
ISO9000, Consultants and Paradoxes: a Sociological Analysis of Quality Assurance and Human Resource Techniques

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RESUMO

Neste artigo se analisa a implantação da ISO9000 em duas empresas francesas de alta tecnologia. Utiliza-se a Teoria Neoinstitucionalista para mostrar como a implementação das normas ISO9000 induz isomorfismo nas organizações. Propõe-se uma tipologia relativa a implantação das normas ISO9000, que podem ser implementadas de duas maneiras diferentes: por meio de uma implementação em profundidade, na qual existe a preocupação dos dirigentes com a eficiência do procedimento, o aumento de produtividade e a busca de legitimidade externa pela organização; por meio de uma implementação instrumental, cuja única preocupação é a busca de legitimidade externa e melhoria da imagem institucional da organização. A análise dos dois estudos de caso apresentados mostra que fenômenos de resistência a mudança são frequentes quando a implementação das normas ISO9000 produz mudanças importantes nos jogos de poder e na organização informal. Os estudos de caso mostram, dessa forma, que os responsáveis pela implementação da ISO9000 e os consultores devem considerar o impacto dessa ferramenta organizacional na estrutura informal e nos jogos de poder, bem como os fenômenos de resistência organizacional produzidos pela mudança nas regras da organização.

Palavras-chaves: paradoxo; mudança organizacional; gestão de pessoas.

ABSTRACT

This article analyses ISO9000 normalization processes as sources of organizational isomorphism according to the new institutional theory. We present two in-depth case studies in the French computer industry showing that there are two manners to implement ISO9000 standards: an **in-depth** procedure (concerned with organizational effectiveness and with external legitimacy) and an **instrumental** one (only concerned with external legitimacy). Our findings show that resistance to change is a common phenomenon in ISO9000 implementation programs having high impact on organizational power games and informal structures. In order to face these issues we suggest that consultants must go beyond **engineering** consultation methods that are only concerned with the structural **fit** between the organizational standards and the ISO9000 requirements. The paradox HRM model shows that information that threatens an organization's collective self-concept is often ignored, rejected, reinterpreted or hidden. The manifestation of social defenses – the ways of groups of people deal with non-contained forms of anxiety and fear, can be seen as sources of behaviors blocking organizational change.

Key words: paradox; organization change; human resource management.

NORMALIZATION AND ISOMORPHISM

New institutional theory describes normalization as one of the mechanisms that induce isomorphism in organizations, leading them to adopt structures and practices that follow generally accepted idealized models and myths. According to this theory, there is a general trend towards standardization because organizations seek support and legitimacy in their institutional fields by adopting structural models that are generally perceived to be the best available. In that way, international normalization entities like the ISO (International Standard Organization), which are responsible for issuing many kinds of industrial norms, are key actors in defining the isomorphic properties of many institutional fields.

Social actors and organizations adopt institutional models not only because they perceive them as the best alternatives, but also because they are rewarded to do so by increasing their legitimacy in the field, enabling the access to certain resources, and ultimately increasing the survival chances of the organization. New institutional theory suggests that an institutional sector is a space that aggregates several organizations competing for scarce resources. Institutional sectors are characterized by the elaboration of norms and rules to which organization conform in order to be recognized as legitimate player, in order to get the support of other social actors and organizations (Scott and Meyer, 1981).

Important new institutional scholars such as Scott and Meyer (1981) and Powell and DiMaggio (1991) propose a typology of the processes leading an organization to change its structure and managerial practices to adopt an institutionalized normative model. Professional associations, international normative organisms and governmental entities are important actors in the process of creating and molding organizations.

According to these authors, each institutional sector witnesses the confrontation of several normative models, which engage a symbolic battle at the end of which a small set of normative models is recognized to be more efficient and appropriate to this specific institutional sector. These models then represent the power equilibria of the sector, reflecting the relative prestige of each actor or organization.

According to institutional theory organizations adopt institutional models through four basic isomorphic processes:

. Coercion;

- . Induction;
- . Appropriation (organizational mimetic behavior);
- . Normalization (authorization).

Coercive isomorphism occurs when an outside organism legally imposes rules that are to be followed by the organizations in a particular field. Coercion happens when governmental entities enact legislation defining the forms and procedures that a specific set of organizations should adopt, using the normative power derived from the public authority.

Inductive isomorphism mechanisms occur when economic agents who do not have the legal authority to determine other agents' behavior try to do so by setting up tangible incentives leading the organizations in a particular field to adopt certain organizational forms and procedures. These economic agents usually promote isomorphism by promising benefits and prizes to incite other economic agents to act in the way they believe is more favorable to their own objectives.

Appropriation isomorphism occurs when organizations in a given sector deliberately imitate the models and practices set up by leading organizations. This practice, also called organizational mimetic behavior, is more noticeable in institutional sectors where uncertainty regarding the effectiveness of organizational models is high. In these situations some models usually emerge as more effective than others.

Normative isomorphism occurs when an accreditation organism has the right to evaluate and inspect other organizations, granting the use of a seal or label that certifies that the authorized organization follows the processes prescribed by the authorizer. ISO9000 certificates, issued by the International Standards Organization, fall into this category. Organizations voluntarily choose if they want to adopt ISO9000 norms and to open its practices and routines for ISO9000 audits. However, in many cases, ISO9000 standards are almost mandatory because in certain sectors important economic actors impose them as *sine qua non* conditions to their suppliers and retailers. In order to have the right use of ISO9000 labels, organizations have to prove that they follow the procedures and regulations prescribed by the International Standards Organization.

New institutional theory argues that the formal structures of many organizations in postindustrial society reflect the myths of their institutional environments instead of the requirements of their work activities. Norms, technologies and procedures may be seen as a highly institutionalized structures that function as myths. These institutionalized technical procedures are taken for granted means to attempt

organizational goals. They are considered to be the best tools available and their adoption is source of legitimacy. Their use avoids claims of negligence. As pointed by Meyer and Rowan (1991, p.42), “organizational structures are created and made more elaborate with the rise of institutionalized myths and, in a high institutionalized context, organizational action must. But an organization must also attend to practical activity”. ISO9000 procedure may be considered a myth in some industries.

As seen above, the objective of this article is to analyze ISO9000 normalization processes as sources of organizational isomorphism according to the new institutional theory. We present two in-depth case studies in the French computer industry showing that there are two manners to implement ISO9000 standards: an **in-depth** procedure (concerned with organizational effectiveness and with external legitimacy) and an **instrumental** one (only concerned with external legitimacy). Our findings show that resistance to change is a common phenomenon in ISO9000 implementation programs having high impact on organizational power games and informal structures. In order to face these issues we suggest that consultants must go beyond **engineering** consultation methods that are only concerned with the structural **fit** between the organizational standards and the ISO9000 requirements ⁽¹⁾.

A TYPOLOGY OF ISO9000 IMPLEMENTATION PROCESSES

In this article, we analyze the adoption of ISO9000 quality standards in two computer companies located in France. We have also performed an exploratory survey in 15 French consulting firms specialized in quality management. Our findings show that the majority of the ISO9000 consultants interviewed used directive **engineering** methods to restructure the organizations, trying to enforce conformity between ISO9000 standards and the organization’s formal structures. They used to carry out many quality inspections in order to prepare their clients to be audited by an official entity to obtain the ISO9000 certificate. These consulting methods were based on the assumption that organizations function according to their formal structures. These methods in fact try to increase control over organizational practices so creating a **tightly coupled system**. Nevertheless, many researchers on new institutional theory have concluded that there is a great gap between the formal and informal organizations. As pointed by Meyer and Rowan (1991), organizations in the same industry tend to be similar in formal structure, because they have common institutional origins. But they may show much diversity in actual practice.

Our two case studies confirm this proposition. They show that there are two ways to implement ISO9000 standards: an **in-depth** procedure (concerned with organizational productivity, efficiency and with external legitimacy) and an **instrumental** one (only concerned with external legitimacy) (Vasconcelos, 2000).

The In-Depth Implementation

An organization seeking an ISO9000 certificate has two kinds of objective.

- **Objectives related to organizational efficiency and internal structures:** based on the assumption that organizations function according to their formal structures, the quality assurance system proposed by the ISO9000 norms should, in theory, help the organization to build a transparent and reliable quality system, enhancing organizational production efficiency and effectiveness. In this sense, one of the most important benefits of ISO9000 is the transparency that it imposes on organizational procedures and routines, because they have to be formally described and written. This procedure has the objective to share information and to promote learning in the organization.
- **Objectives related to the external legitimacy of the organization:** the right of using the ISO9000 label should get the certified organization a certain amount of prestige and some market differentiation, contributing to a better organizational image and helping to open new markets, especially with organizations that require ISO9000 from its suppliers.

Managers who decide to implement an in-depth ISO9000 procedure are concerned with these two objectives: improving the production system's efficiency and external legitimacy. In-depth ISO9000 implementation is usually associated with the implementation of a Total Quality Management (TQM) program and the existence of a set of other management systems aiming to control and increase the production system's performance.

The Instrumental Implementation

In an ISO9000 **instrumental** implementation, organizations have the external legitimacy provided by ISO9000 standards as their only objective. These organizations usually build a façade, doing the **bare minimum** in order to satisfy the ISO9000 requirements. Sometimes they do not even have an acceptable quality assurance system.

As pointed out by Avery (1994, p.23), Jacques McMillan, an executive of the European Commission on Normalization, once declared the following:

“The European Commission is still very much committed to the standards and to quality in general, as long as the objective is quality and the enhancement of the competitiveness of industry. It is not interested in supporting the existence of an artificial quality and certification market that only serves the purpose of its providers. The ISO9000 standard led many customers and users to ask their suppliers to have quality assurance certificates, even when they are totally unnecessary for the purposes, for example when the customer carries out second-party audits even in the presence of a third -party certificate. This misunderstanding has led to a situation in which companies go for the certificate before going for quality. This approach leads to an artificial, costly and at best inefficient and short-lived quality system that does not help economic operators face up to global competitive conditions. [...] Some companies have succeeded in being certified without really having demonstrated that they even read the ISO9000 or 9004 normative instructions. There is a growing disenchantment not only for certification but, more important and more dangerous, for the whole move toward quality”.

Moreover, ISO9000 certification procedures tend to generate a **domino effect**: when large organizations adopt ISO9000, they often require large numbers of suppliers to do the same. These suppliers are in that case induced to require the ISO9000 from their suppliers. This phenomenon spreads the need for ISO9000 along large portions of the production chain, forcing many organizations to seek ISO9000 certificates even when they do not intrinsically believe that ISO9000 procedures are adequate for their specific realities. These organizations are then more likely to adopt instrumental implementation practices. As referred above, in a high institutionalized context, organizational action must support some myths to obtain legitimacy and rewards. As pointed out by Bradley (1994, p.12), a famous British expert on ISO9000 standards:

“Among companies of all sizes, the overriding reason for going into ISO9000 is one of real or perceived external pressures. A survey by Lloyds Register Quality Assurance Ltd. found that wanting to be considered for tenders was the overriding reason why firms of all sizes put themselves in for the standard. The Federation of Small Business cites from its members’ experience that the most important benefit of the standard is a marketing one”.

Another potential problem with ISO9000 quality standards is the proliferation of consultants specialized in writing the ISO9000 procedures, helping organizations to organize a façade to get the certification without really modifying the organizational practices they adopt. Some of these consultants offered pre-written

reports and manuals that could be easily adapted to fit the organization's activities. Finally, as pointed out by Brumm (1997), the existence of many entities capable of performing the required audits and issuing the ISO9000 certificates was pointed out as a weakness that favored instrumental implementation practices, contributing to the erosion of the ISO9000 prestige and credibility.

“The organizations have two options: They may elect simply to be registered to ISO9001, 9002 or 9003 as their customers specify: a competitive advantage will not necessarily result. Or, they may use ISO9000 as a point of departure for a customer-led quality effort, one in which marketing is a full fledged participant” (Brumm, 1997, p.35).

CASE STUDIES

The Ox/SA Case

In this case study we show that especially when managers intend to implement ISO9000 in a **in-depth** way, they can find organizational resistance mechanisms that make the ISO9000 much more difficult than expected. In this case we observed that strong organizational blockages led an organization to modify its ISO9000 implementation procedure, changing from an **in-depth** procedure to an **instrumental** one.

By the end of the 80's the computer industry suffered a significant technological transformation. The UNIX-based systems, based on open software architectures, started to take important markets that before were in the hands of restricted proprietary technologies that belonged to the main computer manufacturers. The UNIX-based systems allowed mainframe programs to be produced and sold in a radically different way. Before the UNIX era, almost all programming required by a mainframe computer had to be done in the proprietary language of that specific computer, thus restricting supply to the original computer manufacturer and some of its licensees. With the UNIX technology software products became transferable from one platform to the other, and allowing the creation of an open market for software. Customers that were once tied to only one supplier became free to choose from a much more diversified offer.

The competition among the companies increased and the prices dropped drastically. The gradual substitution of the large systems (Mainframes) for personal computers and Workstation Networks forced the companies to lower its costs and to work with larger production volumes. The most successful companies in

this period were those that managed to implement these changes quickly and efficiently, adapting its internal structures, practices and procedures.

The shift of power balance, that is to say, the increasing importance of marketing specialists over engineering specialists was not easily accomplished in some companies. The old software engineers, specialized in the proprietary technology, usually resisted to the organizational change programs proposed by the management teams. Old values, patterns, organizational structures and procedures were questioned and companies such as Microsoft, with standardized procedures, more informal structures, lower costs were pointed as success examples and valued in this context. Proprietary systems became associated with the past and considered to be an obsolete technology. New managerial structures that accompanied the new technology became associated with the future of the sector. Among them, we can mention the tendency towards software flexible factories, a semi-standardized system of production of software (Cusumano, 1990; Cusumano and Kamerer, 1992).

In summary, due to technological ruptures, the previously dominant normative models in the computer industry were questioned and new models were proposed, accepted and copied by many companies, becoming sources of legitimacy and prestige. We will analyze how a division of Ox S/A, a large European computer manufacturer associated the **in-depth** implementation of ISO9000 certificates to a complete restructuring of the software production system, seeking to consolidate new values and new organizational structures.

The European group Ox S/A is one of the world's largest computer manufacturers. It was created in the late 60's starting from a political decision of the country's government, with the objective of developing the computer technology needed to facilitate the development of the country's atomic energy industry. Because of this strategic character the company was soon acquired by the state that invested enormous amounts of money in the engineers' training, the same ones that, for 30 years, developed large proprietary systems for Ox S/A. The main objective of the company at that time was not to earn profits, but to locally develop computer technologies.

At the beginning of the nineties, due to the above described structural changes in the computer industry above described, the company began to accumulate enormous losses, losing up to one billion American dollars in 1993. At this time a new governmental coalition broke with the previous socialist government's practices and decided to privatize Ox S/A, appointing for such purpose an executive known by having restructured many companies with success. He and his management team reformulated the company strategic planning, creating the New Ox S/A and the Old Ox S/A.

The **old Ox** was formed by **old professionals** specialized in proprietary systems. These had developed the **mainframes** and the proprietary systems whose sale and maintenance were still responsible for 48% of the company's revenue. These systems would disappear progressively. The **New Ox S/A** corresponded to the development of UNIX-based open systems. Following this strategic planning, the resources generated by the proprietary systems would be reinvested and transferred to finance the **New Ox S/A** project, which included the old professionals' early retirement and the recruiting of young engineers specialized in the new technology.

The old professionals' group naturally questioned these decisions. This group didn't just question the content of the company's strategic planning, but the form that it was being implemented, the fact that it was imposed in an **authoritarian way**, without any kind of negotiation. They resisted and avoided adopting the new directives. Noticing this problem, the management decided to use the ISO 9001 implementation as a means to consolidate new norms, values and behavior patterns in the company, bending the resistance of the **old professionals**. The **old professionals** considered the ISO9001 program to be a menace to their power as **experts**, resisting to what they considered to be a decrease of their autonomy and an increase of controls on the part of the quality management department and of the management of the company. In December of 1995, a little before the certification audit for Association Française d'Assurance Qualité (AFAQ), the French organization that issues the certificate ISO9000 - this group announced that it would not write its procedures and routines of work according to the ISO9001 norms, thus sabotaging the certification audit. Because of this non-collaboration, the members of the quality department had to write the procedures and routines of the **old professionals**' with urgency in order to submit to the external auditors a seemingly coherent program. The company obtained the ISO9000 through an artificial way, manufacturing to the hurries a **façade** in a hurry just to convince the auditors. The company failed in implementing the norm ISO 9001 **in-depth** because of this phenomenon of organizational resistance implementing in the end the ISO 9001 system in an **instrumental way**.

Ox S/A Case Study Analysis

As seen above, usually, ISO9000 consulting methods are based on the assumption that organizations function according to their formal structures. The adoption of this kind of consulting procedure generates a rationalization process in which consultants and managers try to create a **tightly coupled system** in order to increase control over organization practices. This kind of procedure, adopted by Ox S/A managers and consultants, generated social tension and resistance to

change phenomenon in the organization. The psychoanalytic approach shows that when employees feel threatened in their social identities because of the increasing of the control systems, they will manifest their social defenses, this is, the ways of groups of people deal with non-contained forms of anxiety and fear. Social defenses can be seen as sources of behaviors blocking organizational change. One of the social defenses mechanisms, as seen in the Ox S/A case study, is **reaction formation**, that do not allow employees to adhere to the larger rationalities of the wider structure, maximizing the long-run effectiveness. On the contrary, this kind of reaction takes them to block the change program. Consequently, it would be necessary to break the vicious circle that is ISO9000 implementation programs based on an **engineering** model increases control over the organizational system, enhancing social actors defense mechanisms that ultimately block long-run effectiveness of the quality system.

In fact, this kind of **engineering** consulting model is mistaken in its assumption that, as pointed by Meyer and Rowan (1991, p.56), “organizations function according to their formal blueprints” and that actual activities conform to the prescriptions of formal structure. Heckscher (1994) also points out that the formal links of the bureaucratic structure (like ISO9000 standards) are too impoverished to support the real work of organizations. As seen before in organization theory, when everyone really follows the rules, the system does not work. The formal organization needs informal systems and flexibility to work well.

Ox S/A case study confirms the proposition that as attempts to control and coordinate activities in organizations lead to conflicts and loss of legitimacy, elements of structure are decoupled from activities. As pointed by Meyer and Rowan (1991, p.57), “decoupling enables organization to maintain standardized, legitimating, formal structures while their activities vary in response to practical considerations. Program implementation is neglected and inspection and evaluation are ceremonialized”. These authors point out also that the logic of confidence and good faith characterize ceremonial management. Avoidance, discretion and overlooking are some of the mechanisms social actors use to reinforce confidence in the myths that rationalize the organization’s existence.

It is the reason why **decoupling** allows employees to adapt to new rules and procedures, avoiding organizational resistance. Disputes and conflicts are minimized and the organization can mobilize support from a broader range of external constituents. Organizational diversity and a loosely coupled system may be stable solutions. “Even if, to some extent, such structures buffer activity from efficiency criteria and produce ineffectiveness, by binding participants to act in good faith and to adhere to the larger rationalities of the wider structure, they may maximize long-run effectiveness” (Meyer and Rowan, 1991, p.59).

An the end of the article, we show that as formal structures need informal systems and flexibility to work well, it would be interesting to develop complementary multidimensional quality consulting methods to deal with these problems. Diversity, paradox management, **loosely coupled systems** and a psychoanalytic approach seem to be most promising ways to create a ISO9000 program able to develop learning and long-lasting effectiveness in organizations.

The WorldCorp/NTE Case Study

WorldCorp is a large American multinational company that for many years has been one of the leaders of the computer industry. As many other large computer manufacturers, WorldCorp had significant losses in the early 90's, which led to a worldwide effort to adapt its structures and practices to a new competitive scenario. By the end of 1996 WorldCorp showed again positive financial results after having implemented a radical restructuring plan and reducing the company's workforce from 600.000 in 1991 to less than 350.000 in 1997.

This research was conducted at a WorldCorp R&D Laboratory in Europe. This laboratory specializes in Networking and Telecommunication Equipment (NTE) and was considered to be one of the most important R&D centers in the company, especially due to the growing demand for Internet and Local Area Networks.

In spite of the strategic priority of the NTE Laboratory, its headcount was reduced in 1996 from 1.600 to 1.000 employees. This led to an increase of the workload of each employee, since the requests for new products and technologies only increased. To address this problem the lab's management team decided to implement a new matrix structure and a new human resource allocation system locally known as **pipeline management**.

Through this system, 20% of the employees should be available to the company for long-term development projects and urgent works, while 80% of the employees are allocated to temporary projects. These transformations changed the structure of the organization. Just before promoting these changes, the direction of the laboratory implemented an ISO9001 program. This program was presented as the continuity of another quality program that had been used since 1986.

The previous program, in use since 1986, was a program of total quality that sought to introduce some concepts and new social practices in the company in that time. Thus, it introduced the practices of doing intensive market research and of **listening** to the clients, as well as developing quality indexes to measure the laboratory's performance. This program also aimed at understanding the

position of the company's in relation to its competitors, and at promoting the continuous improvement of the laboratory processes.

Some of the WorldCorp/TNE engineers overtly criticized the formalistic and **bureaucratic** nature of the quality management programs used in the laboratory. However, these criticisms were not translated in organized resistance to change. ISO9001 quality program was quickly and painlessly implemented in the TNE lab. It was not even one of the main concerns of the laboratory's management team. The formalistic nature of the previous quality management techniques used in the laboratory helped to fulfill the ISO9000 requirements. In reality, very few changes were needed, because the company's usual formalization level by far exceeded those required by ISO9000 standards. In other words, ISO9000 did not represent any significant changes in the laboratory practices and routines.

In spite of the formal and bureaucratic character of WorldCorp, the laboratory's management team allowed the development of informal groups that formed a true parallel organization. The lab's engineers communicated with its European and American colleagues using the Company's Intranet, overtly criticizing the formal **bureaucratic** organization and proposing common solutions for its problems. This informal organization was not opposed, however, to the formal organization, to the opposite, it worked as a complementary organization, where the professionals communicated with its peers, exchanging ideas and opinions, they shared problems and solutions and often protested against the *status quo*, uncovering and finding forces to tolerate the formal and bureaucratic structure.

Being accustomed to formal and bureaucratic procedures, the employees of the laboratory didn't resist to the ISO9000, that didn't represent a menace or a significant change in the laboratory's social system. In fact, the norm demanded just a few small adaptations in the lab's current systems, not representing the adoption of new models, values or new forms of behavior. The social system of this company was characterized for the lack of mobilizations and protests. Social actors expressed its dissatisfaction through the official channels of communication or through Intranet. The laboratory thus obtained the ISO9001 certificate in February of 1997 without major problems. The implementation of the ISO9000 standards did not threaten interests established as it happened in the Ox S/A case. It did not involve power disputes because it did not produce transformations in the system of rules consolidated in the organization. However, after two years, most of the innovations introduced by the Total Quality Program and by the ISO9000 standards had disappeared.

WorldCorp/NTE Case Study Analysis

Even when ISO9000 implementation works well and the company creates what can be considered as a good quality assurance system, there are limits in the engineering consultation method adopted by ISO9000 consultants: As pointed by Hecksher (1994), this consultation method generates an unexpected phenomenon: the successful failure. According to some researchers, despite the fact that the vast majority of those involved in TQM programs expressed satisfaction, upwards of 75% of the innovations disappeared within 3 years. Our findings at WorldCorp/NTE confirm these results. At the end of this article, we will further analyze this issue.

COMPARING WORLDCORP/NTE AND OX S/A ISO9000 IMPLEMENTATION PROGRAMS

The comparison between these two cases suggests that the concept of social relevance can help understanding the role of ISO9000 programs in organizational change. Programs with low social relevance are those that demand some superficial modifications in the practices of the organization. Its implementation neither disturbs the *status quo* in the organization nor disturbs equilibria already attained among the social groups. The WorldCorp/TNE case here presented is a clear example of this dynamics. ISO9000 programs with high social relevance have deep implications on the structures, procedures and cultures of the organizations they reach. They are programs aiming at deep and lasting organizational change. Ox S/A case study is a good example of these dynamics.

Both organizations studied used conventional consulting models to facilitate ISO9000 implementation, and our conclusions will focus on the limits to this kind of consulting. The propositions we formulated regarding ISO9000 consulting models and the change management dynamics they entail are the following:

- . the more an ISO9000 implementation process generates significant changes in the organization's social system, the more the organization is likely to face resistance to change;
- . the less an ISO9000 implementation process generates significant changes in the organization's social system, the less the organization is likely to face resistance to change.

These propositions suggest that the extent of the social change produced by

ISO9000 is an important issue. Yet, ISO9000 consultants, as showed in the survey presented below, generally ignore this factor. This survey’s findings suggest that when consultants, using conventional methods, succeed an **in-depth** ISO9000 implementation, they often face an unexpected phenomenon: the successful failure. Based on that it is possible to formulate a third proposition:

- . the less an ISO9000 implementation program changes the organization’s social system; the more likely the organization will face a successful failure.

Table 1 below shows conventional ISO9000 consulting methods dysfunctions and some of its consequences.

Table 1: Conventional ISO9000 Consulting Methods Dysfunction

Level of change	Process dynamics	Change program outcome
ISO9000 programs with low social relevance implemented through conventional consulting models	Successful failure	ISO9000 in-depth procedure succeed, but the technical innovations do not last
ISO9000 programs with high social relevance implemented through conventional consulting models	Resistance to change	ISO9000 in-depth procedure fails and becomes instrumental

THE LIMITS OF THE ISO9000 ENGINEERING CONSULTING MODEL

We have conducted an exploratory survey with 15 French management consulting firms that implemented ISO9000 standards. Our findings show that in an **in-depth** ISO9000 implementation, consultants try to achieve a good **fit** between organizational structures, norms and procedures and the ISO9000 official requirements. Actually, by itself, ISO9000 certification merely indicates the existence of a functioning quality assurance system that meets certain standards. Consequently, the most common way to implement quality systems is to restructure. The majority of the consultants interviewed (80%) uses a basic linear engineering consultation model – the end point (to get the ISO9000 certification) is quite clearly defined and then implemented through a directive process: define your ends, then seek the means to achieve them. As seen above, this method may generate a successful failure or resistance to change issues. In fact an important limit of the shuffling of the structure produced by the ISO9000 engineering consulting model is that it is usually a painful and disruptive

process, as has been demonstrated by the Ox S/A case study (Heckscher, 1994; Vasconcelos, 2000).

Mckingley and Scherer (2000) show that organizational restructuring in a turbulent environment has the unanticipated consequence of producing short term cognitive order in the top executives who engage in it and in the management consultants who oriented the process, because restructuring creates a perceived congruence or fit between the organization's internal structure and the state of the environment. However, restructuring also involves a paradox, because a second unanticipated consequence of this purposive management strategy is the longer-term disordering in the internal environment. Heckcher (1994, p.138) emphasizes the limits of the conventional **engineering** methods: "to deal with that disorder, consultants act as educators, trying to persuade, training and pushing social actors toward a vision that (at best) only they have".

We may ask now: How to build a long-term quality system? How consultants may help the company to live up to ISO9000 and TQM standards during the post-audit and post-certification years?

We advocate that the ISO9000 consultant, in an **in-depth** procedure, so as to assure the longevity of the TQM system in the organization, must go beyond consultation methods that are only concerned with the structural **fit** between the organizational standards and the ISO9000 requirements. We suggest that a psychodynamic consulting model as developed by Schein (1965), Argyris and Schön (1978), Hirschhorn (1997) and other authors may be complementary to conventional quality consulting methods. We advocate a multidimensional approach of consulting methods in order to lead with the complexity that characterizes organizational change. Our findings showed that the majority of the consultation methods used to implement ISO9000 procedures insist to adopt only a conventional approach.

PARADOX: A RESEARCH FRAMEWORK AND A HUMAN RESOURCE MANAGEMENT TOOL

Klein (1994) emphasizes this aspect when she points out that TQM procedures are based on operational control - observing the actual performance, comparing this performance with some standard and then taking action if the observed performance is significantly different from the standard. To do so efficiently, the organization needs the social actors commitment with TQM procedures. The employee discretion over work methods, however, must fall within the boundaries

of standardized work methods. Consequently, a paradox may be created between the need for operating discipline and employee empowerment over operating decisions. If these experts were assumed to be the sole experts in setting work methods, they may not accept the new quality standards. In order to avoid resistance to change it is important to solve this issue and clarify the empowerment-conformance paradox. But what is a paradox? How quality managers and consultants can use this approach to better understand resistance to change and successful failure phenomena?

As pointed by Eisenhardt (2000, p.703), paradox is the simultaneous existence in the organization of two inconsistent states, such as “empowerment and conformance”, “old and new”. Brabet (1993) points out the emergence of a HRM Paradox Model, based on the concepts as organizational complexity, duality and paradox management, exploring the tension in a creative way. It is based on the idea that change is not a smooth, linear and planned journey. Lewis (2000, p.762) points out important characteristics of the paradox as a research framework:

“a Paradox may denote a wide variety of contradictory yet interwoven elements: perspectives, feelings, messages, demands, identities, interests or practices. Paradoxes are constructed – as actors attempt to make sense of an increasingly intricate, ambiguous and ever-changing world, they simplify the reality into polarized either/or distinction. Paradoxes become apparent through self or social reflection or interaction”.

The author, based on the work of Kets de Vries (1995), Argyris (1996), and others, argues that paradox requires a guiding framework: a tool to help researchers to explore contradictory tensions, reinforcing cycles and their management.

Lewis (2000) argues that paradoxical tensions are perceptually, cognitively or socially constructed polarities that mask the simultaneity of conflicting truths. Most actors accentuate contradictions by interpreting data through simple and bipolar concepts. Such frames of references or schemes enable actors to make sense of complex realities, but they are biasing and once entrenched, become highly resistant to change.

After this, the reinforcing cycle perpetuates and exacerbates organizational tension and stress, generating defensive reactions in social actors.

The management of paradox is the attempt to explore tensions and drive the potential energy, insights and power that may enable dramatic change.

Paradox management entails exploring, rather than suppressing tensions. Lewis (2000) cites three psychodynamic mechanisms to explore paradox tensions: acceptance, confrontation and transcendence.

THE PARADOX HUMAN RESOURCE MANAGEMENT AND THE PSYCHODYNAMIC CONSULTING MODEL

Hirschhorn (1997) emphasizes the three phases of organizational development in the United States. The first one, after World War II, based on **quality of work life** movement. In the 1980's, started the second phase of organizational development. It was the phase of quality management and companies developed workers to help in restructuring the production of goods and services. As put by the author, "managers no longer wanted to limit the impact of workers discontent. Instead they mobilized them to reshape and redesign the work" (Hirschhorn, 1997, p.5). Now a third phase has begun. Many companies are beginning to emerge from the cost-cutting phase. Each phase personalizes work more deeply and brings the organization closer to creating a culture of openness. "The personalization of work has the potential to bring each of us to an understanding in-depth of our own and our institutions purposes, of the institutional environment that shapes them and of the capacities and intentions of the people we work with" (Hirschhorn, 1997, p.126).

In this context, the psychodynamic consultation model may allow managers to have a better understanding of the effects of the increasing personalization of work. Conventional consulting methods do not have the tools to understand these issues.

Researchers and consultants in organizational psychoanalysis use methods closer to historical research. A proposition linking a cause to an effect gains credibility only when it is tied to a broader story of events. This story becomes a coherent narrative.

Hirschhorn and Barnett (1993, p.3) emphasizes the fact that psychoanalysis of organizations consulting method takes the concept of "contradiction" for granted: "the psychoanalysis of organizations highlights the frequently paradoxical behavior of managers and workers. It takes the concept of "contradiction" for granted. It leads with paradox".

Consequently, when practiced as a clinical discipline as a form of organizational consulting, the psychoanalysis of organizations uses interpretation as the vehicle

for learning and dialogue and as the medium for clarifying the paradoxes of group life.

This framework is based on the work of authors as Edgar Schein, Peter Frost, Manfred Kets de Vries and others. Schein (1965) and Frost and Robinson (1999) have showed that the stress levels and anxieties that are produced by organizations in the working activities can be metaphorically thought of as **social toxins**. In addition, Kets de Vries (1995) argues that even if individual psychiatric models are insufficient in dealing with complex human systems, many clinical concepts that have their origin in the dialogue between two people can be used in a larger context. The contributions of psychiatrists at the Tavistock Institute – Jaques (1955) and Bion (1959), can be seen as extrapolations of the two-person encounter. Klein (1965) work shows that to cope with this anxiety, the child develops defense mechanisms, including splitting, introjection and projection. In this way, organizational dysfunctionality can be seen as the manifestation of social defenses – the ways of groups of people deal with non-contained forms of anxiety and fear.

We propose that, especially in ISO9000 implementation programs with **high social relevance** (those that will have deep implications on the structures, procedures and cultures of the organizations they reach), a multidimensional consulting approach must be adopted to lead better with the issues we have explained above. What does it mean to use a psychoanalytical approach or a paradox management technique to deal with these problems? We will exemplify these issues using the Ox S/A case.

Let us recall the most important aspects of this case and analyze it by using the psychodynamic approach. The **old professionals'** group, software engineers representative of the company's past, rejected the project of a **New Ox S/A**. Noticing this problem, the company's management decided to use the ISO9001 implementation as a means to consolidate the new norms, values and patterns of behavior in the company, bending the resistance of the **old professionals** to the new model. The old professionals resisted, trying to sabotage the ISO9001 program. The company obtained the ISO9000 through an artificial way, manufacturing a **façade** in a hurry just to convince the auditors. The ISO9000 **in-depth** implementation process has failed.

The first paradox we can find in the Ox S/A case study is the **old/new** paradox. It is often found in technological change programs, TQM and ISO9000 procedures. In this case, the old professionals defense mechanisms were **reaction formation**. This behavior entails excessively manifesting the feeling or practice opposite to the threatening one. In our case, the reaction formation

behavior was the sabotage of the ISO9000 procedures by the software engineers - a practice against the management. Breaking the reinforcing cycle between **old and new** that perpetuated and exacerbated organizational tension and defensive reaction would be a fundamental step to restore cooperation and dialogue among social actors.

The key dilemma in changing organizations is creating the future from the past. The past is the source of all knowledge and competencies in the organization. As shown in ISO9000 Ox S/A case study, people may have difficulties in collaborating in a radical change program when they identify with the past and they see it being **destroyed**. Since social identity is heavily based on past action, organizations may accept the past as a strategic asset, as a repository of competencies and as a bond that brings people together. In this way, the management of paradox means that social actors have to accept the past as a resource to leverage the present and the future. People are more likely to accept and embrace change when a **bridge** between past and future is erected, allowing them to move **chunks** of their past experiences, values and memories to build their new future identities (Brown and Starkey, 2000). If the Ox S/A managers had had professional help to deal with these issues, maybe they could have avoided some of these problems.

CONCLUSION

Is it possible to implement ISO9000 in a more creative way?

ISO9000 in-depth procedure is a tool that can allow people to share information, promoting learning in the organization. It depends on the way it is implemented. The psychodynamic consultation perspective suggests that in order to promote change and effective learning in the organization, managers have to implement rationalization tools and technology in a way in which the information is used to challenge existing ideas and to develop new perspectives on the future. Technology may generate new information, reconfiguring the nature of work and the social interactions in a more productive way (Zuboff, 1988). On the other hand, Brown and Starkey (2000) show that information that threatens an organization's collective self-concept is ignored, rejected, reinterpreted or hidden. These authors points out also that organizational learning literature tends to be overoptimistic regarding the weakness of barriers to learning, so it underemphasizes the difficulties involved in the learning process:

“a psychodynamic perspective suggests that once one embraces the identity of a learning organization, the organization actors must accept that identity formation is never closed and that the organization will develop a series of identities through time that reflect the organization’s and its members evolving self-concepts” (Brown and Starkey, 2000, p.108).

A psychodynamic perspective also suggests that it is no easy task. But Argyris (1992) shows that it is possible to deal with the difficulties and to promote double looping learning.

It is the reason we advocate blending psychoanalytic approaches with a careful diagnosis of the social tensions inside and outside the organization as complementary consulting methods to manage organizational change in a more effective way, building bridges between learning and effectiveness.

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REFERENCES

ARGYRIS, C.

On organizational learning.
Cambridge, MA: Blackwell, 1992.

Knowledge for action: a guide to overcoming barriers to organizational change. San Francisco: Jossey-Bass, 1994.

ARGYRIS, C.;

SCHÖN, D.

Organizational learning: a theory of action perspective. Reading, MA: Addison-Wesley, 1978.

AVERY, S.

What’s wrong with ISO9000?
Purchasing, v. 116, n. 3, p. 49-53, 1994.

BION, W. R.

Experiences in groupes. New York: Basic Books, 1959.

BRABET, J.

Repenser la gestion des ressources humaines? Paris: Economica, 1993.

- BRADLEY, M.
Starting management from ISO9000. **The TQM Magazine**, v. 6, n. 1, p. 50-54, 1994.
- BROWN, A. D.;
STARKEY, K.
Organizational identity and learning: a psychodynamic perspective. **Academy of Management Review**, v. 25, n. 1, p. 102-120, 2000.
- BRUMM, E.
Managing records for ISO9000 compliance. **Quality Progress**, v. 28, n. 1, p. 73-77, 1997.
- CUSUMANO, M. A.
Shifting economies: from craft production to flexible systems and software factories. **Research Policy**, v. 21, n. 453-480, 1990.
- CUSUMANO, M. A.;
KEMERER, C. F.
A quantitative analysis of U.S. and Japanese practice and performance in software development. **Management Science**, v. 11, p. 1394-1406, 1992.
- EISENHARDT, K. M.
Paradox, spirals, ambivalence: the new language of change and pluralism. **Academy of Management Review**, v. 25, n. 4, p. 703-706, 2000.
- FROST, P.;
ROBINSON, S.
The toxic handler: organizational hero and casualty. **Harvard Business Review**, v. 77, p. 97-106, 1999.
- HECKSCHER, C.;
DONNELLON, A.
The post-bureaucratic organization. London: Sage Publications, 1994.
- HIRSCHHORN, L.
The psychodynamics of organizations. Philadelphia, PA: Temple University Press, 1993.
- Reworking authority**. Cambridge, MA: The MIT Press, 1997.
- JAQUES, E.
Social systems as a defense against persecutory and depressive anxiety. In: KLEIN, M. (Ed.). **New directions in psycho-analysis**. London: Tavistock, 1955.
- KETS DE VRIES, M. F. R.
Organizational paradoxes: clinical approaches to management. New York: Routledge, 1995.

KLEIN, J.

The paradox of quality management: commitment, ownership, and control. In: HECKSCHER, C.; DONNELLON, A. (Eds). **The post-bureaucratic organisation**. London: Sage Publications, 1994.

KLEIN, M.

Contributions to psycho-analysis. London: Hogarth Press, 1965.

LEWIS, M. W.

Exploring paradox: toward a more comprehensive guide. **Academy of Management Review**, v. 25, n. 4, p. 760-776, 2000.

MEYER, J. W.;

ROWAN, B.

Institutionalized organizations: formal structure as myth and ceremony. In: POWELL, W.; DIMAGGIO, P. (Eds). **The new institutionalism in organizational analysis**. Chicago: The University of Chicago Press, 1991.

POWELL, W.;

DIMAGGIO, P. (Eds).

The new institutionalism in organizational analysis. Chicago: The University of Chicago Press, 1991a.

The iron cage revisited: institutional isomorphism and collective rationality in organization fields. In: POWELL, W.; DIMAGGIO, P. (Eds). **The new institutionalism in organizational analysis**. Chicago: The University of Chicago Press, 1991b.

SCHEIN, E. H.

Organisational psychology. Englewood Cliffs, NJ: Prentice-Hall, 1965.

SCOTT, R.;

MEYER, J.

Organizational environments: ritual and rationality. London: Sage Publications, 1981.

The organization of societal sectors: propositions and early evidence. In: POWELL, W.; DIMAGGIO, P. (Eds). **The new institutionalism in organizational analysis**. Chicago: The University of Chicago Press, 1991.

ZUBOFF, S.

In the age of the smart machine. New York: Basic Books, 1988.