

Methods of knowledge gathering and the role of the knowledge worker in sharing relevant information for sustainable development and learning

VH (Hein) Spingies

Manager: Information Resources and Services, National Research Foundation Pretoria, South Africa

Meeting:

107. Knowledge Management, Continuing Professional Development and Workplace Learning with Information Technology

WORLD LIBRARY AND INFORMATION CONGRESS: 76TH IFLA GENERAL CONFERENCE AND ASSEMBLY

10-15 August 2010, Gothenburg, Sweden http://www.ifla.org/en/ifla76

Abstract:

Gathering knowledge to share and to learn from one another has never proven to be an easy task. In many organizations, there are methods and tools that have been put in place for employees to contribute knowledge, share the lessons they have learned, and even discuss the challenges they have experienced. When knowledge workers gathered this feedback (knowledge) it is normally done with the aim to ensure that it can be packaged and distributed among employees of that organization to improve service delivery, processes, or even the identification of new projects, etc. within that organization. In a modern high tech environment, this sounds great and could even be seen as a daily routine task of a knowledge worker. But in rural communities, this might not be the case.

The aim of this paper will be to determine how knowledge workers can use already know tools and techniques to gather relevant knowledge to ensure development and sustainability in rural communities. The gathered knowledge could lead to the re-establishment of social cohesion amongst the community or it might assist developmental organizations to plan and execute development projects that will have a real impact and improvement on their lives through community.

As knowledge experts, all of us must have come across many challenges surrounding knowledge management. One of these challenges is the process of gathering knowledge from rural communities to improve their lives through the implementation of developmental projects or just the sharing of knowledge so that others can learn and benefit. What is our role as knowledge workers towards social and economic development of rural communities and how can we use knowledge to ensure the eradication of poverty in rural areas. These are some of the questions developmental agencies in South Africa are dealing with – but shouldn't it become also something that the knowledge worker should be assisting with?

Paper submission: IFLA Conference 2010 (Global Learning System) Author: VH (Hein) Spingies, National Research Foundation, South Africa



In most of the rural communities one has to deal with the fact that literacy levels are not the same and in many cases reading and writing are limited to only a few people in that community. Gathering knowledge can therefore not happen by means of handing out questionnaires etc. It requires process a process of understanding the culture, environment and the people. The use of qualitative and quantitative methods can be used to obtain knowledge, but it cannot be taken as the only method to gather knowledge and whether it will provide all the information that is critical for developing that community?

With this paper I would like to share some practical information with delegates on how we as knowledge workers can adapt tools and community platform (mapping processes, community discussions and technology) to extract and gather knowledge form communities to assist with and promote community development – and thereby creating a platform to learn and share from one another.

1. Introduction:

Knowledge gathering is a method known to and used by many knowledge workers to identify and obtain information from all over the organization. In many cases this exercise includes gathering knowledge from individuals or groups of people within the organization. It can also be seen as a method where information and data is gathered and made known to others to enhance business processes, to review performance or even to plan the future of an organization.

However, gathering knowledge to share and to learn from one another has never proven to be an easy task. In many organizations, there are methods and tools that have been put in place for employees to contribute knowledge like blogs, portals etc., spaces where they can share the lessons they have learned, and even discuss the challenges they have experienced. When knowledge workers gathered this feedback (knowledge) it is normally done with the aim to ensure that it can be packaged and distributed among employees of that organization to improve service delivery, processes, or even the identification of new projects, etc. within that organization. In many cases this gathered knowledge can provide valuable insight in planning the way forward for businesses.

But what happens in rural and community development with regards to gathering knowledge? How do we apply our knowledge and skills to enhance the lives and the future of those rural communities to ensure that they become self sustainable? Is this even possible? Can knowledge workers in working in development agencies use the same knowledge gathering methods to gather knowledge and to monitor and evaluate rural communities than those methods being used in organizations to gather organizational knowledge? In a modern high tech environment, this sounds great and it could even be seen as a daily routine task of a knowledge worker. But in rural and developmental communities, this might not be the case. Can development agencies really afford not to have knowledge workers, and if the answer is no, then what exactly will the role of the knowledge worker be within a development agency? Is it merely to gather institutional / organizational knowledge or can they contribute to ensure rural development and sustainability?

These are some of the questions this paper would like to address and the aim will be will be to describe what gathering methods a knowledge workers can utilize to gather



information and data, or even indigenous knowledge from rural and developmental communities. This paper would also like to address the role of the knowledge worker in making sure that the right information is gathered and to transform these gathered pieces of information into making sense, so that development agencies can make informed decisions pertaining to rural and sustainable development. The gathered knowledge could also lead to the re-establishment of social cohesion amongst a community or it might assist developmental organizations to plan and execute development projects that will have a real impact on and improvement the lives of the community.

2. The Challenge:

As knowledge experts, all of us must have come across many challenges surrounding knowledge management and the gathering of valuable (and useful) information and data. As a knowledge worker for a development agency one of the many challenges faced, was the process of gathering knowledge from rural communities to improve their lives through the implementation of developmental projects or just the sharing of knowledge so that others can learn and benefit. What are the correct methods to use? Will the community understand me? In South Africa, language is a challenge when gathering knowledge from rural communities. South Africa has eleven (11) official languages and in many of the rural communities English is neither spoken nor understood. If you're lucky, there might be an interpreter or a youngster visiting from the city, but how do you face the challenge if there is none?

Another challenge the knowledge worker faces in gathering knowledge from rural communities is literacy. In most of the South African rural communities one has to deal with the fact that literacy levels are not the same and in many cases reading and writing are limited to only a few people in that community. Gathering knowledge can therefore not happen by means of handing out questionnaires to obtain relevant information and data. It requires process a process of understanding the culture, environment and the people. The use of qualitative and quantitative methods of information and data gathering can be used to obtain knowledge, but it cannot be taken as the only method to gather knowledge and whether it will provide all the information that is critical for developing that community?

Facing the challenge means understanding the challenge. When the knowledge worker understands the challenge, the correct method for gathering the relevant information and data will be selected. The challenge for knowledge workers is to really understand the environment that they are operating within and not just focusing on getting the numbers, stories and data. It is to understand the requirements and demands of social and economic development of rural communities and how can we use knowledge to ensure the eradication of poverty in rural areas. These are some of the challenges knowledge workers in rural development agencies in South Africa are dealing with – but shouldn't it become also something that the knowledge worker should be assisting with anyway?

There is no simple solution to poverty eradication and rural community development and most definitely it is not just about providing schools and sanitary facilities. What



is critical is that we as knowledge workers, should become are part of the "understanding the real need" so that we can ask the right questions to get the right answers (information) to be able to inform others (those responsible for creating and implementing projects in rural communities), but the real important factor is that we as knowledge workers have to be sure that whatever method we use, that it will provide relevant and useful knowledge to the organization and those that have required the knowledge, so that the organization can understand what its role will be towards rural and community development and therefore being able to execute its developmental activities with success.

3. Methods of knowledge gathering

There is probably more that one method that can be successfully used in gathering information and knowledge from rural communities. The aim is not to prescribe a certain method or to say that the three methods described in this paper are the best methods to be used. It is to share with and inform the audience how these methods were used and what the results were after the knowledge was gathered.

The Local Area Planning process is a familiar process within the local and provincial councils of South Africa. In many cases this process is seen as an intensive planning process that normally spans across a few days (sometimes more than a week) which involves discussions with communities in all the wards (districts) regarding the plan of action for the year to come for that specific ward and the communities residing within that ward. There are many wards within a district and the sum of all the districts forms the local municipality. A lengthy and tedious process indeed, but what a great source of information. It is a method that involves the entire community and it happens at a local level. This means that everyone residing within that community will form part of the discussion. The main stakeholders involved are normally the local council representatives, community leaders and their spokes people, and the community itself.

At first, the gathering might seem to be a bit chaotic, but once the ranks of authority has sorted themselves, it provides the knowledge worker with an excellent opportunity to gather appropriate information and knowledge from the discussions so that he / she will be able to provide input into possible areas where a development agency can focus its efforts. In so many cases it has happened where development happens for the sake of development – in other words without proper planning and thought. As a knowledge worker, I had the opportunity in 2006 to be part of such a local area planning process in the Northern parts of KwaZulu Natal – one of the nine provinces of South Africa. This was my first project as a knowledge worker for a development agency. As the process evolved in front of me, I realized the power of the information that was shared between the various people from the community. A natural formation of groups took place (men and women formed separate groups). In many of these communities women don't have much say in planning the future of the community. The men are traditionally the leaders in the community and take responsibility for decision making and how the community will move forward. Yet in this community the process involved all the women as well as the youth from the community. The reason mainly because many of the men are working else where in the country and the sustainability of the community relies on the economic



contributions of the women in the community. This is one of the many dynamics of rural communities in South Africa that requires understanding.

The local area planning process (in this case) required the community to map out the importance of critical decision makers within their community. These are normally the indunas (chief of the community – leaders and representatives of the King's house) the community leaders (non traditional), representatives from the local council and ward councilors. The community was also requested to draw a map of the area indicating schools, clinics, shops, and infrastructure (water, road, sanitation, etc). On the same map, all households and number of people staying within that house hold had to be mapped down as well as what (and where on the map) current community projects are being conducted. Details regarding these "unfinished" projects were also gathered as well as the drawing up of a "wish list" indicating what the community feels should be addressed by the local council to improve their lives.

Through careful observation and taking notes of the process that unfolded (and the help of an interpreter) I was able to understand the key requirements the community had in terms of its future development. It is critical to understand and to know who the key decision makers are and what influence they have on the community and vise versa. For a development agency this harvested knowledge can then be used to plan projects that will have a real impact on the community. The development agency will be able to assist the community (through the local council) to plan and execute projects where the community can be involved (through contracting the community to help with the projects) and not just do development for the sake of development.

In the case of this rural community one of the critical requirements was a senior secondary school for their children. Since the community only had a primary school many of the older children had to attend schools in the surrounding areas and towns. Of tradition, this community is known in South Africa for grass weaving and the beautiful carpets, furniture and other products they manufacture from grass. The transfer of their grass weaving skill was of great concern to them as many of the older children migrated to the cities and larger surrounding towns due to the fact the there was no senior secondary school. The bulk of their income and living allowances come from the grass weaving and the products that they sell at local markets and if they are not able to transfer their skills to their children, the skill will soon die with the elderly and potential income will be lost. Not to mention how the community will take care of themselves. It is therefore critical that this type of knowledge gets transferred through the appropriate channels and that development planning and actions are build with these corner stones in mind. The knowledge worker can therefore ensure that rural development projects are focused on the actual community requirements and not just on what other people might think that community requires (without consulting them).

Another useful method for knowledge workers in rural and community development is *Community Dialogues* – also known as community forums. Only leaders and selected representatives from the community are normally involved with this knowledge gathering method. This method provides the knowledge worker the opportunity to work a bit closer with the community leaders and selected members from the community and it normally is conducted very informal. Prior to the date of



the dialogue it is however required to negotiate access to the community through the community leaders. This will ensure that you are welcomed in the community and that the community leaders will support the process of knowledge gathering. An agenda also serves at the dialogue to guide the discussions that will follow.

The role of the knowledge worker is to ask relevant and leading questions and to lead the discussion by focusing on challenges and opportunities within the community. In a recent visit to a community in the Northern Cape, the dialogue resulted in the identification of a number of potential community development projects. Not only new development projects were identified, but also a few projects that needed some new direction and a few that had to be revived. With regards to the latter, it is critical that the information that is gathered will indicate why the projects need new direction and revival. This is typical a lessons learned exercise to understand the successes as well as the challenges the projects faced and what made them to not being implemented or going "dead". The concept of social cohesion also featured with a discussion pertaining the influence of the 2009/10 economic conditions of South Africa on the social cohesion amongst the community members. One of the key lessons learned from this experience was that strong community values and a sense of belonging (through a community caring initiative) can survive any difficulty or challenge.

During the community dialogue it was identified that the use of an *Environmental Scan* (as another method to gather information / knowledge) would be of great value to this specific community. The use of an Environmental Scan in this case means that a SWOT analysis will be done to determine how the community can use its strengths and opportunities to overcome its weaknesses and threats. A very quick SWOT analysis was done with the community since it did not form part of the initial planning. It turned out that this community had much strength among themselves with lots of opportunities to become sustainable again. Their entire "being" – in other words "who they are" rests on values and believes and this form the foundation of every decision that is made by the leaders of that community.

So what is the role of the knowledge worker or what does the knowledge worker contribute to this community? Knowing the method of identifying the community's strengths, weaknesses, opportunities and threats, will enable the knowledge worker to inform the community leaders on areas that they should focus their efforts on.

It actually work both ways – on the one side the knowledge worker will contribute towards the community by informing them on which areas they need to focus their efforts while on the other hand, he / she will be able to provide guidelines to the development agency in terms of possible projects that will focus on the strengths and opportunities of the community as well as informing the development agency what things to avoid that could potentially influence the successful implementation of developmental projects (threats and weaknesses). It could also mean that the projects in plan for the community could address their threats and weaknesses so that they could become a much stronger community. If this is done correctly and planning of the projects are in line with the expectations and requirements of the community the re-establishment of social cohesion will happen much easier as well as the way in which the community can become self sustainable.



4. The use of technology to support the gathering of knowledge

No matter how you want to describe it, technology can be seen as a method and enabler to support the gathering of knowledge for rural and community development. Technology is a powerful tool that can be used by the knowledge worker and it also has an impact on the role the knowledge worker plays in gathering (and capturing) information and data for rural and community development. The role of the knowledge worker is to ensure that when technology is used that it makes the task of capturing stories, answers and information that were shared during the various methods used to obtain information and data much easier. In the knowledge gathering methods described above, the use of technology on site can also speed up the process of making sense out of the gathered information.

Recently the Trimble has been investigated by some development agencies as a possible technology enabler to be used when knowledge / information has to be captured on site. The Trimble is a hand held device – similar to a HTC mobile phone that will allow the knowledge worker to capture information as per predefined templates. It also offers the knowledge worker to take photos and video clips. Probably one of the coolest features that the device has is that it automatically captures and stores the GPS coordinates of the site / place where the knowledge was gathered. When the gathering process is done (complete), replication happens through the press of a button. This ensures that through GPRS, the information whether it is text, picture, video or sound is replicated to a server somewhere in an office in a busy city.

In the case of the Local Area Planning process, the Trimble will enable the knowledge worker to not only complete online questionnaires (predefined on a template) but also to capture the drawings and sketches, make videos and take sound recordings of the actual happenings during the process. The risk of loosing these valuable drawings becomes less, and they can immediately be interpreted along with the text, sound and video that was replicated to the server back at the office. No need for the knowledge worker to write a report afterwards. Everything can be done on site. The same can be done for the Environmental Scan and even at the Community Dialogue. Potential project sites can also be captures and discussions pertaining to these potential sites can be captured. All of this can be used to make the case for new projects in rural and community development so much stronger.

On the other hand, the Trimble can also be used as an excellent monitoring and evaluation tool for existing developmental projects. For monitoring and evaluating projects, the project manager or the knowledge worker can perform the actual exercise on site. The same uses of the Trimble apply, except for the fact that the reporting templates might differ to cater for the needs of a monitoring and evaluation exercise. The gathered information is replicated to the server and it allows for instant MIS reporting and project status updates allowing the project manager to plan actions of getting the project back on tract or addressing those areas of the project that needs immediate attention.

Using technology to support the methods of knowledge gathering makes it a powerful process and it makes the role of the knowledge worker so much more



fulfilling. With this, the knowledge worker (and project manager) will be able to go from gathering, storing, sharing and retrieving to the creation of new knowledge (and innovation) for the use of developing new project charters and plans for rural and community development or the management of existing community development projects.

5. Closure

It doesn't matter what your business is – whether it is consumables, fashion, finance, security or rural and community development – we all need to gather information so that we can improve our business processes, understand our business and in many cases create new business. In the case of rural and community development, gathering knowledge can have an impact on both the internal performance and rural and community development strategy of the organization as well as the direction the development organization will take towards initiating and delivering rural and development projects to ensure community sustainability.

In all of this, the role of the knowledge worker is not only to ensure that information is gathered, captured, stored and made available but also to ensure that it is viewed in the right context and with the background of the community where the gathered information originates from.

My last example refers to the recent drought restricted area in the Eastern Cape, a province within South Africa. By the end of March this year many of the farmers in the community had already lost huge percentages of the export fruit for the season. Little drinking water was available not to mention that there was almost nothing (water) for farming activities. In the midst of this, 300 water tanks (about 10000lt each) were delivered to the community by a development agency to assist them as part of the drought relief program initiated by the local government and surrounding municipalities. Unfortunately having water tanks only doesn't relief the drought. These tanks mean nothing if they are not leveled, have no tap and no gutters that will divert rain water from the roofs into the water tanks.

If one wants to plan development projects around drought relief, one needs to carefully understand the impact of the drought on the community and the long term effects of the drought. Careful planning and requirements analysis needs to be done and frequent interaction with the community and its leaders is required to make this type of rural development project a success. Unfortunately no development agency can guarantee rain during drought, but the infrastructure and requirements to harvest rainwater need / can to be addressed. If this is well planned and executed, by the time the rain does come, broken dams will fill up, water tanks will provide sufficient drinking water again and communities will realize the value of water. Maybe the development agency can also play a role by making use the knowledge worker to establish a drought awareness program and educate the youth of the community regarding saving water and using water scarcely. It is really not about the water tank or fitting of a gutter, it is also not about giving children water bottles to drink water from instead of drinking from the tap outside the class room - it is about understanding drought and the impact of that on the community.



Gathering knowledge is pretty much the same – it is not just about getting stories and numbers or filling in questionnaires and documents. Yes, getting the stories and information is important, but understanding what to do with it is also important. Gathering knowledge as a process will provide valuable information for developmental organizations to carefully plan new rural and community development projects and in some cases even revive older projects.

In conclusion, we as knowledge workers have the opportunity to utilize our skills in gathering information and to transform it into knowledge, in a variety of industries. We don't have to bound ourselves to the daily routine work of organizational knowledge management – we have more to offer – we can contribute our skills and experience of gathering knowledge so that the lives of those communities that are poverty stricken and that requires unique interventions can change so that they too can live a better life.

Authors' Contact information:

Hein Spingies | NATIONAL RESEARCH FOUNDATION

Manager: Information Resources & Services

PO BOX 2600, PRETORIA, 0001, SOUTH AFRICA

+27 (0)12 481 4363 - office

+27 (0)83 415 0890 - mobile

+27 (0)86 585 8782 - fax

heinrich.spingies@nrf.ac.za - email