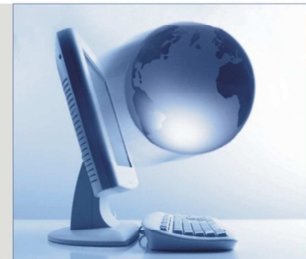# Construction of Communities of Practice Guideline

ARPEL Guideline Construction of Communities of Practice
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This document was devised within the context of the ARPEL Human Talent and Knowledge Management Committee. The ARPEL Project Team on Knowledge Management was in charge of the content and review of this document leaded by Oscar Guerra from ECOPETROL and:

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GUIDELINE FOR THE CONSTRUCTION OF COMMUNITIES OF PRACTICE

1.   CONSTRUCTION OF COMMUNITIES OF PRACTICE[1]

Communities of Practice (CoPs) are 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 & Snyder, 2002); in addition, their relationship has no hierarchical level among their members.

In the context of a CoP, best practices are validated, lessons learned are shared, professional skills are strengthened, and collaborative teamwork enables its members to grow together, shortening the learning cycle of newest members. Communities of Practice can be specific to an area of the Company, to a particular process, to an area of knowledge or a particular activity, or cut across an organization.

The purpose of mature Communities of Practice is to build self-organized networks of professionals (that define and adapt their processes to the needs of the business) able to capture the critical problems of businesses, discussing and offering solutions and ways to achieve their goals, acting as promoters of innovation and improvement in business processes.

CoPs are different from work teams and networks of experts. Table 1 shows some of their differences.

Table 1: Basic differences between CP, network of experts and working group

	Community of Practice	Networks of Experts	Work Team
Nature	Social	Non-social	Non-social
What unites them?	Passion and interest in a particular practice, learning and building relationships	Experiences and expertise in a specific topic	A task with a defined objective
Objective	Generating and sharing knowledge within the practice	Solutions to specific problems	Achieving a defined objective
Participation	Voluntary	Assigned	Assigned
Interaction	Flexible by each participant, interaction as a whole	Transactional: delivery and supply of information	According to work plan, and everyone participates according to their assigned role

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[1] Information adapted from ECOPETROL S.A.

1.1. Aspects to be considered to create a Community of Practice

In the creation of a Community of Practice, it is important to consider the following fundamental aspects to develop it correctly:[2]

1. *Design*: communities of practice are not developed from scratch, they arise from existing social networks within the company. Since its inception, it is important to consider a learning plan or work plan that addresses topics of interest and how to develop them, the people and resources required, how to develop some issues, such as questions to the community by CoP members and people in general, form of interaction among members (teleconferencing, video conferencing, classroom meetings, virtual spaces, etc.), participation in national and international events on the particular topic, search and socialization of lessons learned and best practices generated within the company that would help with such topic, implementation of knowledge management methods to develop the plan, training processes within the community, etc.

2. *Spaces of communication*: it is necessary to generate spaces where members can give their opinions about a specific topic, comment on lessons learned and best practices, and share information and criteria of experts. All this contributes to the involvement of the CoP members in the community, fosters professional growth and creates a culture of collaborative work. The different spaces of communication with this purpose are: chat rooms, discussion forums, consulting networks of experts, etc.

3. *Participation of different types of members of the Community*: In a Community of Practice there are different participating groups:

   - At the first level is the core group, formed by the facilitator and the group leading the activities of the Community; this group comprises 10-15% of the total number of members;

   - At the second level is the active group, formed by members participating actively in the discussions and activities proposed within the Community; this group comprises 15-20% of the total number of members;

   - At the third level is the peripheral group, formed by people who almost never participate but observe what is being done in the Community, learn from the outside and apply what they learn in their daily work; this group comprises 65-75% of the total number of Members; and

   - Another group, which is actually not accounted for because it is a very small group, is formed by the so-called "foreigners", that is, persons external to the Community but who are interested in what is being done in it. They may be consultants, persons from other companies, intellectuals and experts in the topic of work who contribute with their ideas. Their participation is sporadic and no percentage is assigned to them.

   Each group has a different degree of interest, the success of the CoP lies in having mechanisms that allow the interaction between all the members and develop activities of interest.

4. *Information*: The information shared, developed and created within the Community must comply with the intellectual property and information security regulations in force in the company.

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[2] Wenger, Etienne; Richard McDermott, William Snyder (2002) (in English). *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston, Massachusetts: Harvard Business School Press. ISBN 1-57851-330-8.

5. ***Create a rhythm of participation for the Community****:* Activities must be developed in the Community on a regular basis in order to keep all members interested. For this reason, it is important to develop an appropriate work plan which members perceive as part of their daily activities, and with which they may feel identified and involved in order to participate actively and continuously.

6. ***Dissemination***: The Community must identify the scenarios where it will show its progress and request the respective spaces (committees, systematic meetings, work teams, etc.), and determine the activities where it will participate, such as national and international events, inter-institutional work teams and spaces within the Corporate Group.

1.2. Steps for construction of a Community of Practice (CoP)

The CoP may be formalized through a document in the format that best suits the needs of the particular Community (Word, Excel, Power Point, etc.) In order to construct a Community of Practice:

— There must be a specific need for generation, assurance and transfer of knowledge about topics inherent to the business or related to the strategy of the company or organization. The most important aspects to consider are: Defining the relationship and the impact between the CoP topic and objectives, the business strategy and/or strategic framework of the company or organization, and the performance indicators of the business or area that may be impacted;

— There must be a general and/or specific objective (if applicable), which should describe what is to be achieved through the work to develop. The objective must respond to the following questions: "What are we going to do?," "How are we going to achieve it?", and "What is the purpose of doing this?" It is important that this objective be shared and validated by the members of the Community. In parallel to the definition of the general objective, specific objectives are defined, if required, with a focus on verifiable actions that support the achievement of the general objective.

— The CoP must have a scope: defined in terms of where the work starts and ends; these limits may be expressed in deliverables focused on the accomplishment of objectives.

— Level of coverage: It is important to define the dimensioning of the work to be performed and/or developed, which may well be expressed in areas of work, areas of development or groups of people focused on the topic.

— Work plan: Compilation of the main milestones and activities to develop in order to accomplish the general objective.

— People and units or areas that will potentially be involved.

— Knowledge management mechanisms and tools to work with (lessons learned, discussion forums, etc.)

— Identifying barriers and strengths (organizational, resources, spaces for interaction and others), to support the sustainability of the CoP and the way these will be implemented.

— Defining the core group, that is, the group of people who support the work of the facilitator, are interested in the topic and find it important to work and learn about the topic collaboratively and build together as a team.

— Identifying the metrics and indicators to use in order to monitor the impact of the Community of Practice on the results in the area or company.

In addition, the following actions must be taken:

— Defining work methods, how the learning or work plan will be developed and implemented, forms and frequency of interaction among members (in person meetings, virtual meetings, etc.) It will be important to define how to monitor and quantify the work plan, the measurement indicators and the critical factors for the sustainability of the Community, as well as to determine how to disseminate the activities and achievements.

— Defining roles and responsibilities within the Community; the essential roles to be defined are: facilitator, content owners and members (see Table 2)

— Discuss whether a sponsor is required: The definition of the sponsor is done when the Community has already begun its work with results that impact the objectives or the strategy of the sponsor suggested.

— Structuring the information in the virtual space - Together with the core team: identifying the type of information to be used and shared, in accordance with the regulations on information security and intellectual property rights, how it will be organized within the virtual space by avoiding that it becomes a repository of information, the permissions granted to the members regarding such information, the times and forms of participation, the scheduling of the spaces to monitor the work, and the contribution made to the business strategy regarding the topic.

— Strategy of ties among members: inviting people who may be potential members to be linked to the Community; explaining to each of them what the Community is, its objectives, scope and general characteristics to spark the enthusiasm of those who are going to participate; these people may be of different professions, geographic areas and/or departments.

— Beginning of the Community: the facilitator in conjunction with the core team, begin to perform the initial interaction with all the members providing assistance in those cases where it is deemed necessary to understand the role of each individual, the interactions required and the form of work. It should be remembered that this is not an additional work to that developed on a daily basis but a support to such work. Here is where work starts as a Community around a topic, following the plan agreed, the interactions and contributions required by the business.

Table 2: Roles in the Communities of Practice

ROLE	DESCRIPTION AND PROFILE	RESPONSIBILITIES
Facilitator	Leader who gathers and participates actively in the CoP. Does not require being an expert on the topic but be recognized for his work on the subject. Establishes and manages the relationships within the Community, promotes the exchange of information. Is the bridge between the members and the formal part of the company or organization. • Group leadership. • Empathic and service-oriented. • Tutor skills. • Good communication and interpersonal relations. • Mediation - negotiation abilities.	• Establishing relationships among members (in the initial phase of creation of the CoP, it represents 80% of the work inside the CoP). • Identifying and linking new members. • Promoting exchanges and flow of information and knowledge. • Supporting members of the CoP as required, in the development of discussion forums, validation and publication of contents. • Ensuring that the CoP moves forward with the correct approach and direction. • Ensuring that members of the CoP know their roles and the opportunities offered by working as a CoP. • Following up on the development of the work plan established and agreed activities.
Owner(s) of content	Ensuring that the explicit knowledge (contained in documents) is updated and organized within the CoP and according to the information security and intellectual property regulations. Role assumed by one or several members of the CoP. • Sense of order. • Ability of synthesis. • Information management skills.	• Debugging and organizing the information on the portal site. • Updating, publishing and disseminating on the portal site of the CoP all the information related to the topic in accordance with the work plan. • Communicating the publication of new information, if any. • Establishing assertive communication with the CoP members, ensuring their participation through questions and sharing best practices and lessons learned. • Checking the measurement of the CoP activities.
Members	Sharing ideas, knowledge, lessons learned and best practices; representing an opportunity for shared and individual learning. Are the owners of the CoP and represent their identity. • Prepared to interact with new people. • Understanding the importance of teamwork and the benefits of collaborative learning. • Interest in sharing and receiving knowledge. • Positive attitude toward learning new experiences. • Initiative and self-discipline.	• Documenting and formalizing best practices. • Developing and sharing lessons learned, best practices, and spaces for conversation. • Generating questions and/or discussion forums on topics that are managed in the CoP. • Generating and participating in discussion forums and events of the CP when deemed convenient. • Reviewing the requests for information made to the Community.

Sponsor	Ensuring the support to the CoP for its development, monitoring the work plan and initiatives generated that contribute with value to the objectives of the area or organization and/or the improvement of its results. • Organizational position to solve conflicts between the Community and the Organization. • Ability to make decisions. • Access to budget. • Vision of the future to anticipate potential. • Good communication and relations.	• Encouraging staff participation in the CoP. • Managing official relations with upper management. • Ensuring the integrity of the CoP approach. • Promoting the CoP at the strategic level. • Searching for and/or developing spaces for disclosure where the CoP may show its progress and achievements. • Meeting regularly with the facilitator and core group to know the status and progress of the CoP. • Provide the resources (time and money) if necessary.

− Initial Workshop - Once the Community has started working as such and the first results have been obtained, a workshop should be organized to make the Community known to the Company. The Workshop may be in person or online, taking no more than four (4) hours if it is in person and not more than two (2) hours if it is virtual. It is presided by the facilitator of the CoP and its agenda will cover, as a minimum, the following points:

- Presentation of the sponsor and core group.

- Presentation of the objective, scope and strategy for the development of CoP.

- Training on CoP and tools available to use.

- Space to discuss problems and opportunities of the CoP.

- Review of the most important activities to develop.

- Strategy of promotion and dissemination of results to the Organization and/or Companies involved.

− Follow-up and consolidation with the purpose of determining a level of development that would allow the CoP to play its role in a sustainable manner, achieving its objectives and supporting the development of business strategies. A CoP is consolidated when:

• It has developed and implemented in a sustainable manner work plans, forms and periods of interaction among the different groups within the CoP and their participation in the community, maintaining the frequency agreed, and generating results and collaborative learning.

• It develops work that benefits the business (at the level of processes, procedures, projects, development of courses, working times, costs, etc.), and implements knowledge management processes regarding the topic being discussed.

• It systematically monitors the plans agreed for collaborative work and maintains a dynamics of participation and performance of new tasks and/or activities.

• It has reviewed and disseminated formally the progress and value of the CoP inside the formal structure of the Company (strategic, tactical and operational level), both for the members and for the Company.

• The work plan is implemented and reviewed, making the necessary adjustments on a regular basis.

• Social relationships have been developed and there is trust among its members.

1.3. Recommended Activities

The sustainability and participation of the members of a CoP, as well as its growth, depend heavily on the internal motivation (passion for a particular topic). *Table 3* shows the recommended activities for each role in order to promote motivation and recognition of the CoPs.

Table 3:   Activities recommended for motivation and recognition of the CoPs, in accordance with each role

ROLE	RECOMMENDED SUPPORT ACTIVITIES
Facilitator	• Holding periodic meetings with the core group to monitor the fulfillment of the objectives of the CoP. • Developing discussion forums on topics within the scope of the Community and related to the business strategy. • Promoting the participation of the CoP in national and international events with presentations and preparation of articles. • Organizing special events related to the fulfillment of the objectives of the CoP, bringing experts, highlighting issues for each month, convening meetings and fostering exchange. • Looking for spaces where to show the work done by the CoP.
Members	• Disseminating best practices and lessons learned from the work in the CoP or from the various work teams where such members participate. • Participating in events organized by the CoP and interacting with other members in different scenarios. • Acknowledging the value added by the CoP on a personal level and rewarding it with the attendance of members to external or internal events.
Sponsor (if any)	• Participating in the initial workshop of the CoP to show commitment to the topic and promote a sense of belonging among the participants. • Participating occasionally in meetings and/or workshops; it is important to reaffirm to the participants and the facilitator that they are supported by the Company. • Recognizing the work done by the CoP, either specifically or as a group, and through formal communications posted on the portal site. • Meeting with the facilitator and the core group with certain frequency to see how the work plan is being developed, what results have been reached, what barriers have been encountered and what the perspectives are for the future, as well as to become a point of support in the development of the business strategy. • Presenting the work done and/or the results obtained by the CoP in relation to the different strategic scenarios of the Organization.

The formal organization plays a key role in the motivation and recognition of the CoP. Some examples of mechanisms to achieve this are:

- Allocating time and resources to members and the roles of the CoP

- Celebrating success, looking for success stories within the CoP and publishing them outside the CoP in formal and highly visible media.

- Recognizing at the corporate level the impact of the CoPs in the results of the organization and/or the impact of its participation in projects.

- Rewarding teamwork and the results of the CoP, for example, providing additional resources for the work of the CoP or participating in a particular event.

1.4. Measuring the impact of the CoPs

The impact of a COP will depend on the purpose and scope of the work that it develops regarding the business strategy and on the agreement with the sponsor (if any). Three types of metrics may be identified:

1. Usage Metrics

    a. Members accessing and participating.

    b. Content provided.

    c. Visits to the Community per user.

2. Exchange Metrics

    a. Different participants in the discussion forums

    b. Number of queries to the contents of the Community.

    c. Number of queries to experts answered

    d. Average response time for queries in forums.

    e. Events organized by the Community

    f. Number of questions whose answers have been accepted by the CoP as closed (or solved)

    g. Participation with presentations at national and international events, among others.

    h. Use of blogs and wikis

3. Business Metrics

    a. Impact on business indicators within the scope and environment of the CoP, including activities developed as a Community and validated by the sponsor.

    b. Benefits generated in a business activity as a result of a proposal of improvement of the Community (BP, LLAA)

    c. Savings produced by involvement of the community in some business process (localization of experts for innovation projects, homogenization and standardization, achieving a goal, etc.)

    d. Valuation and number of solutions that have generated savings in resources, man hours, processes and/or procedures, increase in production, etc. through work developed within the CoP

    e. Number of knowledge gaps and development of closed competences through work with external and internal experts that do not belong to the CoP and/or development of courses.

    f. Number of knowledge assets completed and formalization of these expressed in documents developed and/or adjusted, answers from experts or satisfied customers.

2.   BIBLIOGRAPHY

- ECOPETROL S.A., 2013. Guía de Aseguramiento del Conocimiento Para ECOPETROL S.A.

- REPSOL, 2013. Comunidades de Práctica, Jornadas-taller de Gestión de Comunidades de Práctica