

A dream out of silence: employee voice and innovation in a public sector community of practice

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Abstract

Employee silence plays a crucial role in the evolution of Public Services because it stops communication, opportunities to modify routines and knowledge sharing. The case study presented in this paper highlights employee silence as outcome of a bottom-up innovation introduced into the University of Padova. Using a questionnaire, we collected information about silence and voice to an ICT Community of Practice. The results are that silence due to fear of top management is less important than silence due to fear of sharing knowledge and information among colleagues. We conclude by suggesting innovation adoption difficulties in Public Services not only as a management deficit, but also as a governance problem.

Key Words: silence, fear, community of practice, organizational innovation, Public Services, governance

Introduction

In public organizations, the innovation process is generally considered a very slow one and sometimes also a failed experience. This bad outcome does not only depend on risk aversion of bureaucracies, political judgments and organizational inertia, but also on the decisions of employees to be silent about the opportunities that innovation offers.

Silence is a typical risk in Public Services that want to introduce innovation and that contribute to the definition of risk aversion in the public sector. It can become a defensive strategy for employees when an organization with an aggressive style and/or stable culture decides to assume the risk of innovation. Whether the Public Sector does not know the expected reactions of its workers (lack of environmental

¹We are grateful to Silvia Sartorelli and Arjuna Tuzzi for useful comments and suggestions on the questionnaire design. All remaining mistakes are obviously ours.

scanning), it is exposed to the “failure of invariance” (Kahneman and Tversky 2000) and increases uncertainty in forthcoming innovations. Normally, public management is more risk-averse than private management because they have to take into account political judgment and the perceived quality of the service besides the mission of a more efficient organization (Albury 2005, Bhatta 2003). Moreover, we have to bear in mind that in a system governed by accountability, innovation and efficiency do not go in the same direction. Efficiency is a short-term goal easily attainable in a stable economic growth context that contributes to stability through productivity increases of known labour practices. On the contrary, innovation requires a longer time span, and it is endogenous to economic and policy evolution; it is the response to new consumer needs and it creates new services. Adapted to changing contexts, it produces uncertainty and moves away from organizational solutions, easily achieving the goal of efficiency by accountability (Potts 2009, Walker 2003). This means that when an organization focuses on efficiency by accountability, we observe a trade-off in the sense that “the goal of efficiency ‘crowds out’ the goal of innovation”, and an innovation deficit results as a by product of efficiency (Potts 2009: 36). We propose to translate this statement in terms of silence/voice, claiming that the efficiency goal can discourage employee participation in the renewal of the problem-solving process, thus jeopardizing the outcome of organizational innovation. Whether we agree that an innovation deficit cannot be the only outcome of efficiency, but also of silence, because new ideas, capabilities and knowledge sharing do not have a suitable organizational climate, we need to investigate more deeply those organizational behaviours that threaten the inner learning processes, discourage experimentation and decrease the appetite for innovation risk.

We know that learning is a basic ingredient in organizations’ performance because it allows adaptation to changing environments by selecting the best responses among those acquired by experience (Becker et al 2005, Argyris and Schön, 1978/1996). But we also know that experience itself represents the firm’s tacit knowledge, and it has to be shared and explicitly transmitted via communication channels to become a part of the firm’s dynamic capabilities (Loasby 1994, Dosi et al. 2000). Organizational learning, which is considered a collective action, requires an organizational climate, seen here as intensity of the voice, in order to innovate routines and produce new

services. Knowledge sharing by voice is a strategy to relocate knowledge from the lower tacit individual level to the higher tacit firm level, and it requires a revision of both the cognitive division of labour and problem-solving procedures in order to be implemented (Nonaka 1994). Nevertheless, voice can be difficult to manage as a strategic tool when the organization is based on a vertical division of labour with many scattered, usually disconnected, decision centres. Voice can activate an empowerment process undesired by the management and stimulate a feedback relationship between workers and management that can threaten organizational governance. Again, voice can be seen negatively from inside the employee community because it can produce employee competition. This means that to become an “operative” action, voice needs governance innovation and room to build up its identity inside the organization. We believe that the Public Services are organizations that need to re-design their decision centres and governance as well. However, to do this, they have to investigate the strong silence characteristic of their employees’ behaviour. In this paper, we tackle this question, describing the experiment introduced by the University of Padova to better share its ICT knowledge. By pooling the tacit knowledge acquired by departments, faculties and administration into a community of practice of ICT employees, the top management wishes to face problem-solving and dynamic capabilities with lower costs. In the paper, we focus on the silent behaviour of many ICT employees during the experiment, and we offer some hypotheses to interpret this behaviour with respect to voice. Evaluating the opportunity cost for the university, we suggest some policies or governance re-design to increase voice.

In the first section, we briefly introduce the literature on employee silence/voice; in the second, we sketch the present Italian climate of Public Services organizational innovation and, in particular, the climate at the university of Padova; in the third, we tell the story of the community of practice of the ICT staff at the University of Padova, while in the fourth and fifth, we analyze silence of employees by interpreting data collected by an anonymous questionnaire. We conclude by reflecting on the silence/voice relevance to introduce/sustain Public Services innovation.

1. An overview of employee silence/voice literature

Employee silence is a behavioural choice that can deteriorate or improve organizational performance. Excluding its emotionally difficult expression, silence can convey approval and sharing or disfavour and opposition, thus becoming a pressure mechanism for both individuals and organizations. Silence is not just the opposite of voice, so we need to define voice to understand the nature of silence. Hirschman (1970) defined voice as “any attempt at all to change”, and he suggested that it becomes a better way of preventing decay in organizational performance when an exit is unavailable. He was a forerunner of voice investigation, but his analysis of motivations focused on the voice and exit reaction functions instead of voice and silence. In the management literature, silence is not simply defined as the opposite of voice in the sense that we cannot qualify silence and voice with just the act or absence of speaking up. The silence or voice of an employee owing information, ideas and opinions about organizational performance depends on his motivations; that is, on a conscious decision based on an opportunity cost.

Recently, some scholars have focused on three different motives for silence and voice in organizations (Van Dyne et al., 2003; Pinter and Harlos, 2001; Morrison and Milliken, 2000, 2003; Scott, 1993): disengaged behaviour based on resignation, self-protective behaviour based on fear and other-oriented behaviour based on cooperation. Resignation, in which the employee perceives his working context as unchangeable, produces an acquiescent silence/voice and causes a passive withholding/sharing of ideas and opinions. Self-protective and other-oriented behaviours are more proactive strategies; the first one produces a defensive silence/voice against external threats, and the second, a pro-social silence/voice for the benefit of other people or for the protection of the organization. Silence and voice are multidimensional concepts that cannot be ascribed to a clear passive/active behaviour. For example, it can be that withholding information is the outcome of an evaluation of themselves or others: silence is active, intentional and strategic. On the contrary, voice features resignation when speaking up is the expression of agreement, conformity and low responsibility.

But how and why is it that silence overcomes voice inside organizations? Different theoretical answers address these questions: because individuals are not supported by co-workers and they fear isolation (Bowen et al., 2003); because top management is

not supportive and open (Dutton et al., 2001); because they enter a spiral of silence, perceived as not agreeing with the majority of opinion (Noelle-Neumann, 1991). The external environment plays a crucial role and homogeneity of work groups is a key factor in producing collective goals and in speaking up. When fear dominates organizational life, we observe silence as a reaction function. Silence due to fear is a construct that has recently deepened as a research area in the management literature. Starting from the definition of defensive silence, Kish-Gephart et al. (2009) describe the nature of silence due to fear and try to identify its effects in the short and long terms inside organizations. They suggest that fear intensity depends on two threat characteristics: threat immediacy and threat severity. The first one outlines the time needed by an individual to respond, while threat severity is “the perceived amount of threat in the situation” and is subjective (Kish-Gephart et al. 2009: 8). High or low fear intensity is the outcome of the combination of threat immediacy and threat severity. High-intensity fear stems from both high threat immediacy and threat severity, while in the opposite case, the threat is less severe and immediate. As a result, the fear of speaking up can produce different types of silence: a non-deliberative defensive silence (freezing voice because of high fear intensity); a schema-driven defensive silence (there is enough time for deliberate action or low-intensity fear drives an individual to be alert); a deliberative defensive silence (there is low fear intensity and enough time to calculate the opportunity cost of voice); and habituated silence (passive behaviour to prevent undesirable outcomes which leads to fear).

Silence due to fear is the best behavioural strategy when voice is perceived as risky in either a vertical organizational context - with the top management - or horizontal - with the co-workers (Milliken and Morrison 2003). Managers can discourage voice when they fear negative feedback and assume that employees are self-interested and untrustworthy (Bhatta 2003, Morrison and Milliken 2000). These managerial beliefs can impact employee behaviour, producing a climate of silence that discourages communication and information sharing among them (McGregor 1960, Ashford et al. 1985).

2. The Italian climate of innovative Public Services

The Italian Public Sector is currently engaged in a process of organizational innovation to optimize the allocation of public services. The expected increase in efficiency is mainly driven by cost reduction and restructuring of routines, but its outcome is not foregone because of the many organizational constraints that government reforms have to challenge. One of the main constraints of this reform is the standard Public Sector labour contract that, in defining a permanent job, restrains the strategic options to innovate Public Services. In particular, this means that the Public Sector cannot use fear of firing as a threat or leverage over the employees' competition to increase labour productivity. Some scholars state that when there is no emotional tension, such as fear, employees may loaf and express little interest in participating in organizational innovation (Ichino 2006).

However, employee slackness can be a collective behaviour induced by managerial beliefs through the description of a working climate where individuals do not assume their job responsibilities and do not invest enough effort to solve problems to improve production or distribution. In this organizational context, many Public Sector employees facilitate organizational silence, producing a collective increase in the withholding of information as a strategy to hamper Public Sector management and to jeopardize the outcome of the new organizational strategy (Morrison and Milliken 2000).

To overcome this general tension dominating the Italian Public Sector there are local initiatives that introduce organizational innovation by changing the workplace climate. This is the path that has been taken by a pool of six Italian universities² since 2000 with a special program focused on organizational climate (project UNICLIMA). The climate profile of the University of Padova³, which stems from interviews of employee clusters with similar tasks, is quite in line with the other universities. The climate is generally perceived as positive, there is good team cohesion and individuals show competence, responsibility and confidence. However, between teams belonging to different organizational levels, some differences emerge. In particular, the group we

2 Universities of Bologna, Firenze, Padova, Pavia, Trento and Polytechnic of Milano.

3 The University of Padova is a large organization (in the Italian context) with 2.396 researchers and professors, 2.326 technical and administrative employees, a student population of 60.462 people. There are 65 Research Departments, 13 Faculties, 54 Libraries and one ICT Centre to manage the software and hardware network.

are interested in – technicians - perceives the organizational climate as uncertain and less collaborative than in the past. They describe the decision-making process as very centralized and focused on working relationships. In addition, they have a low feeling of collaboration, with a general sense of envy as a result of career competition in the past. They ask for greater attention from top management to their tacit knowledge and suggest revision of the evaluation mechanism in order to build up skills and effort in a collaborative climate inside the workgroups. However, even if this will change future directions, they distrust any possible evaluation innovation. They perceive the university as a barely dynamic workplace, and they hope that horizontal relationships can better off (Majer and D'Amato 2002).

3. The “Dreams” Community of Practice experience

Until 2007, the workplace of ICT staff at the University of Padova was characterized by very high fragmentation and isolation, with each department and faculty being physically and administratively isolated, and their staff working on similar, if not exactly the same, problems without knowing of each other's efforts. All ICT innovation initiatives were centrally arranged or confined to local environments as a consequence of the lack of horizontal communication. In the past, many proposals to overcome this organizational deficit were rejected. In 2006, as a consequence of management change, a series of proposals from a group of senior ICT employees was approved. A mailing list was created for discussion of common open issues and solutions, and a conference was scheduled, with the purpose of discussing problems and solutions and identifying key competencies and innovations. After a long time of working in a rigidly isolated organizational context, “Dreams” was the suggestive and declarative name given to this bottom-up organizational “revolution”.

The sole presence of the communication channel allowed for a number of workgroups to agglomerate around common problems and to discuss solutions, policies and best practices for the future, as well as those already in place. Later, some of these solutions became concrete proposals to overcome technical deficits that should have been implemented at the highest organizational level rather than in the single organizational unit. Most of the workplace groups became official innovative project

teams. In three years, many of the seminal contributions of the conference became strategic university-wide innovation projects, including an online “single sign-on” service, a new administrative software for faculties, and many guidelines and best practices.

What immediately followed the building of the communication channel in some way resembled to an "Innovation Jam" (Bjelland and Chapman Wood 2008; Helander et al. 2007), while what followed is best described with the concept of a "Community of Practice"(Brown and Duguid 1991; Lave and Wenger 1991; Wenger and Snyder 2000; Wenger 2000). An Innovation Jam is a technology-intensive, corporate-wide event which engages employees and partners of world-scale firms around a massive communication web-based platform with the intent to foster an innovation brainstorm lasting a few days, in a coordinated and moderated environment. Contributions emerging from the brainstorm are recorded, collected, sorted, integrated to be further developed and eventually marketed (Helander et al. 2007)

In our case study, a traditional conference was called immediately after the establishing of the mailing list, with the purpose of identifying promising innovations and innovators or hard-to-solve problems and critical technical spots. Even if the conference and subsequent meetings were held face-to-face without the need of ad-hoc web platforms, the effect was similar to an Innovation Jam: collect and discuss innovative experiences and best practices, elaborate their possible exploitation on a organization-wide scale, and eventually issue a feasibility report⁴.

Following Giddens, it has been observed that the Innovation Jam practice has the power to transform the bounded and local “place” of the corporate workplace into an universal and more abstract communication “space”, more encouraging for creativity and change (Ginzburg, Lichtenstein, and Saar 2009). The role of the InNova conference and the initial meetings was the same: create a common creative “space” among connected people that were once isolated in different “places”.

The overall effect of the establishing of a shared communication channel and the common space can be better described as the emergence of a Community of Practice

⁴ We are aware that brainstorming, or face-to-face events, and innovation jam are different communication tools in terms of effectiveness and collaboration mainly because they have different time span and participation modes. Brainstorming are shorter time events and “voice” can be managed by few people (see Morrison 2009). However in our case “collaboration was in the air” and the meeting was successful in terms of voice and participation.

(CoP) that in literature have been defined in multiple ways. One effective definition is: “groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (Wenger, McDermott, and Snyder 2002: 4)

Communities of Practice are valuable to organizations because they allow tacit knowledge to become explicit, mainly through the circulation of narratives. They are largely self-organized and need a very peculiar management style, which is best described as “cultivation” more than direction or regulation. CoP are considered to be very different objects from project teams, work groups and informal networks in terms of purpose, membership, motivations and persistence (Wenger and Snyder, 2000). At the same time they present some similarity to the described innovation jams, because they can create new networks to produce innovations by aligning employees around a common aim and, at the same time, foster reciprocity and trust by stimulating collaboration (Birkinshaw, Bessant, Delbridge 2006; Diasio and Bakcici, 2010; Morrison 2009).

In the “Dreams” experience, the sudden emergence of the CoP made explicit a great variety of solutions to problems common to a number of organizational units and ICT employees that had been, until then, isolated: in some cases, outstanding solutions envisioned in one organizational unit were adopted by the whole organization after their value had been recognized by the community and, subsequently, by managers. In other cases, mediation was needed between different equivalent solutions; in other cases, no clear “best practice” emerged.

In three years, 160 ICT employees of the university (nearly all of the ICT workforce) subscribed to the CoP mailing list, about 120 posted at least one message, but only between a half and one-third of them actually attended the work groups meetings and the official projects that followed. Moreover, we observed that participation seemed to decrease over time⁵. This “silence” was perceived as an issue by the participants, so the community decided to investigate its reasons with a survey.

Space does not allow for an in-depth account of the “Dreams” experience, but we have collected personal narratives of participants in a previous work that depicts the

⁵ We observe a similar effect in the famous IBM’s Innovation Jam where in the first phase (Collecting new ideas around four product areas) there was a large number of contributors while in the second one (Refinement of Big Ideas) contributors reduced to 30% of starting phase participants (see Helander et al. 2007).

emerging culture of this CoP (Cammozzo and Gambarotto 2009). We observed that the overarching context of the CoP did not meet positive approval everywhere, and that some troubles arose, especially over human resource management and allocation. We observed a bottleneck in the university because it seemed impossible to guarantee the needed quality level for ICT services at the local level and, at the same time, new ICT solutions for the university as a whole. This result depends on the fact that managers of different organizational units are used to having exclusive control over their ICT employees so that local efficiency dominates their choices. Moreover, the human resource needs for organization-wide projects lack multi-level managerial commitment. In some cases, CoP members found themselves involved in harsh individual bargaining in order to participate in innovation activities in which they were interested.

Another point worth noting is that despite the fact that the literature considers a CoP a completely different object than a work-group or a project team (Wenger and Snyder 2000), active and leading members of the community considered completely natural and consequential to form organizational entities that are more apt at delivering the services and products drafted by the community to overcome common problems. Senior management greeted well the transformation of workplace group's activities in official project teams, giving participants monetary rewards and resources, along with deadlines, milestones, etc. This transformation occurred quickly over the first year, and was not properly recognized until already done. But not every member of the community, especially the more hesitant ones, perceived this organizational change as natural and desirable, thus causing several misunderstandings.

4. The survey conceptual model

In order to address this “silence” issue, the community suggested that a survey could be useful. In designing the survey, we faced the difficulty that organizational silence literature is specially focused on silence between the employee and his organization, along – so to speak – a predominantly *vertical* dimension. However, our experience of silence stemmed from the context of a community that self-organized itself in a *flat, non-hierarchical* and informal structure based on a *bottom-up* initiative organized by employees considering themselves peers. Thus, we have to account for a vertical

and horizontal dimension.

Moreover, we have reason to believe that the sudden emergence of a CoP and its subsequent transformations represent a dramatic departure from a well-established practice, challenging the views and practices that an employee builds over time around his role inside an organization (self-views). Perceiving such a change and reshaping the boundaries of oneself could be startling and trigger silent observation, before engaging in communication. Consideration for these issues requires a third dimension that is related to identity and the perception of the self in the workplace environment, and we recognize the *identity negotiation* theory (Swann., Johnson, and Bosson 2009) as an appropriate analysis framework within which the identity results from the personal and social views that are continually checked every time the environment changes.

These three dimensions can be summarized as *height* (vertical, linked with hierarchy and authority, “them”), *width* (social, linked with the community, “we”) and *depth* (self-centred, linked with identity, “I”).

These three dimensions could be linked to the research on silence conceptualization by Van Dyne, Ang, and Botero (2003), which we introduced in the first paragraph. Recalling their viewpoint, they state that employees can choose silence (defined as “Intentionally withholding work-related ideas, information, and opinions”) or even voice (intentionally expressing them) for three motives: (1) Disengaged Behaviour, based on resignation and, due to low *self-efficacy*, “feeling unable to make a difference”; (2) Self-Protective Behaviour, based on *fear*, “feeling afraid and personally at risk”; (3) Other-Oriented Behaviour, based on *cooperation*, “feeling cooperative and altruistic”. Those three behaviours have been labelled *acquiescent*, *defensive* and *pro-social* respectively.

This multidimensional model of organizational silence can be enlarged in our peculiar CoP and work-group experience with at least two other drivers of voice or silence behaviours besides “fear”. While CoPs offer the employee an opportunity in terms of *learning* (Wenger 2000), following a prevalent intrinsic motivation, like coping with challenging problems and building relations (Wenger and Snyder 2000), work-group participation can be driven by *other incentives* (such as committed time, use of dedicated resources, recognized work, rewards) with extrinsic motivations or a

combination of intrinsic and extrinsic motivations (Amabile 1993; Amabile 1998), which lead to a “separable outcome” (Ryan and Deci, 2000).

To summarize (for conceptual framework, see Table 1), the survey was designed to detect the personal beliefs of the ICT employees with respect to voice/silence behaviour concerning the three *drivers*—fear, learning and other incentives—in three *dimensions*: height (organization, hierarchy), width (community, peers), and depth (identity, self).

The respondent had to make “I agree / I disagree” decisions on proposed statements that suggested “silence” or “voice” attitudes in each case (see Table 2 for statements reported in their interpretative framework. Please notice that actual statements were in Italian).

For instance, “Dreams promotes competition between employees” - suggested to take a Silence attitude due to Fear of the Community (horizontal dimension), while “Dreams allows rewards for competence with career or remuneration” suggested a voice attitude due to incentives expectations of the organization (vertical dimension).

We are aware that different possible interpretations of the statements and the lack of intermediate positions between “Agree/Disagree” make this model imprecise. Moreover, while we do not claim that our model is generalizable or explicative, we find it useful for drawing categories for a purely descriptive analysis.

[TABLE 1 HERE]

All statements used in the survey and organized in the conceptual model were adapted from the community's emails, prior narratives (Gambarotto 2009), or organizational silence literature. Every question addresses individual voice/silence preferences to detect which factor – fear, learning, incentives – dominates when an employee faces the hierarchy (the height dimension), the community (width dimension) or the personal identity (depth dimension).

Among the reasons for “Voice” behaviours, we considered the following: participation as an opportunity for learning or career advancement, desire to be useful to the ITC staff community or to the Organization, fear of personal knowledge obsolescence, fear of consequences of ITC staff immobility, fear of missing some important news due to being excluded, thus entering a “spiral of silence” (Bowen and

Blackmon 2003), the belief of being able to take advantage of others' knowledge, the sensation that "together we can make useful change happen" and, simply, "because it's fun".

Among the reasons for taking a "Silence" position, we considered the following: consequences for career and relations with managers, possible harm to the ITC staff due to tacit knowledge becoming available to the organization, the belief that "anyway nothing could change", fear of not being at the same level as colleagues, fear that excessive involvement with extra projects would damage ordinary work, fear that tampering with the current organizational arrangement would make work conditions worse, the belief that "it's better to stay put if you want to live on", and the sensation that no benefit could come from participating in a community.

We considered that subscribing to the mailing list and reading messages could be considered intermediate or neutral behaviours between voice and silence, enabling subsequent voice/silence behaviours that require connection to the shared communication channel. The prevalence of voice/silence statements in the conceptual framework (see Table1) should reveal prevalent drivers and the dimensions of given voice or silence behaviours. In particular, the drivers are as follows:

Defensive: whether this case prevails, we observe silence in fear of a negative outcome from the organization or voice to overcome negative actions by the organization (such as being given strict guidelines and losing autonomy).

Pro-social: silence in fear of a negative outcome in the community (competition, envy) or voice as risk-sharing behaviour among community participants to overcome individual fear.

Acquiescent: silence from resignation and low self-efficacy or voice from expectation to become more self-confident (doing the same thing as others in similar situations decreases uncertainty).

Organization learning: silence comes from the perceived risk of tacit knowledge appropriation by the organization; voice allows the organization to learn and be innovative.

Social learning: silence comes from the perceived risk of knowledge appropriation by the community, while collective voice allows the community to learn and gain knowledge.

Personal knowledge: silence comes from perception of personal knowledge being deficient or inappropriate. Voice behaviour (participation) makes individuals more competent and qualified.

Professional: silence is more advantageous than participation because the organization considers participation as showing-off, as opposed to voice (participation), which can evoke direct advantages from the organization like career advancements or economic incentives.

Environmental: silence comes from the lack of advantages in cooperating with the community; voice behaviour of the community has a positive individual outcome, for instance in a better workplace environment.

Self-centred: silence is better because participation gives no incentive and increases workload. Voice (participation) is better, as it brings personal intrinsic advantages, like having fun and gaining professional autonomy.

[TABLE 2 HERE]

[ILLUSTRATION 1 HERE]

5. The survey technique and results

The survey was an anonymous online questionnaire. We used LimeSurvey's hosting service to ensure privacy.

The survey stayed open for eight days, during which time we issued three invitations to participate in the community's mailing list, asking community members to involve ICT staff who were not on the mailing list.

The total number of subscribers was 161, which is the number of the ICT employees. Thirty-six percent of respondents completed the questionnaire. Statements about voice/silence behaviours were arranged in three groups (corresponding to the height/width/depth dimensions) with mixed voice/silence statements. While respondents knew of the reasons for the survey (employee silence), they were not informed about the interpretative framework (Table 1). Other questions asked were about involvement in work-group activities (never attended /once or a few times/actively/coordinated a work group) and participation in CoPs (meetings/ mailing list/conferences).

We graphically represent the aggregated results (Illustrations 1 and 2) to establish the

voice/silence attitude and intensity of the different dimensions (height, width, depth) and factors (fear, learning, incentives). The diagrams show that there is very strong agreement with voice in the width dimension (community), especially for learning and fear, and disagreement with silence in the same dimension, especially in the “social learning” frame (Illustration 1, Illustration 2). This means that the respondents agree on speaking up for learning reasons because it fosters the CoP and knowledge sharing. At the same time, there seems to be a general disagreement with silence behaviours, except for the significant agreement on silence in the “self-centred” frame, due to the statement “Dreams induces increased workload”. This suggests that there is a group of respondents for whom the trade-off between increased workload and benefits determines their decision to participate.

This result, together with the strong voice on the “learning” factor shows the strategic role of a CoP in propelling voice behaviour: learning, which is the main driver of a CoP (Wenger 2000), tends to overcome fears in all three dimensions (organizational, social, personal).

At the same time, there is strong agreement that the Dreams initiative is an opportunity for innovation and learning for the whole organization. Unfortunately, the organizational issue of the burden of new projects is also perceived in the form of increased workload, but seems to be compensated by non-monetary incentives such as fun and autonomy, so workload is, thus, mitigated (see Illustration 1).

ILLUSTRATION 2 HERE

A second important group of observations was done concerning participation in work-groups. Employees who attended one or a few meetings of the work-groups show a noticeably different pattern of agreement with respect to most of the statements compared to those who actively participated or who did not participate at all (those two groups show similar patterns between them). Their opinions diverge significantly from the average for a generally weaker voice (lower agreement with voice statement) and deeper silence (higher agreement with silence statement).

The most striking differences concern three frames: first, employees with lower self-efficacy (in the “acquiescent” frame): they do not fit with the new way of working

and do not feel much safer and confident; second, those who lack incentives for cooperating socially (in the “environmental” frame) feel the organization is not improvable by the community; and finally those who feel the lack of organizational incentives (in the “professional” frame) because they see participation as a show-off with no real positive outcome. For these reasons, after a brief experience in the work-groups, respondents prefer to adopt a silence attitude.

Collateral evidence from answers to a few open questions in the survey and previously collected narratives suggests that the rapid “budding” of work-groups from the Community has displaced many and involved a delusional effect. This could be due to personal difficulty in coping (or “negotiate an identity”) with a new, highly motivated and focused environment, with deceptive expectations (perhaps of a “warmer” and less focused community), or both; these results show a clear direction for future research.

Employees who never attended work-group meetings replied similarly to those who were active, except with respect to the stronger belief that “Dreams is a way for the organization to acquire knowledge from naïve employees”, and, thus, a preference for silence in the “organization learns” frame prevails. At the same time, they feel their self-views are less motivating of voice behaviours than those who actively participate (the “depth” dimension). This could suggest an “organizational distrust” that overcomes even initial curiosity to participate in an innovative experience.

In summary, the CoP activates the voice option, particularly to foster learning and for the translation of individual tacit ICT knowledge in a firm-specific asset. Silence dominates the self-centred frame to maintain the work effort at a constant level and to maintain invisibility because an increase in productivity does not produce an adequate monetary or career incentive. Silence within the hierarchy is fed by distrust of management, and it is considered a good reaction function because it protects against *exploitation* of tacit knowledge. Also, a low individual competence endowment is the cause of silence as well as the fear of co-worker competition.

Concluding remarks

In accordance with the management literature, in this paper we observe that silence

and voice are multidimensional concepts that need to be disentangled to understand the role they play in organizational innovation in the Public Services.

There is a variety of motivations that can explain silence/voice inside an organization. In describing this case study, we focused on silence/voice due to fear, due to learning and due to incentives. We have stressed that such silence/voice can be conveyed to the management, to peers or to making up a personal professional identity. For each dimension, an employee can choose a different reaction function by calculating the opportunity cost of silence/voice.

A large body of literature is involved in the analysis of Public Services innovation, but employee silence/voice as a basic ingredient in the success/failure of innovation is not taken into account. Public Services innovation is different from the same process we study in industry and private firms. In the public sector, it is risky to undertake an innovation for production of new services when efficiency, equity and evolutionary goals are put in the same basket: employee silence is the more frequent reaction that has to be faced by public management in the short run. We have seen that such difficulty can be overcome, leaving room for bottom-up innovations and experimental organizations.

In our case study, the CoP was a bottom-up innovation triggered by ICT problem-solving inefficiencies. The CoP showed real strength in mobilizing intrinsic motivations and by containing the negative effects of fear of working in isolation. This could have positive effects on a “silence climate”, possibly breaking a “spiral of silence”. However, we observe that to transform silence into voice, we need some changes in the organizational climate and in the governance of routines and the problem-solving process. To be more efficient and effective in knowledge sharing, decision centres have to be more connected in terms of local and general requirements; that is, the management beliefs have to be explicit and shared in order to find a forceful organizational solution⁶. Otherwise, employee silence rises, participation in information, ideas, and opinions does not occur, and conformity and low responsibility dominate. In other words, speaking up needs organizational actions to be encouraged.

⁶ In the private sector, the multinational oil company ENI modified its governance structure in 2004 introducing a CoP with a top-down knowledge strategy. Before starting with this project a long training phase of 450 meeting hours for the 1.900 managers occurred in order to create a general commitment to the strategic role of the project (Scarso et al. 2009)

Organizational measures are needed to protect employees from all those effects that induce a silent behaviour: the stressful negative reactions of increased workload that dissuade participation in knowledge sharing, the reputational competition that chokes the proactive effect of knowledge sharing on the organizational climate and the more demanding competencies derived from CoP involvement that feed individual learning. These unwanted effects could happen if a CoP produces significant results, which senior management could be induced to approve within innovative projects and appoint official project teams from the CoP. This is especially needed in case of bottom-up processes where a CoP emerges from a coalescence process: management should be prepared to quickly arrange an enabling environment for a CoP to thrive and simultaneously allow the harvest of innovative projects through work-groups and project teams.

The combined role of employees and managers with a positively innovative attitude encourages voice behaviour and requires necessary organizational change. If this change takes place, it can have a great positive effect on the ability of the organization to be innovative not only in the present, but also in the future: the organization learns from its variety and is able to make use of tacit knowledge, but also learns new ways in which to learn, shaping itself as an enabling environment for further learning. This ability has been called deuterio-learning (Bateson 2000) or double-loop learning (Argyris and Schön 1978), and it introduces the most difficult innovation into organizations even if it plays a crucial role in fitting changing contexts.

Bibliography

Albury D (2005) 'Fostering Innovation in Public Services' *Public Money & Management* 25(1): 51-56.

Amabile T M (1993) 'Motivational synergy: Toward new conceptualizations of intrinsic and extrinsic motivation in the workplace' *Human Resource Management Review* 3(3): 185-201.

Amabile T M (1998) 'How to kill creativity' *Harvard Business Review* 76(5): 76-87.

Argyris C, Schön D A (1978) *Organizational Learning: Theory, Method and Practice*, Reading Mass.: Addison-Wesley.

Ashforth B E (1985) 'Climate formation: Issues and extensions' *Academy of Management Review* 10: 837-847.

Bateson G (2000) *Steps to an ecology of mind*, University of Chicago Press.

- Becker M C, Lazaric N, Nelson R R, Winter S. (2005) 'Applying organizational routines in understanding organizational change' *Industrial and Corporate Change* 14(5): 775-791.
- Bhatta G (2003) 'Don't just do something, stand there!: Revisiting the Issue of Risks in Innovation in the Public Sector' *The Innovation Journal* 8(2).
- Birkinshaw J, Bessant J, Delbridge R (2007) Finding, Forming, and Performing: Creating Networks for Discontinuous Innovation. *California Management Review* 49(3): 67-84.
- Bjelland O M, Chapman Wood R (2008) An Inside View of IBM's Innovation Jam, *MIT Sloan Management Review*, Fall 2008: 32-40.
- Bowen F, Blackmon K (2003) 'Spirals of Silence: The Dynamic Effects of Diversity on Organizational Voice' *Journal of Management Studies* 40(6): 1393-1417.
- Brown J S, Duguid P (1991) 'Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation' *Organization Science* 2(1): 40-57.
- Cammozzo A, Gambarotto F (2009) 'La Coalescenza della Conoscenza ovvero l'auto-organizzazione come soluzione possibile di fronte a una scarsità organizzativa' In *La condivisione Informatica nell'Università*, 15-32. Padova: CLEUP. <http://paduaresearch.cab.unipd.it/2095/>.
- Diasio S, Bakcici T (2010) A Process View of Open Innovation. *Paper presented at the DRUID-DIME Academy Winter 2010 PhD Conference* Aalborg (DK). <http://www2.druid.dk/conferences/viewabstract.php?id=500690&cf=44>.
- Dosi G, Nelson R, Winter S (eds.) (2000) *The Nature and Dynamics of Organizational Capabilities*, Oxford/New York: Oxford University Press.
- Dutton J E, Ashford S J, O'Neill R M, Lawrence K A (2001) 'Moves that matter: issue selling and organizational change' *Academy of Management Journal*, 44: 716-36.
- Gambarotto F (2009) (ed.) *La condivisione Informatica nell'Università* Padova: CLEUP.
- Ginzburg I, Lichtenstein Y, Saar S (2009) Creating cooperation through an innovation jam, In *Proceedings of the 2nd ISPIM Innovation Symposium*, New York City (USA).
- Helander M, Lawrence R, Liu Y, Perlich C, Reddy C, Rosset S (2007) Looking for Great ideas: Analyzing the Innovation Jam, In *Proceedings of the 9th WebKDD and 1st SNA-KDD 2007 workshop on Web mining and social network analysis*, 66-73. San Jose, California (USA).
- Hirschman A O. (1970) *Exit, voice, and loyalty*, Harvard University Press.
- Ichino P. (2006) *I nullafacenti. Perché e come reagire alla più grave ingiustizia della nostra Amministrazione Pubblica* Milano: Rizzoli.
- Kahneman D, Tversky A. (2000) *Choices, Values, and Frames*, Cambridge University Press
- Kish-Gephart, J J, Detert, J R, Treviño L K, Edmonds A C, (2009) Silenced by fear: The nature, sources, and consequences of fear at work, *Research in Organizational Behaviour*, 29: 163-193.
- Lave J, Wenger E (1991) *Situated learning*, Cambridge: Cambridge University Press.
- Loasby B (1994) 'The Biological Analogy and the Theory of the Firm' *Journal of Economic Issues* 18: 1115-1136 (Reprinted in Geoff Hodgson, ed. *The Foundations of Evolutionary Economics*, Aldershot: Edward Elgar, 1998).
- Majer V, Marcato A, D'Amato A (eds) (2002) *La dimensione psicosociale del clima organizzativo*, Milano: FrancoAngeli.

- McGregor D, (1960) *The human side of enterprise*, New York: McGraw-Hill.
- Milliken F J, Morrison E W (2003) 'Shades of Silence: Emerging Themes and Future Directions for Research on Silence in Organizations' *Journal of Management Studies* 40, no. 6: 1563-1568.
- Morrison E W, Milliken F J (2000) 'Organizational Silence: A Barrier to Change and Development in a Pluralistic World' *The Academy of Management Review* 25, no. 4 (October): 706-725.
- Morrison K (2009) The implications of 'jam' and other ideation technologies for organisational decision making. *Journal of Cultural Science* 2(1): 1-9.
- Mulgan G, Albury D. (2003) *Innovation in the Public Sector, Strategy Unit*, Cabinet Office UK.
- Noelle-Neumann E (1991) 'The theory of public opinion: the concept of the spiral of silence'. In Anderson, J. A. (Ed.), *Communication Yearbook*. Newbury Park, CA: Sage, 256-87.
- Nonaka, Ikujiro. 1994. A Dynamic Theory of Organizational Knowledge Creation. *Organization Science* 5, no. 1 (February): 14-37.
- Pinder C C, Harlos K P (2001) 'Employee silence: quiescence and acquiescence as responses to perceived injustice', In Rowland K M, Ferris G R (Eds), *Research in Personnel and Human Resources Management*, Vol. 20. New York: JAI Press: 331-69.
- Potts, J. (2009) 'The innovation deficit in public services: The curious problem of too much efficiency and not enough waste and failure', *Innovation: Management, Policy and Practice*, 11(1): 34-43.
- Ryan R M, Deci E L (2000) 'Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions', *Contemporary Educational Psychology* 25(1): 54-67.
- Scott R L (1993) 'Dialectical tensions of speaking and silence', *The Quarterly Journal of Speech*, 79: 1-18.
- Swann Jr W B, Russell E. J, Bosson J K (2009) Identity negotiation at work. *Research in Organizational Behavior* 29: 81-109.
- Walker (2003) 'Evidence on the Management of Public Services Innovation' *Public Money & Management* 23 (April 2003): 93-102.
- Wenger E. (2000), Communities of Practice and Social Learning Systems, *Organization*, 7(2): 225-246.
- Wenger E, Snyder W (2000) 'Communities of Practice? The Organizational Frontier' *Harvard Business Review*, no. January-February.
- Wenger E, McDermott R A, Snyder W (2002) *Cultivating communities of practice*. Harvard Business Press.
- Van Dyne L, Ang S, Botero I C (2003) 'Conceptualizing Employee Silence and Employee Voice as Multidimensional Constructs' *Journal of Management Studies* 40, no. 6 (9): 1359-1392.

		Height organization authority “them”	Width community peers “us”	Depth identity self “I”
Fear	Silence	defensive [‡]	pro-social [‡]	acquiescent [‡]
	Voice			
Learning	Silence	organization learning	social learning	personal knowledge
	Voice			
Incentive	Silence	professional	environmental	self-centred
	Voice			

Table 1: Survey conceptual framework. (‡)From (Van Dyne, Ang, and Botero 2003)

		dimension		
		Height	Width	Depth
factor	Fear	<i>S</i> : Dreams induces tension with management <i>S</i> : Participation can end in negative evaluation	<i>S</i> : Dreams promotes competition between employees <i>S</i> : Only those with spare time can participate	<i>S</i> : This is not how the right way to work for me
		<i>V</i> : Dreams is a way to impose guidelines on ITC staff	<i>V</i> : Together we can improve our environment <i>V</i> : Together we'll make less mistakes	<i>V</i> : Participation makes me feel more confident
	Learning	<i>S</i> : Dreams is a way to capture knowledge from naive and enthusiast employees	<i>S</i> : It's not advisable to share one-self knowledge with colleagues.	<i>S</i> : My knowledge is not at level with active members
		<i>V</i> : Dreams is an occasion for innovating our organization	<i>V</i> : Dreams allows me to know what others have done	<i>V</i> : Participation makes me feel more competent
	Incentives	<i>S</i> : showing-off brings no advantage	<i>S</i> : I have no advantage in cooperating with colleagues	<i>S</i> : Dreams will make my workload increase
		<i>V</i> : Dreams allows to reward competence with career or remuneration	<i>V</i> : It's a way to improve our organization	<i>V</i> : Dreams gives me more autonomy <i>V</i> : Participating is fun

Table 2: Categorized survey questions, translated from Italian. Respondents had to choose between: “I agree” or “I disagree” on each one of the silence (*S*) or voice (*V*) statement.

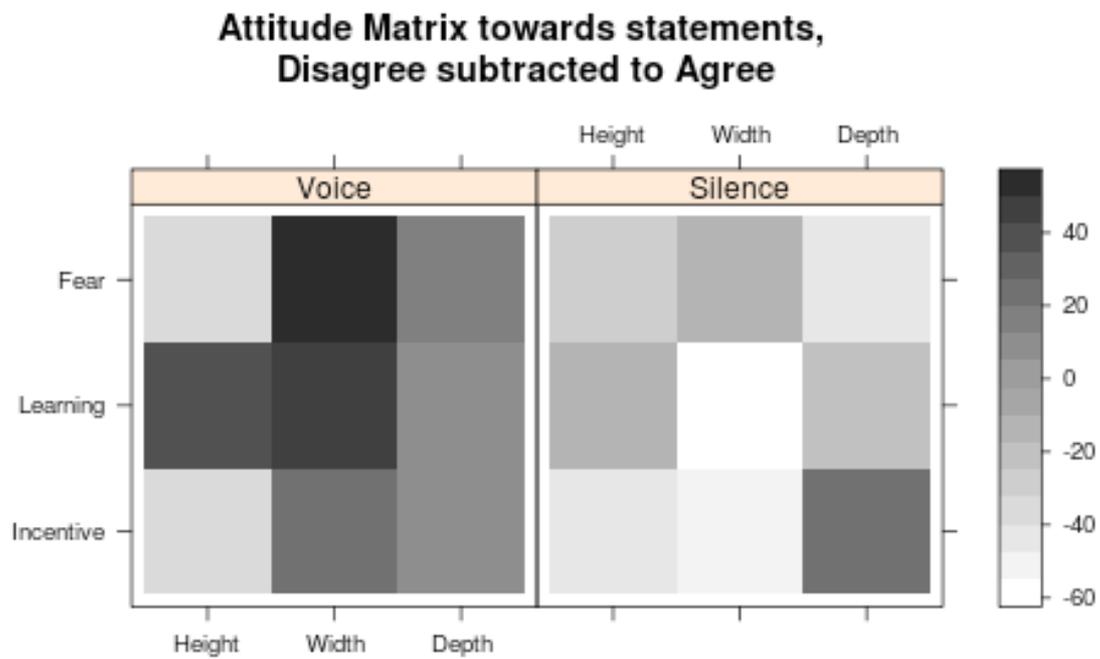


Illustration 1: Synthetic results on statements: for each statement on “voice”/“silence” behaviors, the number of “I disagree” wighted replies has been subtracted to “I agree”. Darker squares denotes ponderated prevalence of statements respondents agreed with. White squares denotes prevalence of behaviors respondents disagreed with. See also Table 1.

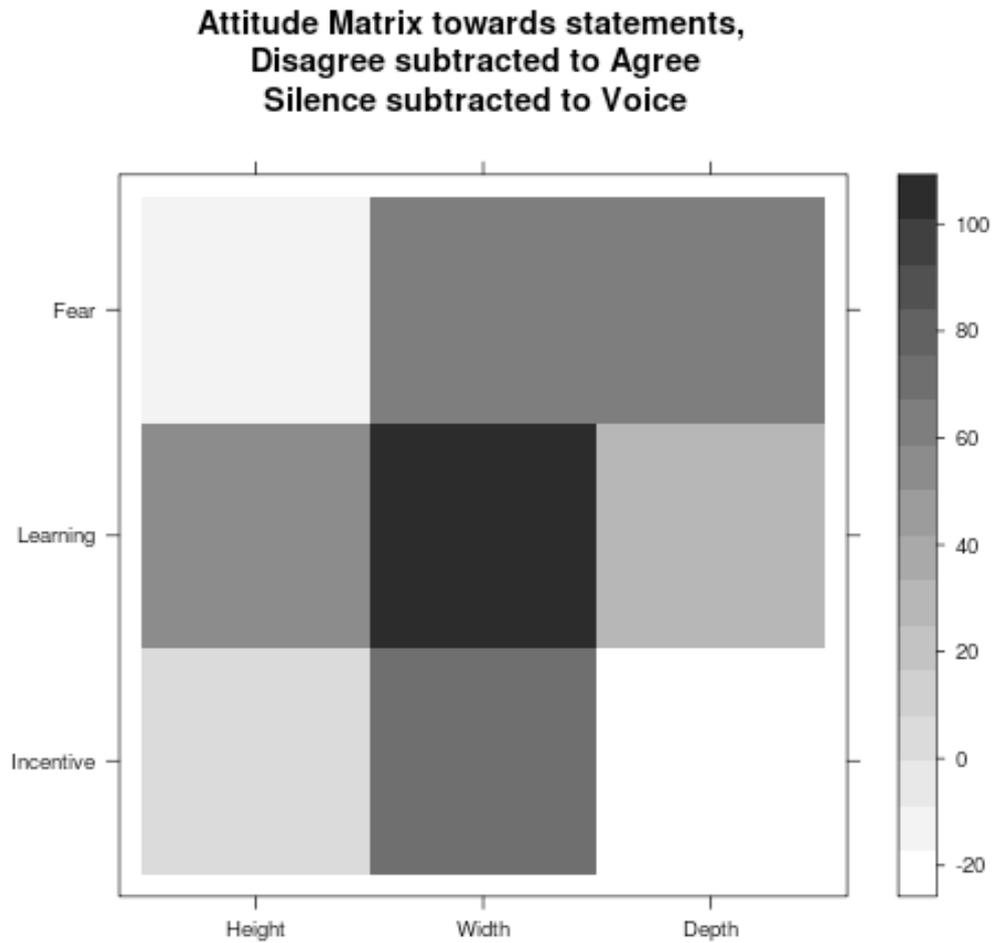


Illustration 2: Synthetic results on statements: for each statement on “voice”/”silence” behaviors, the number of “I disagree” wighted replies has been subtracted to “I agree”. Then resulting “silence” has been subtracted to “voice”. In the diagram darker square denotes prevalence of statements with higher number of prevalent “Voice” behaviors. White denotes prevalence of “Silence” behaviors. See also Table 1.