

# Preface

## OVERVIEW

Communities of Practice (CoPs) are developing in importance for the organizational world. In the field of knowledge management there is increasing importance being placed on the social aspects of knowledge and how it can be managed, as opposed to how technology can be utilized. Technology, it is now being argued as a supportive mechanism rather than a driver for the management of knowledge. People, it is also maintained, prefer to share their knowledge on a face-to-face basis rather than through electronically mediated means. Once the knowledge is shared in a tacit manner, there remains the issue of how it may be shared through technology, as information to be accessed as required.

Much has been made of the difficulties associated with turning so-called tacit knowledge into explicit. One way of characterizing this problem is to see explicit knowledge as recordable (on paper, computer disk, etc.), and tacit as inherently difficult to record and hence to share through such media as computers. A possible solution to this is to see sharing tacit knowledge as a process, achieved through human interaction, rather than as simple content.

CoPs can contribute to this by connecting people so that they can collaborate and share their tacit (personal) knowledge about a particular work context or practice. Thus railway engineers will meet to discuss issues such as how to devise good signalling; midwives will meet to discuss best practice in drugs for childbirth and so on. As Wenger (2001) argues they are people who “share an interest in a domain of human endeavour and engage in a process of collective learning that creates bonds between them” (p. 2).

Here, in the *Encyclopedia of Communities of Practice in Information and Knowledge Management*, for the first time, we combine discussions of how CoPs can assist organizations, both voluntarily and privately funded, from both practitioners and academics. These discussions come from a wide variety of industrial sectors and from across the world.

## COPs IN THE ORGANIZATIONAL WORLD

There are a number of definitions of CoPs available in literature. However, Etienne Wenger is credited as being the person who has most developed the concept. Thus, here we offer his definition taken from his study of supporting technologies:

*Communities of practice are a specific kind of community. They are focused on a domain of knowledge and over time accumulate expertise in this domain. They develop their shared practice by interacting around problems, solutions, and insights, and building a common store of knowledge.* (2001, p. 1)

There are a many ways of defining a community, including: the domain, the practice, and the community itself.

In the organizational world these communities are very much focused on expertise, and are intended as social structures for sharing practice and practical knowledge. It is therefore embedded in the CoP concept that CoPs have the ability to cut across departmental or even organizational boundaries, and can provide learning (and teaching) opportunities to all levels of staff, of all ages and experience, in an informal manner. Communities, once established, may outlast the organization in which they were created, and may even grow across time to encompass practitioners in very diverse organizations. Communities need to be re-informed in their practice by regular meetings and engaging in joint activities. Through these activities they re-enforce their social bonds.

In gathering and collating the material for this encyclopedia, we and our Editorial Advisory Board have found the contributions naturally falling into seven categories, and consequently a Table of Contents by Category is included in this encyclopedia and detailed in the following section.

## **ORGANIZATION OF THE ENCYCLOPEDIA**

In this encyclopedia we have more than 100 entries related to the topic area of Communities (of Practice), including both practical examples and theoretical discussions: this is the largest collection to date of articles in this field.

This encyclopedia is organized into categories consisting of related articles. It is organized in a manner that will make your search for specific information easier and quicker.

In addition, a comprehensive index is included at the end of the encyclopedia to help you find cross-referenced articles easily and quickly.

The seven major categories also include sub-categories. All are detailed below:

### **Category 1: Generic Aspects of CoPs**

In this category the sub-categories covered are:

Classification and Critique of CoPs

CoPs and Formal Workgroups

CoPs and Networking

The Strategic Advantages of CoPs

Story-Telling within CoPs and Knowledge Transfer

Language (and Symbol) Development in CoPs

The category begins with a general introduction to the concept of communities of practice by Coakes and Clarke and is followed by six sub-categories: Classification and Critique of CoPs; CoPs and Formal Workgroups; CoPs and Networking; The Strategic Advantages of CoPs; Story-Telling within CoPs and Knowledge Transfer; and Language (and Symbol) Development in CoPs.

Examples of the types of contributions found in this encyclopedia can be seen from the unusual entries by Tunç Medeni. In Category 1, Medeni discusses Yaren talks. Yaren talks are an example of medieval tradition relating to craftsmen's guilds still operating but in a modified form in modern Turkey. Medeni also provides us with some fascinating photographs of these talks in action illustrating the costumes worn by the participants and discusses not only the story-telling that comprise the main activity of these talks but also the punishments that might be imposed on those who transgress its rules. Modern CoPs rarely have punishments for transgressors. His second unusual contribution is to be found in Category 4.

A very important sub-category of this category is that concerning language and symbol development within communities and here we look at two articles. Ahmad and Al-Sayed discuss how language within a

medical community has evolved and von Wartburg considers the part that metaphors play within figurative speech and as part of the socialization process for members for the community.

## **Category 2: CoPs and the Business Environment**

In this category the sub-categories covered are:

- CoPs and Virtual Communities
- Developing Organizational Strategies for CoPs
- Role of CoPs within Complexity
- Role of CoPs within the Business Environment
- Role of CoPs within the Public Environment
- CoPs and Competitive Advantage
- Role of CoPs in Supporting Economic Development
- The Role of Knowledge Management in CoPs and Supply Chains

A number of issues, or themes, are apparent in these articles. One considered by Teigland in her articles with Schenkel, relates to economic development and regional innovation systems. These systems are networks of organizations, institutions and individuals within which there is the creation and exploitation of innovation. These communities comprise not only for-profit firms but also academic institutions, policy and government authorities, large and small firms that are spatially contiguous and develop 'local' capital through their activities. A related article by Mason and Castleman looks at SMEs in regional clusters and the value of virtual CoPs for promoting innovation and knowledge sharing.

## **Category 3: Organizational Aspects of CoPs**

In this category the sub-categories covered are:

- Organizational Culture and CoPs
- Organizational Change Elements of Establishing, Facilitating and Supporting CoPs
- CoPs and Organizational Development - Ethics and Values?
- Measuring the Output of CoPs
- Inter-Organizational Communities
- Using Communities to Support Research
- Using CoPs for Organizational Learning
- CoPs and the Development of Best Practices
- Leadership Issues within CoPs
- Collective Learning within CoPs
- CoPs and Their Life-Cycle
- CoPs and Project Management
- How Are Social and Community Links Captured and Supported in CoPs?

This category reviews the internal and organisational aspects that affect and are affected by CoPs. The 13 entries within the section reflect the importance of these issues.

The idea that CoPs can enhance the development of intellectual capital and the local economy is considered by Pyke, and by Bellarby and Orange. Bellarby and Orange look at the voluntary sector as does Walker. In the latter study, community spaces, it is argued, have long been in existence where voluntary sector workers engage in discourse and informal learning.

## **Category 4: Virtual Teams and the Role of Communities**

In this category the sub-categories covered are:

Distinguishing Between Work Groups, Teams, Knowledge Networks and Communities  
 Virtual Teaming  
 Vortals (Communities Operating Via an Electronic Network Rather Than in Contiguous Space)  
 Teamwork Issues in Virtual Teams

Here we see the second unusual entry offered by Medeni relating to a virtual community of fantasy game-players. The world of Wold has been developed and researched for sometime and here we see some insights into how this world operates and how the community has developed.

## **Category 5: The Role of Knowledge Management**

In this category the sub-categories covered are:

Knowledge Sharing  
 Issues in Knowledge Sharing  
 Knowledge Communities  
 Virtual Knowledge Communities  
 Knowledge Communities and Issues  
 The Meaning of Knowledge

Here our contributors look at the role of knowledge management within CoPs, issues such as: how do communities share knowledge? What is tacit knowledge within CoPs and how it is considered?

We learn from Rodriguez-Elias et al. how to develop knowledge management tools to support knowledge flows. We also find in Zappvigna's article how systemic functional linguistics can assist us to discover the relationship between doing, meaning and saying. The article from Chen et al. provides an overview of the inter-organizational knowledge transfer and its related literature, and present a proposed inter-organisational knowledge transfer process model based on theoretical and empirical studies.

This category also looks at some very interesting articles discussing malpractice in CoPs and the issues involved in knowledge sharing, as knowledge management theory often leaves us with the impression that knowledge can be as easily managed, like products and commodities, which may well not be the case.

## **Category 6: Enabling Technology**

In this category the sub-categories covered are:

Software and Hardware for Community Work Support  
 Where Does Knowledge Management Software Fit?  
 Tools - Repositories, Modelling, Scenario Development, and Analysis (Etc.) To Support and Capture CoP Activities

Category 6 is concerned with the technology support for communities and in its three sub-categories look at software and hardware, especially knowledge management software and also specific software types such as data warehouse and their role in knowledge sharing.

We have a number of articles discussing what technology is needed to support CoPs. In one article by Coakes, we see a generic discussion of what facilities CoPs need to function and how technology can supply

(some) of these functions and facilities. In an article by Chua, we learn about three tools for educational communities: portals, course management systems, and videoconferencing, which can be used to create and sustain communities of practice, and provide value-added services to participants in an interactive environment. The article by Dotsika explores the advantages and pitfalls of supporting ‘computerised’ versions of these communities, reviews a number of existing software tools and looks into emerging technologies considering their role and appropriateness. In Ruhi we look at a best practices model for utilizing these technologies.

## **Category 7: The Philosophy Theory of CoPs/KM**

Finally, in this category the sub-categories covered are:

Narrative Inquiry and CoPs

What Organizational Development Theory Can Contribute To Our Understanding of CoPs

What Sociotechnical Theory Can Contribute To Our Understanding of CoPs

Social Aspects and Issues of CoPs

Psychoanalysis, Organizations and Communities

Psychological Aspects and Issues

Social Philosophy and CoPs

Philosophy and theory in relation to communities of practice is well represented with seven entries. The theories we consider include narrative inquiry; sociotechnical, social theory and social philosophy. We also look at psychoanalysis and psychological aspects and issues within communities.

Three very interesting contributions here are made by Nobre. In her first article, Nobre argues that the dominant stream of management theory is still largely influenced by the command and control paradigm developed over a century ago and that there is a growing awareness of the dangers of assuming a reductive and limited view of organisational complexity. Indeed Grieves agrees and additionally comments that the use of organisational development theory enables organisations to achieve effectiveness through careful analysis and diagnostic techniques as well as through carefully considered intervention strategies. In her second article, Nobre explores the many hidden dimensions of human actions within the organisational environment and considers the practice of the theory of psychodynamics and the role of consultants engaging with a client organization. Her final contribution argues that the growth in importance of communities within organisational settings is a sign of a change in paradigm.

Finally, Clarke offers the view that CoPs are in essence social groupings, and that something is therefore to be gained by considering the contribution of social theory and philosophy to the domain. Some of the current research and practice informed by critical social theory is used here to shed light on the issues.

## **CONCLUSION AND CONTRIBUTION**

The *Encyclopedia of Communities of Practice in Information and Knowledge Management*, we believe, will become the leading reference source for dynamic and innovative research in the field of CoPs for information and knowledge management. With the ever-increasing interest in knowledge management, this volume provides a comprehensive, critical and descriptive examination of all facets of CoPs in information and knowledge management in societies and organizations.

This encyclopedia contains numerous research contributions from leading scholars from all over the world on all aspects of communities of practice in information and knowledge management, with comprehensive coverage of each specific topic, highlighting recent and future trends and describing the latest advances. It also contains a compendium of key terms, definitions and explanations of concepts, processes and acronyms,

and thousands of comprehensive references on existing literature and research on communities of practice in information and knowledge management.

We hope you enjoy reading it as much as we have enjoyed the challenge of collating the 100 plus entries.

*Elayne Coakes*

*Steve Clarke*

## **REFERENCES**

Wenger, E. (2001) *Supporting communities of practice: A survey of community-oriented technologies, Version 1.3*. Available from <http://www.ewenger.com/tech>