their impact, distinguishing between risks
    - inherent (structural and inevitable) and residual (residual after being treated and mitigated);
  - v. The treatment of risk, within the limits tolerated by the organization, depending on how the management decides to respond to risk (by avoiding, accepting, reducing or transferring);
  - vi. The procedures for verifying the effective implementation of risk response actions;
  - vii. The dissemination and communication of information that can help staff in taking its responsibility;
- viii. Monitoring of ERM changes implementation.
- 3. The different levels of the organization and actions, controls and components of the framework that must be known to all personnel.



# 3. Thinking about risk perception

Conventionally, in most theoretical models of risk management, all types of organizational issues are associated with the definition of "risk", although the nature of the constraining factors can assume different weights, depending on the nature of the obstacle that can be interposed to the achievement of objectives; in fact, among the critical events, we distinguish (i) "risk events" whose occurrence is opposed by preventive actions, (ii) "criticality of organization", which depends on an objective situation of inefficiency, repairable only through the elevation of the quality of administrative processes.

In this perspective, the Risk Management aims to support policy making, both from the methodological and operational point of view, in order to steer the organization in excellent quality performance and define priority actions for the risk response to be included into strategic and annual planning.

According with the model adopted by some Italian government bodies, including Istat (the Co.SO. ERM, Enterprise Risk Management, Integrated Control - Integrated Framework 1992-2004), the first stage of the ERM process provides the analysis of the control environment in which this system must be implanted; in fact, to better work, the theoretical model must be calibrated on internal organizational, formed by the spirit of belonging and identity of those who belong to it.

The internal environment is the foundation of all other components of the ERM because it affects the rules and structure, it exerts a profound influence on how the strategies and goals are established, the activities are set and risks are identified, evaluated and managed in line with its own dimension of risk.

The environmental dimension is influenced by the history and culture that pervades it, and by many contextual elements, including: ethical values, expertise and dynamism of staff, delegation of responsibilities and risk management philosophy.

The latter, understood as a set of values and behaviors that characterize the company's attitude towards risk, address the control activities, information systems and communication and monitoring activities, from the formulation and implementation of strategies to the current operating activities, up to the way in which organizational risks are identified and managed.

Understandably, when the philosophy of risk management is evolved, understood and shared by all staff, the company is best able to assume and manage risk effectively; otherwise it could lead only to an heterogeneous and incoherent internal application of ERM. Actually, even when the attitude to risk is advanced, there may be cultural differences between the components of the organization that could give rise to uneven application of the ERM (for example, the managers of some facilities may be inclined to take more risks, while others may be overly conservative). If all components were operating according to a common philosophy of risk management, it would prevent inappropriate and harmful behavior for the company.

The ERM influences the actions of individuals and brings them back to a collective vision. In fact, to deal with and effectively manage criticality, it must combine the willingness of top management to define the maximum level of acceptance of risk, compatible with the pursuit of the institutional mission, with the ability of individual managers to evaluate the uncertainty as a threat or opportunity.

This ability depends on the willingness of the executive staff to take risks (risk appetite), within the limits of the tolerance threshold that an organization decides to accept (risk tolerance) to safeguard its strategic objectives, enabling the necessary checks on critical processes that enable them to maintain the level of risk exposure in the accepted range.

The magnitude of risk appetite depends on external factors (stakeholders involved, type of business, competitive landscape, etc.) and internal (company policies, risks specific to their sector of activity, etc.). The methods of measurement of these factors can vary from simplified qualitative models, based on the assessment of subjective elements (reputational factors, environmental compliance, perceptions of risk, etc.), until the development of complex quantitative systems based on the economic exploitation of both, the costs of taking risks and the countermeasures to be adopted.

The survey of risk perception by managers conducted in Istat joins in this context. The relating case study is illustrated in the second part of this paper.

# 4. Assessment of the risk perception in Istat

As part of the strategic objectives defined by the Istat political body, the Institute has started for about 2 years the project for the introduction of a Risk Management System, aimed at identifying, cataloging and assessment of risks weighting down on the organization, against which setting and monitoring the actions of "treatment", intended to cancel or hold them; the experimental phase of this project will be completed in 2012 and in 2013 the Risk Management will form an integral part of strategic and operating planning in the Institute. In line with the model adopted (CO.So. ERM - Enterprise Risk Management - Integrated Control / Intergrated Framework 1992-2004), the first stage of introduction of the risk management system has focused on the analysis of organizational and control system in which it is implanted.

The analysis of the environmental context represents, in fact, the development phase to determine the potential consistency between the attitude and the ability to manage critical events by management (Risk Profile), and the level of risk considered to be compatible with the nature and objectives of the institution, as defined by the apex bodies (Risk Appetite); any deviation resulting from the comparison between the two levels of risk defines the "Risk Tolerance", ie the margin within which it can evolve the level of acceptance of risk without compromising the strategic lines.

In this sense, Istat has decided to launch a survey for the top management on the perception of the dynamics and severity of risk factors that may affect the activities, either directly coordinates, or developed by the whole organization.

Among the possible methodological solutions evaluated for the topographic analysis of risk perception in Istat, was selected a questionnaire, derived from the recognized internationally standard (ISO 31000:2009, AS / NZS 4360:1999, A & O) and modeled on the definitions shared in the EU framework (PD ISO / IEC Guide 73:2002 and standards FERMA -Federation of European Risk Management Associations).

The Survey has been implanted with the primary objective to inquire about:

- 1. the level of attention given to risk management in preparing and monitoring the main activities of the Directorates and the Institute;
- 2. the consistency between the current programming and control environment and the risk management system that there will be implanted;
- 3. finding, albeit in simplified form, the factors that may cause danger of injury on work structures, divided into:
  - a. outside the analyzed structure and the Institute;
  - b. inside the analyzed structure: compliance, organization, technology and security systems, ethics of behavior;
  - c. cross-sectional among the different Istat Directorates.

The audience of the respondents has been identified in higher organizational positions (Directors and Heads of staff office), which were given the task and responsibility of compiling the "Questionnaire" distributed inside Institute through a web application.

In the questionnaire have been deliberately inserted heterogeneous expressions and used different types of response, in order to maintain consistently high attention of the respondent in expressing its assessment; also, considering that it is to detect a perception, were used, sometimes, terms remitted the interpretation of the respondent, (eg., "substantially", "normally", "total", etc..).

Neither statistical significance nor quantitative measurement of the phenomenon was attributed to the information collected, rather a qualitative meaning, as they showed the importance that managers attache to the risk, in the exercise of their functions and in the interaction with the rest of the Institute; the individual perception, however, is itself a particularly skittish phenomenon, because it depends on environmental trends that affect the one's field of competence.

Given the variability and subjectivity of risk perception, the results of analyzes of the responses showed a tendential behavior and do not establish a psychological profile or aptitude of the manager, whose assessment competes at tools and purposes entirely different.

The survey on risk perception has been initiated in order to build, based on the average of the responses, the overall profile of the Institute, to be compared with the degree of acceptance of risk considered compatible with corporate strategies; while it is in progress the implementation of Risk Management policy, which specifically identifies the actors involved in the process of governance, the definition of the tolerable level of risk has been likened to the level of perception expressed by top management, which includes the General Director and Heads of Department.

The questions included in the questionnaire, therefore, have been formulated so that answers can adequately express the propensity of taking and managing risks by the interviewed managers, representing all sectors of activities of the Institute.

The information obtained was processed to highlight the incidence of risk factors on planning and organizing the activities of each single structure and of the Institute's goals.

For this purpose, we selected four dimensions, which are most representative of the attitude of managers with respect to critical events. They describe:

- 1. the perception of risk referring to the manager activities, or the consideration of risk as a critical success factor for achieving the objectives of the directed structure;
- 2. the perception of risk for the Institute, namely the consideration of risk as a critical success factor for achieving the organization's strategic objectives;
- 3. the maturity of the control environment of the coordinated structure, i.e. the ability of the structure to implement and support a risk assessment system;
- 4. the maturity of the control environment of the Institute, which is the organization's ability to implement and support a risk assessment system.

Each of these dimensions corresponds to an aggregate set of answers, not necessarily placed in sequence, aimed at highlighting the character and the criteria used by the Manager in converting their perception of risk in organizational behavior.

The detail of these dimensions is illustrated in the second part of the document which describes the experience gained in Istat.

# 5. Risk management in prospect

Only recently, within Istat and, more in general, within the Italian Public Administration, risk management and the effects that it can produce, has become a topic of great interest. This trend is also dictated by the need to rationalize the organization, to reduce public spending, to enhance its available assets.

The systematic and structured management of organizational risk fosters the spread of a culture of public administration that evolves by learning from their mistakes and protecting their intellectual and tangible capital, whose value must be associated with the sense of responsibility and belonging of its personnel.

Istat is one of the few Italian public administration that has set up, about two years ago, a structured process of risk management, putting the project in charge the Technical Committee (Risk Committee), consisting of managers and scientists, until the establishment of a Risk Management System, derived from Co.SO. ERM, that must be integrated with planning tools and operational/strategic control tools.

The first "dividend", earned from the investment in the project, was reflected in the growth of organizational culture at all levels of staff, favored also through the organization of seminars, training courses and workshops as well as the realization of the risk management web site <a href="http://risk.istat.it">http://risk.istat.it</a>. Therefore, it is gradually spread within Istat the awareness that critical organizational events, that may occur in the pursuit of the objectives, must be addressed and treated, starting from the perception of risk "as is", covered by the survey described in the previous pages.

In this context, it is highlighted the importance of risk management in attributing a major role for managers for a model of efficient and transparent public administration, giving them both the responsibility to identify risks as part of their own competence, and the task to formulate appropriate response actions, through the human resources management, not only efficient, but also in line with expectations and prerogatives of those who belong to or cooperate to achieve results.

However, in order to complete a "qualitative cultural leap", it will need a major turnaround that overturns the position of the current players (owners of the Risk Management function) with that of the passive players (the structures required to apply the system). Having accepted that the purpose is not punitive but proactive, it is expected that the "supervised" structures will request the intervention, for real cases, of those who currently promotes the application of the ERM system.

This means a deep review of the approach to organizational problems (problem solving), for which an uncertain event shall not necessarily be considered a threat, but also a possible opportunity ("to be" scenario). In this way, it slides into the back the predictive ambition of the historicity of the event, based on the past experience, while it is strengthened the ability to effectively face critical situations previously unknown and with uncertain outcome.

# CASE STUDY: The survey on the risk perception in Istat<sup>7</sup>

# I.1 The questionnaire

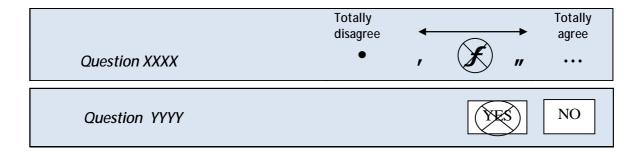
The questionnaire, consisting of more than 60 questions, is divided into the following sections:

- a. Internal control environment and organizational culture, to examine the organizational context and to analyze the sensitivity to the internal control of employees;
- b. Objectives of the organization and of the risk management system. The organization must identify, analyze and communicate its own risks to face and overcome potential obstacles to achieving its objectives;
- c. Identification and classification of risk factors, i.e. facts or events affecting the development of strategies or the achievement of objectives. They can have a positive impact (opportunities) or negative (threats), or both; their nomenclature (open) represents the link between identification and classification of risk, allowing the definition of a system in which all components are integrated with each other;
- d. "Cataloguing" risks, based on the previous classification, so that it is possible to build a catalog of critical events to evaluate, according to the method of the Control & Risk Self Assessment (C & RSA), in terms of severity and probability of its occurrence.

The responding parties and questionnaires sent, duly completed, amounted to about 30. About 10% of personnel has been involved in the analysis of production processes.

The questions in the questionnaire correspond to 4 different types, exemplified below.

1. Questions containing a statement, whose response shows your personal assessment, with reference to the complex reality or individual:

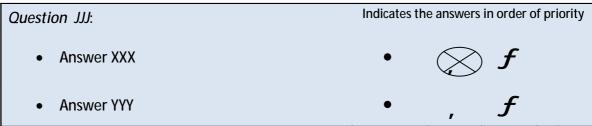


<sup>&</sup>lt;sup>7</sup> Author: Fabrizio Rotundi

## 2. Multiple choice questions



3. Questions that express the priority that you want to assign to the statement by a number:



or, by the distribution of a number of points conventionally defined between the included statements or statements suggested by respondent:

Question KKK:	Distribute 100 p.p.	Impact on risk
Answer XXX	30	
Answer YYY	70	X

4. Open-ended questions, where the compilation of the response is free.

The questionnaire, thus conceived, explores the most representative four dimensions of manager's organizational behavior, when the critical events occur. To analyze the survey responses, were selected:

- 1. the perception of risk compared to the activities of the manager;
- 2. the perception of risk compared to the Institute;
- 3. the maturity of the control environment headed by the respondent;
- 4. the maturity of the control environment of the Institute.

The details of these dimensions are described below.

- 1. The "Perception of risk in relation to its activities" (Size A) is measured by the content of those responses that determine whether and how much the risk affects the planning and management of the manager's activities within the structure of belonging. The aspects that explore this dimension are:
  - a. consideration of risk as an opportunity or threat for its own activities;

- b. the importance attributed to the systematic management of risks to achieving the objectives of its structure;
- c. the ability to use risk management to improve the performance of the managed structure;
- d. the weight assigned to possession of technical skills required for effective risk management in carrying out its activities.
- 2. The value of the "Perception of risk compared to the Institute as a whole" (Size B) is related to the connection between the existence of risk and the achievement of the strategic objectives of the Institute. In particular, are considered hallmarks of this dimension:
  - a. consistency between the strategic centralized system of planning and control and the need for programming and monitoring of the structure headed by respondent;
  - b. the adequacy of the current system to support a risk management system;
  - c. the trend of the level of risk perceived by the organization.
- 3. The "Maturity of the control environment headed by the respondent" (Size C), is dependent on the individual property to apply the risk management system adopted by the Institute. The design of this dimension takes into account:
  - a. the existence of a link between operational objectives and risk management, in order to prepare measures to contain the critical organizational;
  - b. sharing of objectives between managers and staff assigned to the structure;
  - c. level of standardization of processes within the structure;
  - d. the ability of the single structure to organize the work, encouraging, for the achievement of objectives, to take controlled risks;
  - e. the systematic identification of factors that may affect the achievement of the objectives of the structure.
- 4. The value of dimension "Maturity of the control environment of the Institute" (Size D), derives from answers to questions that investigate the ability of the Institute to implement and support a system of risk assessment. In particular, were considered the following elements:
  - a. the existence of an effective interaction between the Institute's government bodies and the analyzed single structure, in order to translate the strategic objectives within the activities of expertise;
  - b. the influence that the strategic objectives, the organizational context and the risk management affects on the preparation of measures to reduce the criticality;
  - c. the inclusion of experts in relevant initiatives for risk management.

#### I.2 Results in pictures

#### 1.2.1 The risk and control environment perception

To facilitate understanding and interpretation of data, the dimensions described in the previous paragraph have been represented using a "Radar" graph model, in which the value placed on each vertex is the average of the values declared by the manager in the set of questions that express the meaning of the relative dimension. Depending on the risk profile to be analyzed, the results of the survey can be differently interpreted.

Specifically were examined 3 situations:

- I. The risk perception by management, highlighting the outliers;
- II. The risk perception by management, by level of responsibility;
- III. The risk perception by management, by area of activity (technical and administrative).

### I. The risk perception by management, highlighting the outliers

Figure 1 compares the average rating given by all the executives involved in the survey (brown line) with the profile of the top management<sup>8</sup> (dashed blue line), including General Director and Chief of Department, who, in the current theoretical framework, is the level of acceptance of risk consistent with corporate strategies (risk appetite). Furthermore, we show the outliers, ie the maximum values (green bubbles) and minimum (red bubbles), recorded for each dimension.

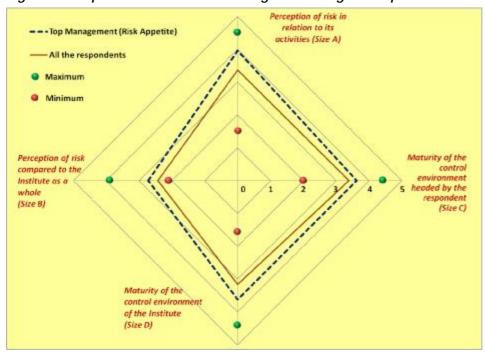


Figure 1 – Representation of the average of management profile

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<sup>8</sup> General Director and Chiefs of Department

The graph shows that the risk perception is assessed as an important component for its own activities planning (Size A), both for the top management and the total number of respondents. However, there is a more favorable approach by apical managers (value of 4 to a maximum of 5) compared to all respondents (value of approximately 3.5).

On the contrary, is perceived by both parties, a moderate mistrust in considering the risks an essential planning element to achieve the strategic objectives of the Institute (Size B). Again, however, it should be noted an attitude more inclined to consider the risk as an important factor for the Institute's activities, by the top management, although the gap between the two values is not so large as in the case of A. In addition, for this dimension, even the maximum value recorded (bubble green equal to 3.8 points) is by far divergent from the average.

We note, however, a positive general judgment about the maturity level of the control environment, both the single structure of belonging and for the Institute (Dimensions C and D: values slightly higher 3 out of a possible 5), such that it is allowed a positive development of the risk management system, based on the current organizational configuration.

Even for these two dimensions, the orientation of the apical Leadership is demonstrated more favorable than that of all the respondents, although the gap between the two values is more pronounced about the overall vision of the Institute (Size D).

#### II. The risk perception by management, by level of responsibility

Figure 2 shows the average profiles of senior management, divided by level of responsibility, including Top Management, i.e. General Director and Chiefs of Department, (blue dotted line), Directors (green line) and Heads of Staff Office (red line) in order to highlight 'how' and 'how much' they manages the organizational risk, according to the level of responsibility.

The average rating of top management, considered the highest level of tolerance permitted, shows a particular attention to consider the risk as the base element for the activities planning. In fact, from the graph, the value assigned by top management to A and B dimensions, is the highest among the three levels of responsibility, with a value, respectively, equal to about 4 and more than 2.7, on a scale of values ranging from 1 to 5. Moreover, these values are also higher than the average shown in Fig.1, in fact, the maturity assessment of the control environment for C and D sizes is higher than that expressed from the other categories of management (average value equal to more than 3.6).

Perception of risk in relation to its Heads of Staff Offices activities (Size A) --- Top Management (Risk Appetite) - Directors Maturity of the Perception of risk control compared to the environment Institute as a headed by the whole respondent (Size B) (Size C) Maturity of the control environment of the Institute (Size D)

Figure 2 – Mean profile for senior management by level of responsibility

Comparing the Directors profile (green line) with the top management's risk appetite (dashed blue line), are observed two fairly homogeneous approaches in assessing Size C, whereas are much less homogeneous in the evaluation of the other three dimensions (A, B and D).

The Heads of Staff Offices (red line) show, on the other hand, a more moderate assessment of criticality as part of the its own activities planning. In fact, they attribute a lower value to the control environment's maturity, where is implanted the Risk Management System (Size D), than the other classes of senior management. Risk management, instead, is considered an important component for activities planning under its own responsibility (size A, average about 3.2 points).

### III. The risk perception by management, by technical and administrative sectors

Figure 3 shows the average profiles of the legal-administrative structures (green line) and of the technical structures (orange line) compared with that of *top management* (blue dotted line).

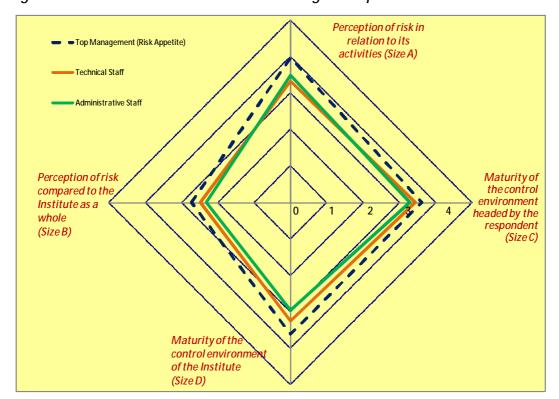


Figura 3 – Technical and administrative management profile

Analyzing the technical and administrative senior management's average profiles, all 4 dimensions converges to values lower than the *top management* (representative of the Institute of *Risk Appetite*). The legal and administrative structures, on the one hand, pay attention on the risks identified within the structure of belonging (Size A, mean value greater than 3.5 points on a scale 0 to 5), on the other hand, are less positive with risks related to the activities of the Institute as a whole (Size B, average value of about 2.5 points on a scale from 0 to 5). Also with regard to the control environment maturity (C and D sizes), legal and administrative structures are more confident in the approach of their structure than in that of the organization as a whole (Size C, value close to 3.5; Size D, value equal to about 3 points, on a scale of 0 to 5).

The technical structures, reveal the same level of attention to the risks identified on the statistical production Directorates and on the Institute as a whole for all the dimension A, B, C, D; the average is around 3.5 percentage points.

The comparison between the administrative and technical-scientific profile shows a more favorable judgment, by researcher, to make risk management an essential factor to get the activities successfully (size B, C and D). Finally, risk management is more important for the administrative top management, referring to the planning and monitoring activities.

#### 1.2.2 The risk factors

Risk factors are events (voluntary or involuntary) originated from internal or external sources of the people concerned, affecting positively or negatively the strategies development or the achievement of objectives.

The manager must be able to identify these factors and to assess whether these represent opportunities or risks; the factors with negative impact determine risks that require prompt and effective responses, while those with positive impact represent opportunities for the development and growth strategies.

In the scheme of the questionnaire, these factors have been divided among:

- a. External to the operational processes;
- b. Internal to the operating processes, but distinct in:
  - i. The regulatory compliance;
  - ii. The organization;
  - iii. The technology and information management;
  - iv. Integrity and ethical behavior.
- c. Cross-structures, with reference to decision-making processes.

In addition to this classification (consistent with the proposal from the European Commission and the Framework "ERM - Co.SO. Report" adopted by ISTAT), in the same section of the questionnaire, managers were asked to assign a priority to the risk factors, by distributing 100 points within each question group, based on the greater or lower impact on the activities of the structure coordinated by them.

In this way, it was possible to represent graphically, for each category of risk factors, the danger of perceived risk, taking into account the variables: "Priority of perceived risk" and "number of occurrences".

In the "bubble charts" shown below, the risk factors are located on the x-axis with reference to the "number of occurrences" and on the y-axis referring to the "priority of perceived risk" parameter; the "bubbles size" is a function of the value relating to each category of risk.

The tables below show the results of the analysis of risk factors, for each category indicated in the nomenclature used in the questionnaire.

#### 1. External factors

The most part of interviewed managers think that among the main risk factors, for the activities governed by process owners outside the Institute, fall:

- the relations with other institutions/organizations (orange bubble), from which depends the cooperation for the fulfillment of agreements and conventions, stipulated, for example, also to acquire administrative data;
- the technological innovations (purple bubble), the development of which he feels
  particularly necessary in the public administration, to improve quality and increase
  efficiency of management and production processes, but whose investments are
  constrained by reduction in funding.

In many cases, the intervention of external factors may be due to causes "exogenous" to the subject who suffers them, to which it is subtracted, thus, the possibility of preventing the event, being able only to limit its impact.

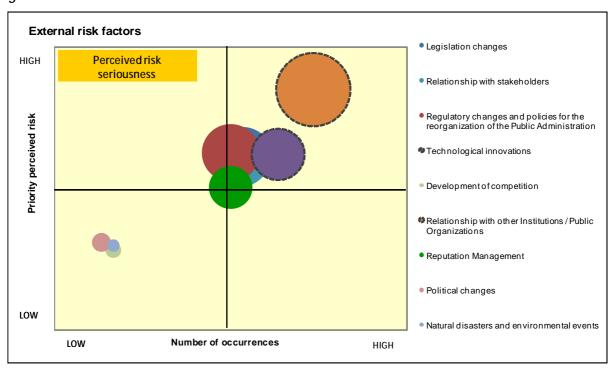


Figure 4 - External risk factors

#### 2. Internal factors

Since the internal factors directly affect the operational actions of the organization, this category is divided in turn into 4 sub-categories, for each of which are represented the risk factors considered to be of greater impact:

- I. The regulatory compliance;
- *II.* The organization;
- III. The technology and information management;
- IV. Integrity and ethical behavior.

## I. Regulatory compliance

Among the risk factors from which could result regulatory non-compliance for its own activities, the managers of the Institute have selected:

- Quality and times of supplied services (purple bubble), focusing on the possibility of contractual non-fulfillment by suppliers;
- Respect the laws and regulations and compliance with procedures and standards of production processes reported by over half of executives among the most worrisome causes of critical events, demonstrating the importance given to compliance with the rules in force.

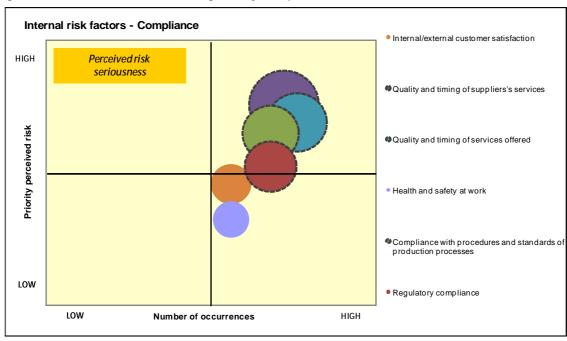


Figura 5 - Internal risk factors - Regulatory compliance

### II. The organization

The management's attention to the qualitative aspect of the resources is shown with the interest towards the best organization of work; this statement is confirmed by:

- the majority of respondents identifies the inadequacy of the *skill of resources* (green bubble) the main indication of a bug that could undermine organizational expectations and results. It is expected an appropriate personnel selection policy which aims at placing the "right person to the right place";
- a training and people development policy, unsatisfactory or inconsistent with respect of the needs, worries more than half of the managers interviewed;
- among the major factors that can affect the quality of the organization, have been reported the efficiency of production processes and innovation of the work style, with the awareness that the two aspects (efficiency and innovation) are closely related and dependent.

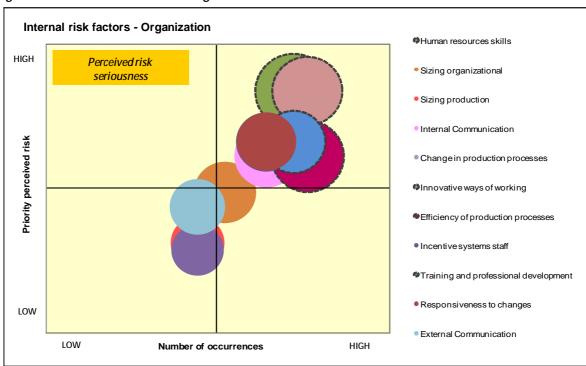


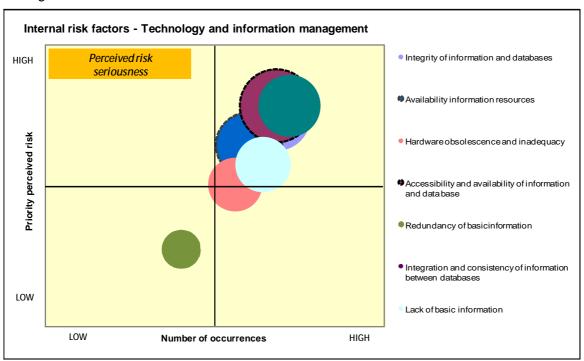
Figure 6 – Internal risk factors - Organization

# III. The technology and information management

Since, for a methodological choice, were excluded from the survey ICT technical questions, not being faced through organizational solutions (eg, computer codes, network architecture, application development software, etc..), the managers focused the attention on:

- availability of information resources necessary to support the official statistics production; the survey reveals a widespread fear about possible IT malfunctions, due to obsolescence or unpredictable events, that could produce a disruptive impact on the Istat outcome expected by the community, policy makers, with obvious implications for the loss of reputation;
- accessibility and availability of information and data base, from which depends the continuity in providing production and dissemination services, and the correct use of information by inside and outside users, for their role into the organization or for the position that society accords them.

Figure 7 - Internal risk factors indicated by respondents - Technology and information management



#### IV. <u>Integrity and ethical behavior</u>

An efficient organization, responsive to change, is based on the collaboration and hard work of all those who take part, regardless of the played role and the hierarchical level. This principle emphasizes the importance of harmony in the working environment and management's attention to the dimensions that could be compromised by a careless management for organizational wellness issues. Among them, have been identified:

- Sense of belonging of personnel, understood as the recognition and sharing of corporate values by all staff;
- attention and protection of *policies and procedures to comply with the security of data and assets"*, aspects closely linked to respect for privacy legislation and data security, breach of which is one of the risks of *compliance* to which the administration must pay attention;

Emblematic is the marginal level of concern about the possibility that the personnel could damage or fraud the Institute assets (represented by the factor *Fraud staff*), a clear sign of confidence towards employee behavior.

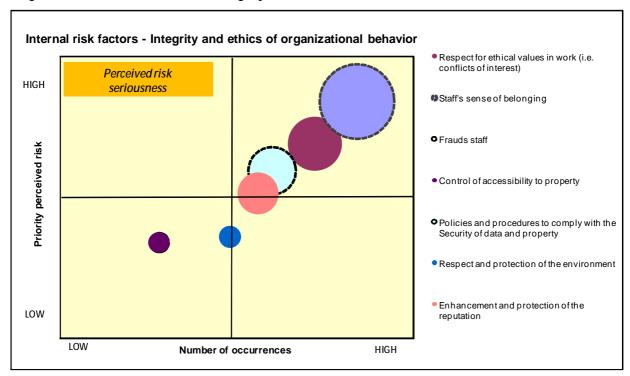


Figure 7 – Internal risk factors – Integrity and ethical behavior

## 3. Cross-cutting factors

According to Istat top management, the outcome of production processes across the organization that require the cooperation and participation of stakeholders, can be put in jeopardy by factors that affect:

- a) "Leadership and coordination between the transverse processes in the internal structures", concerning the identification of the activities-owner that involve more structures, from which may arise conflicts of competence "positive" or "negative";
- b) Constraints contractual for personnel, for recruited staff on flexible contracts from which depends the continuity of delivery services;
- c) "Financial Constraints," which affect the compatibility between strategic and operational objectives and the availability of resources.

