



## COMMUNITIES OF PRACTICE IN AN ACADEMIC LIBRARY : A RUN ON THE WILD SIDE?

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*ABSTRACT: The global economy of the modern world, also called the New Economy, is characterised by globalisation, growing customer demands, greater competition and continual advances in technology. This has forced organisations to rethink the way(s) in which they operate and do business. Knowledge has become one of the most important assets that can enable organisations to be among the top players. Knowledge in organisations can be explicit and recorded, or can be tacit (i.e. in people's minds). In the past, organisations (also academic libraries) were good at creating, disseminating, organising, recording and retrieving explicit knowledge (also called information). It is the tacit knowledge (expertise, know-how, skills, etc.) of their staff and clients, however, that gives them the edge above their competitors. Some tacit knowledge can be recorded (made explicit), but a big part of it can never be recorded, documented or captured.*

*This has created a very real need. How can tacit knowledge, which is very valuable to organizations, be disseminated and embedded in the organisation for future use? The answer lies in the utilization of Communities of Practice. Communities of Practice have been utilized with great success by organisations in the business and manufacturing sectors, but can these Communities be applied with the same success in academic libraries, or is it a run on the wild side? To investigate this problem, a literature study of the concept of Communities of Practice was done. In the discussion of the results of the literature study, an overview was given of what Communities of Practice are, the advantages of Communities of Practice, their relationship with knowledge management and learning organisations, how knowledge is managed through Communities of Practice, the stages through which they develop, and the factors that are critical for their development.*

*After the literature study, these aspects were applied to Communities of Practice in the Academic Information Service of the University of Pretoria as a case study. Results of the study showed that Communities of Practice have a definite and valuable role in the management of knowledge in the AIS as an academic library that is a learning organisation, but they seem to be very vulnerable human institutions which should be well nurtured, as they are very much dependent on the support of top management, information technology infrastructure, enthusiasm of their members, trust between members, time, and rewards and incentives to participate.*

### **Introduction**

The global economy of the modern world, also called the New Economy, is characterised by globalisation, growing customer demands, greater competition and continual advances in technology. This has forced organisations to rethink the way(s) in which they operate and do business. Knowledge has become one of the most important assets that can enable them to be among the top players.

### **Explicit and tacit knowledge**

Knowledge in organisations can be explicit (recorded), or can be tacit (i.e. in people's minds). In the past, organisations were good at creating, disseminating, organising, recording and retrieving explicit knowledge (also called information). Organisations have, however, found that it is the tacit knowledge (expertise, know-how, skills etc.) of their staff and clients that give them the edge above their competitors. Tacit knowledge, though, is situated in people's heads and when people leave the organisation, the knowledge leaves with them. Some tacit knowledge can be recorded (made explicit), but a big part of it can never be recorded, documented or captured. This has created a very real need. How can tacit knowledge, which is very valuable to organizations, be disseminated and embedded in the organisation for

future use? The answer lies in the utilisation of Communities of Practice.

Many articles in popular and scholarly literature have been written on the utilisation of Communities of Practice by organisations in the business and manufacturing sectors to help manage their knowledge. Academic libraries, in much the same manner as business and manufacturing organisations, are confronted with the ever increasing problem of how to capture and embed the tacit knowledge not only of their own staff, but also of clients, in this case academics, researchers and students, at their respective universities. A review of literature, however, shows that little research have been done on their application in learning organisations such as libraries, especially in South Africa. The question is can Communities of Practice be utilised in academic libraries with success, or is this a run on the wild side?

### **Overview**

In this paper I will touch on the concepts of knowledge management, the learning organisation and Communities of Practice (CoPs) and their relationship towards one another, as well as the stages in the development of CoPs, and CoPs in an academic library

where I will focus on the Academic Information Service, University of Pretoria as a case study.

### What is knowledge management?

For the purpose of this paper, knowledge management can be defined as a discipline that utilizes and exploits all of an organisation's knowledge assets, including all its information (explicit knowledge) as well as its unarticulated experience and expertise (tacit knowledge) resident in individuals so as to ensure sustainability as well as competitive advantage. This is done by utilizing its culture, processes and infrastructure to create, identify, capture, share, use and re-use knowledge so that it adds optimal value to every member and every client's knowledge base (Van Wyk, 2005: 28-29).  
What is a learning organisation?

A learning organisation can be defined as an organisation that can identify, develop and utilize its tacit and explicit knowledge capabilities, enabling the organisation to expand its capacity to learn and grow, and to modify its behaviour to reflect new knowledge and insights, and in doing so to improve its performance and success (Van Wyk, 2005: 59).

### Communities of Practice

#### Background

Man is in essence a social creature, and from the beginning of time, man has been organizing himself in social groups. Ancient Greece had male drinking clubs, which played an important role in society (Black, 1984: 3). The Romans had Collegia, from which we inherited the word college, which included social clubs, burial societies and cultic groups (Duff, 1938: 113). In the Middle Ages the guild came to the fore. A guild was a group bound together by ties of rite and friendship, offering mutual support to its members upon payment of their entry (Black, 1984: 3). Another example is that of the caste system in India, which functioned partly as a craft group (Black, 1984: 3). All of these groups were artificial "families" that differentiated themselves from the outside world through their own special ethos. In the modern world, groups like regiments, schools, old-boy-networks, peer-groups and even gangs bind people together as select groups with common interests, practices and ethos (Black, 1984: 4).

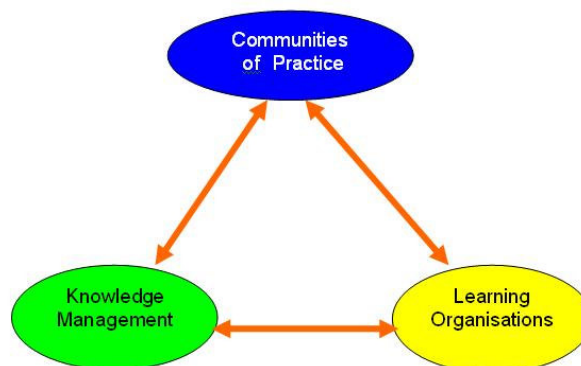
In the academic world, the idea of collaboration in research is nothing new, for example the Royal Society and the American Philosophical Society, and specialists societies that focus on specific disciplines/fields (Price, 1963: 74). Societies that were too big resulted in the formation of unofficial subgroups of really knowledgeable researchers. These groups are described by Price (1963: 85) as "invisible colleges". These groups devise mechanisms for day-to-day communication. They send out reprints of publications, preprints and pre-preprints of work in progress and results about to be achieved. Members of these groups are invited from time to time to "centres where they can work along with several members of the group for a short time" (Price, 1963: 85).

In the early 1980's, Xerox was looking for ways to boost the productivity of its field service staff. They found that technical reps often made a point to spend time with each other in common areas like the local parts warehouse or hang around the coffee pot and exchange stories from the field. As it turned out, these gatherings were not just social activities, but a community of professionals (technical reps) coming together with the purpose of sharing and co-producing insights about how to repair machines better (Brown and Gray, 1995: 78). In other words, it was through these informal conversations that knowledge transfer took place. So, rather than eliminating these informal conversations in pursuit of corporate efficiency, the company decided to expand them as part of their learning and innovation process. (Brown and Gray, 1995: 78)

The idea of a community of professionals sharing insights and practices was then further taken up by Jean Lave and Etienne Wenger in a book they wrote in 1991, entitled Situated learning: legitimate peripheral participation. In this book, they coined the term "Communities of Practice", which took the business community by storm.

### What is a Community of Practice?

A Community of Practice can be described as a network of people emerging spontaneously, and held together by informal relationships and common purpose, that shares common knowledge or a specific domain, expertise and tools, and learn from one another (Van Wyk, 2005: 92).



*Interrelationship between Communities of Practice, knowledge management and learning organisations*

Communities of Practice can ensure and accelerate the sharing/flow of knowledge/expertise. Learning organisations are characterised by the acquisition, creation, usage, storage and transfer of knowledge, and the rapid leveraging of new knowledge, in other words knowledge management (Marquardt, 2002: 16).

Communities of Practice can also act as learning spaces where people can share their know-how and experience with their peers and learn from one another (Burk 2000: 18-19).

A study of literature has shown that Communities of Practice are often found in learning organisations. It was also found that learning organisations are characterised by knowledge management; therefore, knowledge managed through Communities of Practice can also help in the development of learning organisations (Van Wyk, 2005: 177).

### **Capturing knowledge through Communities of Practice**

But how does one capture knowledge through CoPs? There are various ways, but the following methods are most commonly used:

#### *- Storytelling*

Past experiences and know-how are conveyed in the form of a story in order to give a better understanding of the organisation, issues at hand etc. It also gives meaning and helps to pass on what we know (Gill, 2001: Online).

#### *- Role-play/Scenarios*

A technique where people act out new roles in front of each other or simulate/model real-life problem situations (Education in the 80s, 1981:158; Swink, 1993; 91)

#### *- Knowledge mapping*

Through knowledge mapping, one can determine who knows what, what are the relationships between stocks of knowledge, and how and where the information is stored (Fahey et al. 2001: 891).

But can Communities of Practice operate in academic libraries that are also learning organisations, or is it a run on the wild side? In order to answer this I focused on the Academic Information Service (AIS) of the University of Pretoria

### **The Academic Information Service (AIS), University of Pretoria, South Africa as a case study**

#### **Background**

The Academic Information Service (AIS) is the collective name of the libraries of the University of Pretoria, South Africa. The AIS is a networked organisation consisting of a number of service units that are each geared towards rendering a one-stop service to clients (students, faculty staff and researchers) from specific subject groupings, e.g. Humanities, Economics and Management Sciences, Veterinary Sciences etc. as well as support units focusing on certain functions in the AIS and delivering a service to the service units.

Support units consist of entities like Financial and General Administration; Human Resources; Facilities and Maintenance; Information Management Procurement Services (IMPS), which includes the cataloguers, ordering people and people who receive the sources, as well as the Interlibrary Loans Section; and Information Systems and Technology.

Respondents that are involved in CoPs were identified across the different service units and support units and individual interviews were held with them, which were then followed up by a focus group interview consisting of

these respondents together in one group. These interviews were preceded by a literature study on the subject.

#### **Types of CoPs**

Two types of CoPs can be distinguished: Cross-organisational CoPs formed across organisational boundaries or boundaries of different organisational units which can include professionals sharing the same domain, but are working in different organisations or organisational units; and Internal CoPs, consisting internally between colleagues in an organisation, focusing on the internal work processes and practices of the organisation, that normally operate in organisational units in the same organisation (Van Wyk, 2005: 89-90).

#### **Cross organisational CoPs identified in the AIS**

During the interviews the following cross-organisational CoPs were identified in the AIS:

#### *- Knowledge Management Practitioners Group of Pretoria*

Consists of people from government departments, academic institutions and NGOs interested in knowledge management

#### *- GCATS (GAELIC Cataloguers and Technical Services Workgroup)*

Started as a sub-group of the Gauteng and Environs Libraries Consortium (GAELIC) and later developed into an informal knowledge-sharing group, where know-how on cataloguing are shared by staff from the different institutions.

#### *- Maritime Archaeology Group*

This group developed because of the interest of several parties from different faculties and institutions from Pretoria and Cape Town, viewing the topic from different perspectives, and consists of one information specialist and researchers from both University of Pretoria and Cape Town. It functions mostly virtually because of the distance between the two locations.

#### *- Virtual Group on Water Research*

The information specialist working in the Service Unit Natural and Agricultural Sciences, Engineering, Built Environment and Information Technology of the AIS identified different people working with water and realised there are 18 departments on campus working on water research. This information specialist then gathered the information specialists of the academic departments together, including one group of lecturers who were already involved in the InfoPortal. These groups then formed a virtual group on the InfoPortal of the University of Pretoria.

#### *- Virtual Group on Architecture*

This group started because of a lecturer's interest, and consists of a lecturer and students of the Architecture department, with input by the information specialist. This is also a virtual group on the InfoPortal of the University of Pretoria.

#### *- African Goats Group*

The African goats Group started before the InfoPortal of the University of Pretoria had been created, and developed when one of the information specialists at the

Veterinary Library started a web page on African goats. On the web page she provided a list of experts in the field with contact details and this helped researchers in the field to connect with one another as well as with farmers in the community.

**Internal CoPs identified in the AIS**

The following internal CoPs were identified in the AIS:

- *Information Specialists Group*

This group consists of information specialists from all the units in the AIS and meets once a month face-to-face sharing trends and aspects of the profession.

- *Digital Repositories Group*

This informal group was started around a project to enable staff members to share their expertise and know-how on the topic with one another.

- *Informal Network for E-Information Experts*

This group was started by information specialists across the AIS sharing an interest in e-information. It communicates via e-mail, telephone, face-to-face etc.

**Stages of development**

Communities of Practice develop through different stages forming a life cycle (Allee, 2000: Online; Gongla and Rizzuto, 2001: Online; Hanley and Dawson 2000: 326-328) . In each of these stages the information specialist can have different roles to play.

Stages in the development of a CoP (based on Allee, 2000: Online; Gongla and Rizzuto, 2001: Online; Hanley and Dawson 2000: 326-328)

The stages through which a CoP develops can be summarised as follows:

STAGE 1	POTENTIAL
Definition	The possibility for the formation of a community exists.
Fundamental function	Connection.
Behaviour of members	Find one another; Find common ground; Link up; Prepare for a community.
Possible role of information specialist/ librarian	Identify suitable candidates to join; Market CoP to potential members; Identify existing communities; Sell CoP to management for support; Conduct interviews and facilitate group dialogue; Act as Community Champion or coach a Community champion.

STAGE 2	FORMATION
Definition	The members come together, form a community and set out its operating principles.
Fundamental function	Capturing memory, context creation and structuring.
Possible role of information specialist/ librarian	Act as facilitator; Set up, facilitate and document informal meetings; Map knowledge flows and knowledge relationships; Build group identity by setting up a homepage or designing a virtual workspace.

STAGE 3	COMMITMENT
Definition	The community executes and improves its processes.
Fundamental function	Access and learning.
Possible role of information specialist/ librarian	Design knowledge capture and documentation systems; Design, convene and facilitate seminars and conferences; Develop support strategies for the group learning agenda.

STAGE 4	ACTIVE
Definition	The community understands and demonstrates benefits from knowledge sharing and the collective work of the community.
Fundamental function	Collaboration.
Possible role of information specialist/ librarian	Encourage members to stay committed; Make online links to members' papers; Publish stories on individuals or communities in newsletters or other corporate-wide publications; Address organizational issues that are either helping or hindering activity; <b>Help negotiate the role of the CoP in organizational decision-making;</b> Forge linkages with other groups and communities.

STAGE 5	SCENARIO 1 – ADAPTIVE
Definition	The community adapts to changes in the environment.
Fundamental function	Innovation and generation.
Possible role of information specialist/librarian	Mentor/teacher; Facilitator; Innovator.

STAGE 5	SCENARIO 2 - DISENGAGE AND DISPERSE
Definition	The usefulness of the community for its members and supporting organization has been outlived, and its members move on.
Fundamental function	Disengagement.
Possible role of information specialist/librarian	<b>Facilitate; reunions; directory.</b> <b>Convene Maintain</b>

### What did the study show?

Communities of Practice helped their members do their work better, to put a better product on the table, to share/transfer knowledge, to accelerate knowledge sharing /transfer, and to create a stable sense of being part of a network or community.

Communities of Practice were also used to embed knowledge and expertise in the larger organisation, which helps when experts leave the organisation. They were used to cross-fertilize ideas across the structured boundaries of the organisation, and helped to ensure standardisation. Communities of Practice also increased opportunities for innovation and increased access to expertise. These CoPs, though, did not develop as fast as one would have hoped because of certain critical factors which were absent.

### Critical factors for the success of Communities of Practice

#### Involvement of Management

Management plays an essential role in motivating people to participate in Communities of Practice. During this study two of the top management members of the AIS went on retirement. These members were very active in promoting CoPs, but after they left their absence caused a feeling of uncertainty in the AIS, which caused people not to give CoPs the same attention as before. Other issues were deemed more critical.

#### Time to participate

Staff members involved in Communities of Practice need to be afforded the time to attend CoPs, but this is

not always possible. Management can play a role here to allow staff members the necessary time to participate in CoPs.

#### Workload

Workload goes hand in hand with time. Staff members are sometimes doing 2 to 3 people's work and feel that CoPs are just another load they have to carry. CoPs though might just make things easier for them. As they share with others, they might find easier and quicker ways of doing things

#### Rewards or Incentives

People only participate in CoPs for the value that they can get out of it. Management can play a role here by building participation in CoPs into staff members' performance evaluation and rewarding them, for example, in the form of financial incentives. This could motivate people to give more attention to these Communities.

#### Size of the CoP

The interviews and literature study showed that the ideal size of a CoP is 15-20 members. The bigger the group gets the more difficult it becomes to share knowledge with each other.

#### Trust

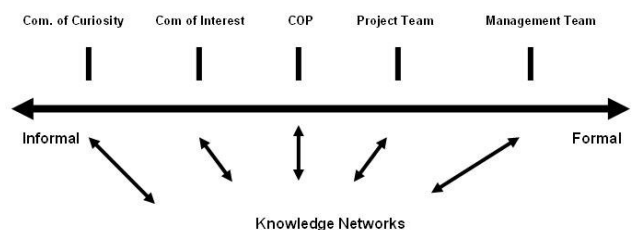
It is essential that members in a CoP trust one another. Without the necessary trust people will be hesitant to share with one another.

#### Coordination or facilitation role in the CoP

The study showed that the information specialist with his/her expertise can easily fulfill the role of facilitator in cross-organisational CoPs, but the leadership role is normally fulfilled by an expert in the field.

#### Formal versus Informal

Communities of Practice lie on a scale between formal and informal. The more formal the group gets the more difficult it is for people to share knowledge.



#### Information Technology

It is essential that one uses the right type of technology for a CoP. Technology shouldn't limit or keep people back from forming such groups. There are various technologies and software that can be used e.g. e-mail and listservs, telephone and teleconferencing technologies, web pages, virtual workspaces on portals, e.g. InfoPortal of UP, blogs etc.

## Conclusion

In conclusion, are Communities of Practice a run on the wild side? It may seem so to some, but the study of the AIS showed that CoPs in academic libraries are possible. Just as the cheetah is the fastest land animal, CoPs might enable academic libraries to outrun others and retain their competitive edge.

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