LEAN PRODUCTION AND ONE-STOP SHOP FOR MUNICIPAL SERVICES

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ABSTRACT

Although lean Production is a largely debated issue in business management studies, it has recently become a relevant trend for public sector organizations. At the same time, empirical studies focusing on lean production in public administration are limited. The present article, based on a single case, explores the introduction of the one stop shop in an Italian municipality. The results are some preliminary reflections on the implications and effects of lean thinking based managerial innovation in the public sector.

1. LEAN PRODUCTION AND PUBLIC ADMINISTRATION: AN OXYMORON?

1.1. Background Theories and Research Question

The concept of lean production, trying to combine efficiency with a customer-oriented approach, was born in the industrial environment – namely in the automotive sector - and, since the second half of the past century, has been at the centre of the academic debate and frequently applied in practice.

The assumptions of value of this production philosophy, usually considered as an alternative to mass production, are the attempt of minimizing the use of resources, a customer-driven interpretation of the concept of value, the re-engineering of processes in the effort of eliminating those without real added-value, a customer-needs oriented process, therefore transforming
the classical accumulative production into a “just in time” process without any need for stocks (Womack, Jones & Roos, 1990).

The well-known evolution of the role of the State (direct producer, the dramatic reforms of the New Public Management, until the governance approach in its diverse interpretations), have naturally been translated in a series of new theories, techniques and tools, often coming from the corporate world, that public administrations have implemented with different fortune.

Nevertheless, the mere transfer of managerial solutions coming from the private sector to the public sector cannot guarantee, in itself, positive outcomes. Even more if these solutions are borrowed without prior considerations about the specific environment where they need to be implemented and without the consequent adaptations.

Recently the Lean Production Theory and more specifically processes re-engineering, has been debated and applied in the field of public services. In this context, some steps in the development and the experimentation are particularly critical for two main reasons: the intangible features of the service and the fact that production and consumption happen simultaneously.

Intangibility, in particular, determines the impossibility of making tests, as it happens instead with industrial products, which makes organisational innovation somehow “risky”. As a matter of fact, the moment of service delivery becomes the moment of truth (Grönroos, 1994; Normann, 1984; Eiglier & Langeard, 1987): the very moment when customers come into contact with the company services, they make a judgment about their quality. Therefore recruiting highly qualified personnel and making a preliminary evaluation of their motivations, attitudes and competencies becomes an essential element.

We also need to take into considerations some other characteristics of public administrations. First of
all the limited attention to cross-sector dynamics, even if these have a strong influence on the time and quality of service delivery; typical consequence of functional organizational setting, where each organizational unit is responsible for its duties in a functional logic. The absence of market and prices for the services make reorganization a peculiar challenge. The value of such an innovation, in fact, is hardly quantifiable in monetary terms and therefore the related and consequent incentive schemes and policies, especially those related to employees, needs to be put in relation to non-monetary or extra-budgetary indicators or measures.

Furthermore: the simultaneity of the production and utilization of services makes the issue of stocks and that of “just in time” policies irrelevant or less relevant. This reduces, beyond doubt, the immediate perception of the economic advantage of lean production; though it should not make us underestimate the importance of time coordination in the perspective of the final service and, consequently, as difficult to quantify as it is, of public value.

Finally, we need to consider that the times of the different processes related to an internal administrative procedure (the so-called endo-procedimenti) may vary, sometimes even significantly, as is the case of environmental or building authorizations. This is even more relevant in the light of the well-known gap between managerial and bureaucratic times (Borgonovi, 1996).

All the mentioned factors may bring different conclusions about the usefulness and opportunity of reorganising the processes based on the perspective of the citizen/user. We cannot deny that such changes bring along different kind of costs (e.g. negotiating with institutional stakeholders or personnel training) that, compared to the expected advantages (as mentioned, hardly quantifiable) could favour the preservation of the status quo.

It is not by chance that the academic debate is particularly intense about this issue and that positions
are all but aligned. The recent article of Jones and Needham (2008) is exemplary in this sense: the first author highlights the merits of lean production and customer orientation, while the co-author juxtaposes to each of the advantages a corresponding critical element.

Considering the special issue of Public Money & Management (2008: 1), supporters of the application of Lean Production to public services are, among others, Hines, Martins e Beale, that present an application to legal services; Lodge e Bamford, which analyse a case study in the public health sector and McQuade, which propose the experience of a housing service. However we can find there are also a number of more sceptical authors: this is the case, for instance, of McNary, Scorsone or of Papadopoulos and Merali.

In general terms, however, most authors seem to agree on the applicability of the basic principles of lean Production, some upholding it openly, others acknowledging it by highlighting potential weak points such as the complexity to reconcile managerial times and rhythms with the bureaucratic ones, the organisational culture that is needed to nurture those innovations and the possibility of favouring increases in the service demand with unavoidable consequences in the level of the taxation.

However, the main question that seems to emerge from the actual debate is exactly if - and how - the Lean Production is applicable in the Public Sector.

Although this question would call for a strong base of empirical data, in the current research there is still a lack of empirical evidence that could help generalize the existing limited findings. In this paper we try to make a contribution to this research field, reflecting on the still under-analyzed Italian case.

Lean Production approaches have been often applied in the Italian Public Administration. Some reforms or organizational changes, in fact, have been inspired by Lean Production thinking although often without a deliberate strategy; reengineering of processes, the creation of the Evaluation Units (Nuclei
di Valutazione), the establishment of Public Relation Units (Uffici per le Relazioni con il Pubblico) and the introduction of management control systems (Ongaro, 2009).

Italy is indeed an interesting research context to analyze how managerial innovation based on Lean Thinking can apply to Public Sector organizations and what are the features of such a process of reform. In this article we explore the innovation effort of a municipality that takes on the challenge of becoming more responsive by applying Lean Production principles to its action.

1.2. Methodology

The research has been carried out through a single case study, adopting an exploratory approach (Yin, 2003). The case has been selected because of the specific relevance, and reinforced by the public acknowledgment of its excellence. Limitations of single case study are well known. Nonetheless, this strategy fits the mainly exploratory research purposes adopted here. Results therefore consist mainly in preliminary interpretation at local level and contribute to the accumulation of knowledge for further hypothesis formulation and interpretation.

Data have been collected using three different techniques to allow triangulation. An initial analysis was made of the documents related to the decision-making process that created the organisational changes and to the administrative procedures in place before and after the change. Subsequently all the managers of the municipality were interviewed, exploring different features of the process including an analysis of citizens’ demand, analysis of processes in place, training, involvement, economic and non economic incentives (in terms of incentives for productivity and the use of selections as a non-economic incentive). Finally

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1 The project has been officially praised by the Minister of Public Function as best practice example.
information collected through documental analysis and interviews has been triangulated with a series of observations from the field where we directly tested the new service as citizens/users to deepen the understanding of the new system in place.

While it is clear that this could not be an attempt to give a definite answer to the meta-question that seems to emerge from the actual debate (if - and how - the Lean Production is applicable in the Public Sector), we nevertheless intend to give a contribution to the accumulation of knowledge in terms of empirical data and analysis.

2. The Sportello Unico al Cittadino (One-stop shop for citizens)

San Giuliano Terme, has approximately 30,000 inhabitants, is included in the administrative province of Pisa, and has a strong tourist function. Its municipality, with 4 managers and less than 300 employees, has accepted the challenge of re-engineering its services in a user-oriented perspective. Beginning in March 2009 a new organisational setting, which had emerged from the analysis of the internal processes, was put in place. Its central nucleus was represented by the One-stop shop for municipal services (from now on OSS).

OSS is one of several, but not yet representative experiences, which have overcome the traditional setting of Public Relations Units. These Public Relations units were introduced into the Italian system at the beginning of the Nineties and most of the time they remained as an almost superfluous body within the organizational structure. They were frequently related to a complaint desk, therefore becoming an ex-post control form instead of a control lever and a demand analysis tool.

Similar structures\(^2\), subsequently introduced in

\(^2\) Sportelli Unici delle Attività Produttive, Edilizia and Appalti (One-stop shops for Production Activities, Building and Tenders).
the Italian administrative system, whilst created to simplify the administration, ended up fragmenting the public administration activity in diverse areas of intervention. Moreover, they did not succeed in overcoming the historical heritage of sector-interventions, hindering a structural renewal of the Public Administration.

The idea of the OSS comes from a different approach: whilst including the information about and the access to administrative files in a functional organization vision of public administration, at the same time the OSS promotes a new philosophy of service (or of results) that start by redesigning backwards ambiguous processes, optimizing times, and with responsibilities that are clearly defined. Furthermore times and expected results are reasonably foreseeable and citizens are suitable informed about them. In this way public administration changes not only the approach to service but also the way of responding to all stakeholders demands.

With the creation of the OSS, finally, the relationship between citizens and public administration takes place through a single front office having as its main aim:

1) To overcome the administrative fragmentation of bureaucratic procedures;
2) To increase the productivity and, consequently, management’s efficiency;
3) To develop a new capacity of active listening;
4) To establish a two-way channel of communication, thus enhancing transparency and accountability (Steccolini, 2004);
5) To open new possibilities of social and informal control by citizens over public administration’s services.

In operational terms, the basic assumption (in line with Lean Thinking principles) has been that complexity, if not managed, is a cost in itself. The
immediate consequence has been the necessity to reconsider the whole process of production (or better the administrative one, in this case), involving all the organisational bureaucratic functions. The focus has not been on the reduction of surplus stock or project design errors (we already mentioned the only partial applicability of Lean Production to the field of service delivery) but on the diminution of downtime, on the flexible use of spaces and equipment, on the increase of opening hours and on the rationalization of supplies.

The focal point of the re-engineering has been the customer (citizen, entrepreneur, professional) and, more specifically, the moment of the actual contact between the customer and the public administration. Every “final” service -that is a service directed to an external actor- was analyzed to single out every process included. Then, each process has been divided into its different phases. Out of these, only the so-called front-office functions or “contact” phases have been assigned to the OSS, while those related to back-office (preliminary and decision-making phases) have remained within the responsibility of single units.

At the end, the municipality published an operational handbook that lists the processes of each service offered to the users, and highlights the “moments of contact” between the public administration and the external actor (particularly the first contact defined as “input” and the last one defined as “output”). Moreover the handbook identifies the different phases of the process and assigns the respective responsibilities to the OSS or to other units.
Figure 1 – Re-engineering of the public register for residents (basic scheme)

| GA07 Registering of Immigrants |  
|--------------------------------|-----------------------------|
| Input                          |                             |
| Request form completed         |                             |
| Output 1                       |                             |
| Receipt Information about the outcome of the request |                             |
| Output 2                       |                             |
| Notification to other bodies and units involved |                             |
| Information Exchange           |                             |
| Forward of the request to other bodies and units involved | Updated forms |
| Aim                            |                             |
| Collection of immigrants applications and forwarding to competent bodies and municipal units |                             |
| OSS role                       |                             |
| The whole process is carried out by the OSS |                             |

Source: Municipality of San Giuliano Terme (2008), OSS Operational Handbook

Figures 1 (above), 2 and 3 illustrate a concise version of some of the processes described, figure 4 (follows), instead, shows a single process in detail.

We chose three examples from different areas of intervention:

1. the registration of residents;
2. the approval/denial of urban authorizations;
3. the access to school meals and transport.

In the traditional organization these three services are delivered by different organizational units, each of them usually with different opening times and access points for the services, different procedures and forms. On the contrary, in the case of the OSS, citizens apply to a single front office, have the possibility to deal all the time with the same operator and, in once, they can access every municipal service.

In general, the OSS handles all the communication activities with the citizens and deals
with any request other than those related to the assessment the administrative procedures, the analysis of their establishment or the discussion about their outcome. More specifically, the OSS carries out the activities of information, reception and preliminary review of administrative requests and forms, issuing and/or delivery of administrative documents, issuing of official copies of papers.

Furthermore the OSS is fully in charge of some specific administrative processes: this happens when a preliminary processing is not needed or when it is limited to a quick review or to a mere formal check. Examples are, for instance, documents related to residents’ registration, status, issuing of identity cards and passports, exemptions from medical treatments expenses and every other activity related to Public Relations.

In terms of organizational structure, the creation of a transversal unit has made the integration between the process dimension and the hierarchical-functional possible. The head of this unit, under the direct supervision of the General Direction, is the line manager of front-office employees. The head has the organisational responsibility of the new unit; that is the substantial responsibility towards citizens for the correct functioning of his office. On the contrary, procedural responsibilities (meaning here administrative-formal responsibilities) lies with each of the back offices dealing with the single administrative processes.

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3 Back Offices deal with these requests, but only through the filter of the UNA and by appointment only.
Figure 2 – Re-engineering of the School Meals and Transport Service (basic scheme)

<table>
<thead>
<tr>
<th>Input</th>
<th>Front Office</th>
<th>Back Office</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Request form completed and income declaration attached</td>
<td></td>
</tr>
</tbody>
</table>

Output 1
- Income declaration form
- Form filling instructions

Output 2
- Inclusion in the users' database

Information Exchange
- Valid request received
- Updated forms
- Times and procedures for request

OSS role
- Distribution of forms
- Form filling support
- Clarifications about attached documentation required
- Receipt and filing of requests after verification of completeness
- Information about denial

Aim
- Support in form filling and approval/denial of the request

Source: Municipality of San Giuliano Terme (2008), OSS Operational Handbook

Figure 3 - Re-engineering of the Urban Planning authorizations and modifications (basic scheme)

<table>
<thead>
<tr>
<th>Input</th>
<th>Front Office</th>
<th>Back Office</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Request form and related technical attachments completed</td>
<td></td>
</tr>
</tbody>
</table>

Output
- Approval/denial of the requests

Information Exchange
- Requests completed
- Updated forms
- Times and procedures for requests

Aim
- To provide authorizations or denials to modifications to Urban Planning through technical consultation

OSS role
- Distribution of forms
- Form filling support
- Clarifications about attached documentation required
- Receipt and filing of requests after verification of completeness
- Delivering of requested documentation

Source: Municipality of San Giuliano Terme (2008), OSS Operational Handbook
Figure 4 – Re-engineering of the public register for residents service (operational instructions)

<table>
<thead>
<tr>
<th>N.</th>
<th>Operation</th>
<th>F/B</th>
<th>Other Units (B)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Verify the presence in the software of personal records of the people interested in changing residence.</td>
<td>Front</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The declaration of change of residence could be made by only one component of age with full legal capacity of the registered family. Documentation to submit by each person interested in changing the residence (if possessed): - Fiscal Number - Driving license - Plates of all vehicles possessed (cars, scooters, motorbikes, etc.); vehicles registered to juridical persons are excluded.</td>
<td>Front</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>If the applicant is a foreign citizen. A. Non-EU citizen: in addiction to what mentioned in point 1 and 2, it is necessary to ask for a valid permit of stay and the passport. In case the foreign citizen is waiting for the first issuing of the permit of stay, he/she is entitled to apply for the residence if he/she possesses the receipt of the application for the first permit of stay and the authorization of the Sportello Unico per l’Immigrazione (One-point shop for Immigration) that is issued for two reasons: for work or for family re-joining as stated in the Code of Immigration – Law Decree no.92/2008 converted into the law no.125/2008). B. EU citizen: in addiction to what mentioned in point 1 and 2, it is necessary to verify the requirements of the Legislative Decree no. 30 of 6th February 2007 (specifically on the basis of article 7, it is necessary that the EU foreign citizen fulfils at least one of the following conditions: 1. To work in Italy; 2. To have for him and his family enough economic resources not to be put on charge of the Italian welfare system and one health insurance that covers all risks in Italy; 3. To be enrolled in a public or in a private –but legally recognised- institute to follow a course of studies or a professional training.</td>
<td>Front</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>File personal data of applicants to proceed with the compilation of the electronic dossier. Inform the applicant about obligations related to waste taxes (TIA, ex TARSU) and the contracts for the different services.</td>
<td>Front</td>
<td>Front</td>
<td>Change of residence form Waste taxes memo and self-declaration for services</td>
</tr>
<tr>
<td>5.</td>
<td>Verify the existence of address name and number; if those data are absent or incomplete open a file and send it to the competent office (Ufficio Toponomastica).</td>
<td>Front</td>
<td>Front</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Internal filing of the form of residence changes and personally brings it to the competent Municipality Police district, for the check of personal details.</td>
<td>Front</td>
<td>Front</td>
<td></td>
</tr>
</tbody>
</table>
When the file comes back from the Municipality Police:
A. In case the personal details check is positive, proceed with the filing of the request and send it to the Municipality of provenance;
B. Once the Municipality send it back, confirming the removal, proceed with the completion of the file. Finally send the filed notice to the applicant and to take it off from the electronic protocol;
C. In case the personal details check is negative: inform the applicant via registered mail; (the citizen has the possibility to restart the same proceeding if shows up within 10 days from the receipt of the notice);
D. After 10 days from the receipt, the denial becomes conclusive and this has to be communicated by registered mail (in this case the citizen has the right to appeal to the provincial government authority within 30 days from the receipt).

Collect the file and the attachments within single folders

Source: Municipality of San Giuliano Terme (2009), OSS analytical process cards.

The co-ordination of the two administrative areas is enabled by personnel belonging to different units of the back office, formally appointed to deal, first of all, with the transmission of procedures’ revisions caused by modifications to laws and regulations or by citizens’ requests and, more generally, with the information exchange with the OSS. These employees, named “referees”, are organisationally included in the OSS unit and respond to its head but, in functional sense, they still respond to the director of the unit where they come from. It is, indeed, a process-based organisational arrangement, whose replication with other units of the same kind, could finally result in a matrix structure strictu sensu (Longo, 1999).

The new unit consists of fifteen people, all of them already employed by the municipality, but coming from different sectors. Their actual number has been decided by a preventive analysis of both front-office and back-office work loads and on the basis of an estimation of the future citizens’ request. At the same time it has been necessary to reorganise all the back-offices, modifying responsibilities and job descriptions.
No new personnel have been recruited, so that this project can be reasonably considered a zero-sum operation.

Employee selection has taken place through a double phase training period: the first phase addressed all the personnel potentially involved in the reorganization and aimed to create consensus around the project’s philosophy and to explain its general features. The second phase focused on a smaller group of participants, selected by their motivation, competencies and attitudes; more specifically people have been chosen on the basis of their problem-solving and public relations capacities, more than of technical ones, sector-specific. These latter characteristics have instead been rewarded in the back-office re-assignments. Training has been characterized by a strong interaction between trainers and participants, in order to analyze and identify the best process solutions. The ongoing training approach has been embedded and is still in place as an added value organizational feature to the service.

Special care has been devoted to the relationship with unions, often going beyond the formal separation of issues to be communicated, agreed or negotiated. The whole reorganization process has been characterized by intense interaction and collaboration, thus fostering cohesion around the project and bringing agreement on an incentive system specifically designed to include complementary wages for the OSS employees.

3. SOME PRELIMINARY CONCLUSIONS

The OSS has only been working for a few months, and it would be far too early to make a comprehensive assessment of this experience. Summing up, the results of the managerial innovation were the following: the concentration of access to all municipal services in a single physical space which is easier for citizens to reach; extended opening hours for the public have been provided; open access to eight multifunction
desks in the morning and four during the afternoon.

On the other hand, we cannot disregard that this change of organizational structure and operational systems (Airoldi, 1980) involved some difficulties. Moreover, these changes brought along two more managerial results, complementary and equally important:

1. the acquisition of wider knowledge of collective needs, not always explicit and sometimes even not considered, and their translation into support services;
2. citizens’, companies’ and professionals’ direct access to information, increasing their awareness of the complexity of administrative action.

Besides this peculiar case, the issue is extremely complex, to the point that the general climate of mistrust in the public administration cannot be reduced to simplistic judgements nor attributed solely to corruption or other illegal behaviours.

Most of times, critical factors (and sometimes even crisis factors) of public administration, can be related to the diverse and, at times, even contrasting needs that politicians have to respond to. Decision-making pragmatism and commonality of choices; efficiency of management and neutrality of administrative procedures; electoral representativeness and priorities selection; rights guarantees and a lighter fiscal pressure; services quality and budget constraints. The mediation among all these issues, although fundamentally contrasting, is what communities ask for and politicians cannot avoid the responsibility of facing the problems and finding some possible solutions. Whatever the answers, each solution implies processes of radical change and clear structural settings. More specifically, in change terms, the renewal of the organisational culture and the rejuvenation of the ruling class; that is to say those who are to manage the change
need a broad consensus and a greater capacity for delegation.

As already mentioned, it is far too early to assess if San Giuliano Terme and other Public Administrations which have put in place similar projects have succeeded or not. If the idea that the current governance system doesn’t permit the accommodation of interests would prevail and if, as many support, there would be a turnaround towards the unification of political and managerial responsibilities under the same decision making centres, times and circumstances could turn to favour those who didn’t dare to innovate (Dunn & Legge Jr., 2002; Demir & Nyhan, 2008).

But this is not the real point. The actual issue is rather to reach, *medio tempore* and in light of contextual conditions, a clear strategic orientation and, conditions permitting (political context and openness towards renewal, as mentioned), to pursue it with an equally clear middle term strategy.

The analysis of the case leads to some preliminary reflections. The introduction of OSS responds to the need for containing expenditure. Since budgets are often at the top of the agenda at national level but are considered a critical constraint at local level, the introduction of OSS based on Lean Thinking approach frames a policy aimed at saving as an opportunity for service innovation. The occurrence enhanced the quality of service (which is an essential priority for services users) and, finally, made easier to adopt a performance appraisal system and a performance pay system. This latter has been seldom implemented in political administrative contexts based on the predominance of Riechstaat culture (Capano, 2003). Consequently it can be argued that Lean Thinking inspired reform has created a window of opportunity for a wider range of innovations.
REFERENCES


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