PIANOO, A KNOWLEDGE NETWORK FOR PUBLIC PROCUREMENT

Kees Tazelaar

Kees Tazelaar is a manager at PIANOo the Dutch Public Procurement Expertise Centre. It is a department of the Ministry of Economic Affairs, Bezuidenhoutseweg 10-12, P.O. Box 20101, 2500 EC, The Hague, The Netherlands, kees.tazelaar@pianoo.nl, *tel. +31 (0)70 3490777 www.pianoo.nl*

His interests lie in public procurement, knowledge management, community building and the use of social media.

ABSTRACT

The goal of the Dutch Public Procurement Expertise Centre (PIANOo), a department of the Ministry of Economic Affairs, is to increase the professionalism of public procurement in the Netherlands. As there are too many governmental organisations to handle individually, PIANOo positioned itself as a knowledge network, in which the community is the bearer of knowledge. PIANOo facilitates the process of making that knowledge visible and available to everybody by using social media. After five years of continuous improvements, PIANOo now has a proven integrated concept of knowledge management for public procurement that is transferable to other governmental organisations. A substantial contributor to the success of PIANOo has been the democratisation on knowledge on public procurement through crossing the boundaries between practice, science, law and policy, but also between countries and between governments and markets.

KEY WORDS

Knowledge management, knowledge democracy, social media, wisdom of crowds, Web 2.0

INTRODUCTION

The aim of the Public Procurement Expertise Centre (PIANOo) is to increase the professionalism of public procurement in the Netherlands, including the use of innovative methods of procurement. The name PIANOo is a Dutch acronym for: Professional and Innovative Awarding, Network for Government Purchasers. PIANOo is a department of the Ministry of Economic Affairs and founded in 2005 as an indirect result of the widespread fraud in the construction sector. Part of the conclusion of the Parliamentary Inquiry into this fraud was that awarding authorities were partly to blame; their way of awarding contracts was far from professional. Therefore, the goal of PIANOo is to help awarding authorities to improve performance. PIANOo consists of about 20 people (fte).

PIANOo's target groups are all contacting authorities that have to comply with the European rules for public procurement. These are municipalities, provinces, water boards, ministries, police, schools, universities and health care. As there are too many organizations to make an individual approach possible e.g. by setting up a helpdesk of experts, PIANOo needed to define another strategy. Knowledge management turned out to be the solution.

Governments are knowledge-intensive organisations, and will become increasingly more so in the future. Knowledge management is the key to improve the efficiency and effectiveness of governments. As knowledge is distributed and fragmented, internet-based information and communication technology like Web 2.0, including the use of social media, can help to leverage the knowledge diffusion (van Baalen, 2005). While traditional knowledge management systems are applied to structured knowledge, Internet and especially Web 2.0 applications are particularly effective in enabling the sharing of informal and tacit knowledge internally, among employees (OECD, 2005). The power of Web 2.0 lies in unlocking the value created by users, active and smart use of the wisdom of the crowds, which, as tacit knowledge, resides in social networks of users. Information sharing, networking, openness and transparency are essential ingredients (Frissen, 2008).

Web 2.0 presents significant opportunities for government. Civil Society Organizations, individual citizens and civil servants are already using these applications in relation with government activities, outside the reach and control of institutions. Thus, engaging with Web 2.0, and learning how to cope with this loss of control, opens avenues for a more effective administration (Osimo, 2008).

Social media are closely related to communities of practice. Advantages of these communities are: easier use of explicit knowledge assets, for example through shared access to a repository of best practices, reference documents, presentations etc., quicker response to customer needs by providing access to the expertise needed to solve problems, reducing the time taken for new employees to become productive by access to assistance and mentoring and lastly: generating new ideas for products and services by sharing perspectives and ideas (Van Winkelen, 2003). A very important effect is that through the socially embedded communication linkages, a group of people combines and exchanges their knowledge, which as a result generates new knowledge (Adler & Kwon, 2002). The strength of a community of practice is self-perpetuating. As members of the community generate knowledge, they reinforce and renew themselves. The aggregation of information results in decisions that are often wiser than could have been made by any single member of the group or even by an expert (Surowiecki, 2004). These informal structures require specific managerial efforts to develop them and to integrate them into the organization so that their full power can be leveraged (Wenger & Snyder, 2000). Democratising expertise is an important component of guaranteeing this process. Only if the ivory tower is opened up and experts come to the agora it is possible to find out what elements they provide to formulate and implement policy decisions, and how these elements are actually used (Liberatore & Funtowicz, 2003).

Establishing a community of practice based on a knowledge democracy involves investments in building social capital (Van Winkelen, 2003) which is the sum of the actual and potential resources embedded, within, available through, and derived from the network of relationships possessed by an individual or social unit. The key conditions for existence and generation of social capital include opportunity, motivation and capability. Other entities such as informal network structure, shared norms and values, and risk also interact with trust tot affect the knowledge creation (Adler & Kwon, 2002). Trust lubricates cooperation, and cooperation itself breeds trust (Nahapiet & Ghoshal, 1998).

The extent to which knowledge is shared and the extent to which members perceive the value of the network determines the success of such a community. The value increases, as the subject of a network lies closer to the daily activities of the members. The subject is thus at top of their mind, or even more: it is their passion (De Bruijn, 2008).

Public procurement is the common passion that binds the members in the community of PIANOo. PIANOo now exists for five years. In these years, PIANOo crossed different boundaries resulting in a integrated knowledge network for public procurement. These boundaries will be discussed in the next chapter.

CROSSING BOUNDARIES

The first and still most important step in crossing the boundary between different organisations was the introduction of the Internet discussion platform PIANOo-desk (www.pianoo-desk.nl).

On this platform, almost 3,000 governmental buyers exchange information by asking questions and giving answers. They can do this worldwide, 24 hours a day, and seven days a week, thus also crossing boundaries between time and space.

The challenge for PIANOo is to influence or even manage the coordination of the informally shared knowledge at PIANOo-desk. It monitors and coordinates the knowledge sharing as well as, acknowledging the informal nature of the community. This is a complicated task; the level of knowledge in such large community as PIANOo is very diverse. In fact, members ask PIANOo to summarise discussions, to draw conclusions or to intervene if answers are not in line with the law. They say that they do not have the knowledge to judge the qualities of the answers. Especially in discussions with many pro's and cons, they turn to PIANOo for an expert opinion.

As PIANOo-desk became very successful and the number of users and information grew, new tools were needed to keep all customers satisfied. First, an Internet portal (www.pianoo.nl) was started where all the general and public knowledge could be collected. The latest jurisprudence is published on a weekly basis with a summary and an explication of the newest judicial verdicts for the practice of the profession.

Frequently asked questions are made available to everyone through the interactive 'metro map' (http://metrokaart.pianoo.nl). All kinds of examples of documents are available in the procurement toolkit (http://git.pianoo.nl). All three are Internet tools, freely accessible for everyone. These actions greatly reduced the amount of information on PIANOo-desk.

The next boundary that needed to be crossed related to the production of knowledge.

As a reaction on the evaluation of PIANOo in 2008, the steering committee of PIANOo concluded, that PIANOo should act less as a network organisation and more as an expertise centre. One task of the expertise centre should be to make authoritative statements on subject matter. Hence, PIANOo needed to rely more on the experts, academics and lawyers in the network.

PIANOo founded two expert groups (think tanks). One expert group is involved in the legal matters surrounding public procurement. The other is involved in the economic aspects of the profession. The members of the groups are high-level practitioners with conceptual competences; meaning that they are all able to reflect on the profession of public procurement. Issues that are not well solved on PIANOo-desk are transferred to one of the expert groups to make a position paper.

University professors head both the expert groups. Several professors and advanced students are members of the network and actively participate in discussions or give lectures to members of the network. At our yearly congress, workshops of these professors are among the highest rated sessions.

Interpretive documents of the expert groups can help judges. Since the profession of Public Procurement is only beginning to develop, judges are very much on their own when settling disputes. With the development of PIANOo as an expertise centre which produces knowledge constantly and dynamically, a series of standards of the profession has been developed to which judges can refer, as in other professions.

PIANOo is part of the Ministry of Economic Affairs, the ministry responsible for legislation on public procurement. Policymakers are stimulated to become members of the community and to remain up-to-date. There are regular meetings in which topics dealing with policy are discussed. Currently, new legislation is being prepared and policymakers use PIANOo-desk to receive feedback on certain topics from the practioners.

Up until recently, PIANOo has had a strong focus on its target group: Dutch civil servants, dealing with public procurement. As PIANOo-desk proved to be the icing on the cake, a similar platform was started on a European scale. Together with Consip from Italy PIANOo is responsible for the EU Public Procurement Learning Lab (https://eulab.viadesk.com). This platform offers the opportunity to meet colleagues all over and even outside Europe and to exchange views with them. Recently, the European Sustainable Public Procurement Policy Community and ICLEI - Local Governments for Sustainability were added to this European community.

PIANOo's own work in The Netherlands has brought about an important shift of focus. PIANOo was founded to professionalise public procurement. However, you cannot buy a good product or service if you do not know what the market has to offer. Therefore, contact was made with the market. The first activity was to build a digital interactive library (http://www.bestekkenbibliotheek.nl) with requests for proposals, based on the American National Institute of Governmental Purchasing (NIGP) example. Originally set up to reduce the amount of documents on PIANOo-desk, it was decided to open it to business companies. The idea is that they are much more capable to comment on these documents, as they are specialists in the subject matter. Now, this library hosts almost 1,000 documents and the amount of documents as well as users is growing rapidly. It is interesting to mention that more and more branch organisations want to take responsibility for their part of the library.

The latest and very promising project is the 'Market meeting', where governmental buyers can meet with business enterprises to discuss relevant issues concerning public procurement in a specific sector.

RESULTS

The aggregation of knowledge has led to the publication of interpretive documents on topics like dealing with innovative procurement, deadlines, involvement of disabled and unemployed people, insourcing, letters of rejection and contracting of unique supplies, services and works, micro-parcels, purchasing cooperation and electronic auctions. A special product was the publication "Public procurement as a tool to fight the economic crisis". PIANOo makes 30 suggestions in 5 categories to use available resources as effectively as possible in order to limit the impact of the economic crisis.

Statistical data about the different activities of PIANOo is collected in Figure 1. It may be clear that satisfaction is high and that the amount of participants is still growing.

		2009	Jan.	Feb.	Mar.	April
Yearly congress	visitors	712				
	satisfaction	7,4				
PIANOo-desk	topics/discussions	244	15	28	27	16
	participants	2.630	2.721	2.723	2.772	2.844
	new participants		99	73	99	111
Library	# requests for propsals	927	927	921	863	856
	visits	466	403	489	611	346
	users	1.100	1486	1550	1625	1690
PIANOo-portal and Metro-map	visitors	127.374	10.876	11.240		
	visits	103.274				
Regional meetings	visitors	510			115 (2x)	189 (3x)
	satisfaction	7,2			7,2	7,3
PIANOo	visitors	289	53	95	40	55

lunch meetings	satisfaction	7,2	7,6	7,3	7,6	7,5
expert groups	publications	6				
EU lab	participants (countries)	205/32	210/32	210/32	221/32	180/32
	visitors	575	33	79	75	124
	visits		228	147	195	301
	new participants		12	4	12	4
Market meeting	participants			53	50	33
	satisfaction			8,3	8,0	7,9
Questions by mail	questions	545	48	55	78	51
	easy	201	18	9	32	21
	send trough	24	5	6	5	4
	complicated	320	25	40	41	26
	Avg. days to answer	3,5	3	3	4	4

Figure 1: Statistical data on PIANOo

REASONS FOR SUCCESS

The main ingredients for the success of PIANOo are 1) focus on needs, 2) the wisdom of crowds, 3) trust and social capital, 4) the role of the network leader and 5) the attention given to both amateurs and experts.

The main reason for success is the focus on the needs of the target group. PIANOo was founded as a direct result of the detection of fraud in the building sector. At the same time, the Ministry of Economic Affairs published an in-depth study of contracting authorities' compliance with the directives regarding European tenders. Results were such that it was concluded that professionalization was needed. In addition, accountability, the necessity to obtain an auditor's approval (which included public procurement) increased the attention. Lastly, more and

more managers discover that you can save money (reduce costs) with professional public procurement.

Secondly, one must not forget that public procurement is a relatively new area of interest. Until recently, facility management junior employer performed public procurement as an additional task. Fortunately, public procurement is seen more and more as a full time professional job, and as a profession in itself. As currently little information is available, people tend to cluster together to gather and share information. In this situation, sharing knowledge is a natural process because it leads to keeping up with or improving on their situation or position.

Both the growing interest from management and the development of the profession create the common necessity to disseminate knowledge.

In this situation, sharing knowledge is a natural process because it leads to keeping up or improving one's situation or position. Both the growing interest from management and the development of the work field create the common necessity to share knowledge.

The second reason is the attitude of the members. In a network without the participation of people who are eager to share, the members are able to share knowledge less frequently. PIANOo has the experience that a public procurement official, somewhere in the country, can better answer a question from the community than one of the so-called experts in The Hague.

The obvious advantages are:

Multilateral contacts instead of unilateral: all 3,000 members of the community of practitioners can simultaneously see any question asked and any answer given, seven days a week, 24 hours a day. Compare this to the classical concept of a knowledge centre, where bilateral contacts are established: one person poses a question and one expert gives the answer, without anybody else having access to it.

The knowledge possesses is more likely to be up-to-date, since the group's 3,000 members represent real and diverse experiences. Most questions refer to practical cases; there are usually people in the network with recent experience with recent experience in a comparable practical case.

Practitioners often have more trust in answers given by peers, who find themselves in a comparable situation than answers by experts, of whom

it is not always clear that they have practical experience, recent or otherwise.

All group members can stay up-to-date. Everyone can benefit from the centrally stored information: he or she will keep up-to-date on all information that may be interesting to him or her.

PIANOo-desk makes exchanging experiences and information easy, to prevent repeated re-invention of the wheel. This reduces costs substantially, as it takes less time for people to find solutions. By using and benefiting from each other's experiences, the best solutions are always close at hand.

The third reason for the success is trust. PIANOo needed a culture of trust and openness to allow meaningful knowledge to be exchanged. PIANOo-desk is an enclosed and trusted society. This creates an environment where users freely dare to give their opinions and views on the different topics. You know to whom you transfer your knowledge and the receiver knows who you are. You know why you transfer knowledge and what the other will do with it. At the same time, you are using knowledge from others. In this way, a living and growing social network is created from users who work together, share, and produce knowledge.

The fourth reason is the role of the network leader. PIANOo sees it as its task to organise the information streams and to translate the information into knowledge. The challenge for PIANOo is to influence, or even manage the coordination of the informally shared knowledge. It monitors and coordinates the sharing of knowledge and acknowledges of the informal nature of the community of practice.

The last reason is a distinction has been made between the needs of amateurs and the need of experts. This was done because there is so much information available that a beginner cannot make the distinction between amateur content and expert content. On the other hand, experts needed to be challenged and to keep them sharing their knowledge. This is why we collected repeating basic questions and published them outside PIANOo-desk. Amateurs now quickly find their answers and expert do not get bored by seeing the same questions repeatedly. The expert groups are meant to challenge the experts. In these groups, they meet each other

and discuss on a high level. The results of the discussions are published. These publications serve the goal of PIANOo of professionalising public procurement and, at the same time, are a reward for the experts willing to share their knowledge.

CONCLUSIONS

PIANOo, originally founded as a knowledge centre for public procurement, positioned itself as a community of practice, in which the community is the bearer of knowledge and in which PIANOo, facilitates the process of making that knowledge visible and available to everybody.

The example of PIANOo shows that Internet, and especially Web 2.0 and the use of social media, offers huge possibilities for governmental organisations who believe in interactive information sharing and collaboration. PIANOo has successfully crossed different boundaries in order to pursue its task to professionalise public procurement.

Key ingredients are the focus on the needs of one's members, the creation of an environment where members trust each other and have the right attitude to share their knowledge, and investing a lot of time and energy in the community. These ingredients are according to literature. For PIANOo is was surprising to notice that what was learned in practice as the results of five years of continuous improvements was afterwards confirmed by literature.

PIANOo is convinced that this model is applicable to every organisation. Developing countries with complex procurement regulations can utilize it, for example, to gain consistency in procedures and raise transparency of the procurement rules.

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