A Training Manual for Training of Trainers on Knowledge Management Approaches Volume 1

By

Bedru Beshir (PhD)

Training Organized by

Ministry of Agriculture (MoA), Participatory Small-Scale Irrigation Development Program (PASIDP) and

Ethiopian Institute of Agriculture Research,

Melkassa Agricultural Research Center

August 2018
Adama, Ethiopia

Table of contents

I

Knowledge Management Approaches

Bedru Beshir, Agricultural Extension and Communication, Melkassa Agricultural Research Center of the EIAR;

Email: bedrubeshir2009@gmail.com; phone: +251 911 382489

If information is the currency of the knowledge economy, human expertise is the bank where it is kept, invested and exchanged.

Introduction

Before embarking on discussion of the concept knowledge management, we shall look at the concepts related to knowledge and at times confused with the concept of the knowledge itself (these are data and information).

Data: Data are the raw, isolated facts, figures, images and sounds that have little or no meaning. They have little or no meaning because they lack a context for evaluation. Data also indicate collection of facts, measurements or statistics.

Information: Information is data that are organized and summarized or presented in a useful or meaningful way.

> **Knowledge**: defined as ─information processed by individuals including ideas, facts, expertise, and judgment relevant for individual, team, and organizational performance.

Knowledge can be also defined as ─a fluid mix of framed experience, values, contextual information, and expert insight that provides a

framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. It can be defined as information summarized or presented in a useful or meaningful way.

A knowledge base is a common repository of knowledge that is made available to a group of knowledge consumers.

Knowledge management can be defined as the fact or condition of knowing something with a considerable degree of familiarity acquired through experience, association or contact.

A knowledge management system is defined as a system designed and developed to give decision makers/users in organizations the knowledge they need to make their decisions and perform their tasks.

Knowledge management is process to help organization identify, select, organize, disseminate, transfer information. It is structuring enables problem-solving, dynamic learning, strategic planning, decision-making. It is leverage value of intellectual capital through reuse.

Knowledge Management Initiatives

It aims at making knowledge visible, developing knowledge intensive culture, building knowledge infrastructure. In the surrounding of processes Knowledge Management as creation of knowledge, sharing of knowledge, seeking out knowledge and using knowledge.
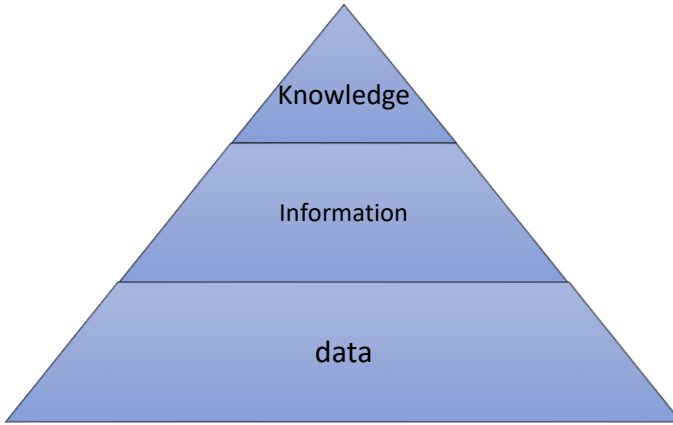
The cognitive Hierarchy of knowledge

What is Management?

Management can be described through four components. These are planning, organizing, leading and coordinating which can be presented in an acronym—**POLC**.

Planning: is a decision-making process whereby a course of action is created to move from a current state to a desired state. It includes gathering information, creating a vision and mission statement, defining goals and objectives, developing strategies, choosing the best course of action, designing and developing the plan to implement the course of action.

Organizing: securing resources, including human resources, financial resources, and physical resources, which are required to implement the plan. Organizing requires good communication in order to justify needs and allocate scarce resources within an organization.

Controlling: is the process of measuring and evaluating progress and outcomes, and taking corrective action as needed, gathering feedback in order to better control operations and outcomes produced.

Leading: is the ability to inspire shared vision and action among individuals or groups in order to achieve a common goal.

> Management is doing things right; leadership is doing the right things. KM deals with planning, organizing and controlling knowledge as well as leading as knowledge champion

This booklet is prepared to introduce trainers to knowledge management in under small-scale agriculture. The material is produced with the initiative and financial support of Participatory Small-Scale Irrigation Development Program (PASIDP) under the Ministry of Agriculture and Livestock resources (MoALR), in collaboration with Ethiopia Institute Agriculture Research Melkassa Agricultural Research Center. This booklet complied by the name "A Training Manual for Training of Trainers on Knowledge Management Approaches," is prepared in five volumes for easily handling in a simple language in a way it may be translated easily into Ethiopian languages. Though this material is prepared for trainers on knowledge management in agriculture anybody who is interested in the area may benefit from the material.

Knowledge Management (KM)

KM is process to help organization identify, select, organize, disseminate, share information. Structuring enables problem-solving, dynamic learning, strategic planning, decision-making. Leverage value of intellectual capital through reuse. Systematic and active management of ideas, information, and knowledge residing. within

organization's employees. Whereas knowledge management system entails use of technologies to manage knowledge used with turnover, change, downsizing and provide consistent levels of service.

KM: The KM system is the on-going, persistent interaction among agents within a system that produces, maintains, and enhances the system's knowledge base. This definition can apply to any intelligent, adaptive system composed of interacting agents. An agent is a purposive and self-directed object.

When a system is producing knowledge, it means that the system (a) gathers information and (b) compares conceptual formulations describing and evaluating its experience, with its goals, objectives, expectations or past formulations of descriptions, or evaluations. Further, this comparison is conducted with reference to validation criteria.

A system's knowledge base is the set of remembered data; validated propositions and models (refuted propositions and models metamodels; and (perhaps, if the system produces such an artifact) software used for manipulating these, pertaining to the system and produced by it.

The Knowledge Management Process (KMP) is an on-going persistent interaction among human-based agents who aim at integrating all of the various agents, components, and activities of the knowledge management system into a planned, directed process producing, maintaining and enhancing the knowledge base of the KMS. Knowledge management is the human activity within the KMP aimed at creating and maintaining this integration, and its associated planned, directed process.

An Organizational Knowledge Management System (OKMS) is the KMS of a formal organization. Since it is a type of KMS, it is also an on-going, persistent interaction among agents which produces, maintains, and enhances the system's (in this case the organization's) knowledge base. The agents in an OKMS may be individuals, formal or informal groups or any goal-directed purposive, intelligent and adaptive object whether human, machine, or system-based.

Organizational Knowledge Base

An organizational knowledge base is the knowledge base of a formal organization. To clarify what this means beyond the more abstract notion of a system's knowledge base, we need some more specification.

First, organizations contain individuals, and groups, both formal and informal, as well as a formal authority structure. Every individual and group can be viewed as a purposive, self-directed agent in interaction with its members, with other groups, and with the organization as a whole. The members of every group can also be viewed as agents whose interaction forms the group.

Second, for every group and for the organization as a whole, we can distinguish analytical properties, structural properties, and global properties. Analytical properties are derived by aggregating from data describing the members of a collective (a group or a system). Structural properties are derived by performing some operation on data describing relations of each member of a collective to some or all of the others. Lastly, global properties are based on information about the collective that is not derived from information about its members. Instead such properties are produced by the group or system process they characterize, and, in that sense, may be said to "emerge" from it, or from the series of interactions constituting it.

Third, an organization's knowledge base is composed of the elements identified above, characterized by classes of global properties or attributes describing the knowledge elements. The values of these attributes and the state of knowledge in an organization, is dependent upon the process that produces the values of knowledge attributes at any point in time; but it is not directly dependent on (or reducible to) the attributes (knowledge or otherwise) of the organization's members and/or the members' relations to one another.

Fourth, Sources of observational (data) attributes measuring the organizational knowledge base, include the cultural products produced by an organization: its documents, both written and electronic, its art, its buildings, etc. Data attributes describing these cultural products provide observational indicators or measures of emergent abstract knowledge properties. We can impose measurement models on these observational indicators to construct measures of these more abstract knowledge properties. In turn, we can relate these properties to one another in process models and dynamic models, and we can also relate them to concepts and properties we encounter in knowledge management such as knowledge creation, diffusion, maintenance, decline and so on.

Fifth, it is useful to distinguish different types of knowledge in the knowledge base. The categories to be used here include:
- planning knowledge (a network of propositions relating alternative decision options to predict consequences and such consequences to the goals, objectives, and priorities expressed in a hierarchy of such goals and objectives);
- descriptive knowledge (a network of propositions specifying what exists or has existed exclusive of impact);
- knowledge about impact (a network of propositions specifying the extent of departure from an expected actual state given no purposive activity by an agent, caused by the purposive activity of that agent); predictive knowledge (a network of

propositions specifying values of variables not yet available); and

  o assessment knowledge (a network of propositions providing a value interpretation of descriptive, impact-related, or predictive knowledge, e.g. benefit/cost knowledge).

An Organizational Knowledge Management Process (OKMP) is a "business process," aimed at integrating the various organizational agents, components, and activities of the OKMS into a planned, directed process producing, maintaining and enhancing an organization's knowledge base. It differs from an OKMS, in that it is a human-managed process whose purpose is to control that system and its dynamics, while the OKMS itself exists whether or not humans explicitly try to manage it.

The sub-processes of an **OKMP** are: Planning, Acting, Monitoring, and Evaluating. Planning means setting goals, objectives, and priorities, making forecasts as part of prospective analysis, performing cost/benefit assessments as part of prospective analysis, and revising or reengineering a business process. Acting means performing the business process or any of its components. Monitoring means retrospectively tracking and describing the business process. Evaluating means retrospectively assessing the performance of the business process as a value stream.

Knowledge Management System Cycle
- Creates knowledge through new ways of doing things
- Identifies and captures new knowledge
- Places knowledge into context so it is usable
- Stores knowledge in repository
- Reviews for accuracy and relevance
- Makes knowledge available at all times to anyone
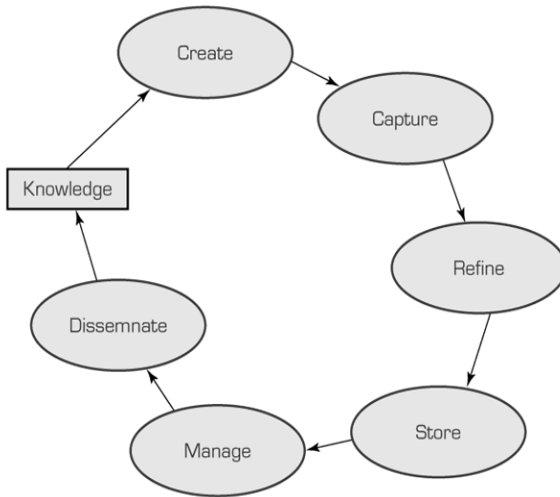
The Knowledge Management System Cycle

Varieties of definitions KM

Knowledge management is the practice of ensuring insights, results and learning within an organization. Hence knowledge is captured and made available for staff to find, use, update, adopt and integrate into company processes. It often aligned with training and learning, as well as innovation and research initiatives (KM, Elcom) Australia

The term knowledge management describes the generation, storage, control and provision of knowledge within a company (KM, Bitfarm Archiv,") Germany

KM: efficient handling of information and resources within a commercial organization ("knowledge management. Oxford Dictionaries—United Kingdom

KM: the way in which knowledge is organized and used within a company, or the study of how to effectively organize and use it ("KM, Cambridge Dictionaries") UK

KM: the technologies involved in creating, disseminating, and utilizing knowledge data; also, any enterprise involved in this (KM). USA

KM is the process of capturing, developing, sharing, and effectively using organizational knowledge (KM 2014). International

KM—A systematic process of finding, selecting, organizing, distilling and presenting information which involves the design, review and implementation of both social and technological processes to improve the application of knowledge (KM) India

KM is the systematic process and strategy for finding, capturing, organizing, distilling and presenting data, information and K for a specific purpose and to serve a specific organization or community (D. King, 2005). USA.

KM is explicit and systematic management of processes enabling vital individual and collective K resources to be identified, created, stored, shared, and used for benefit. Its practical expression is the fusion of information management and organizational learning (Serrat, 2009). International

Knowledge management: a complex set of functions involving processes, people and technology interacting together. Not about doing something new but doing things in some new ways. Partially about

information technology and tools but mostly about process and empowerment of people.

> In summary, KM is about, connecting people together to create, share and exploit knowledge more effectively. Connecting people to the information they need to develop and apply their knowledge in new ways. connecting people to the tools they need to process information and knowledge

Types of knowledge

Explicit knowledge is an objective, rational, technical knowledge available in the form of policies, goals, strategies, papers, reports. It particularly refers to codified and leaky knowledge.

Tacit knowledge: subjective, cognitive, experiential learning sort of knowledge. It is highly personalized, difficult to formalize and sticky knowledge.

Forces driving knowledge management

Increasing domain complexity: Intricacy of internal and external processes, the rapid advancement of technologies. The rate of information and knowledge creation in increasing at an alarming rate than ever before.

Accelerating market volatility: The pace of change, or volatility, within each market domain has increased rapidly in the past decade.

Intensified speed of responsiveness: The time required to act based upon subtle changes within and across domains is decreasing. One of the major attributes of KM relates to the fact that it deals with knowledge as well as information. Knowledge is a more subjective

and it is typically based on experiential or individual values, perceptions, and experience. Popular examples to distinguish data from information and from knowledge include the following:

- Social/structural mechanism (e.g., mentoring) for promoting knowledge sharing.
- Leading edge information technologies (e.g., Web-based conferencing) to support KM mechanisms.
- Knowledge management systems (KMS): the synergy the synergy between social/structural mechanisms and latest technologies.

Classification of KM

Knowledge discovery systems. Support the process of developing new tacit or explicit knowledge from data and information or from the synthesis of prior knowledge. These systems support two KM subprocesses associated with knowledge discovery. Combination, enabling the discovery of new explicit knowledge; and socialization, enabling the discovery of new tacit knowledge.

Knowledge capture systems: Support the process of retrieving either explicit or tacit knowledge that resides within people, artifacts, or organizational entities. These systems can help capture knowledge that resides within or outside organizational boundaries including within experts, consultants, competitors, customers, suppliers, and prior employers of the organization's new employees.

Knowledge sharing Systems: knowledge sharing systems support the process through which explicit or tacit knowledge is communicated to other individuals.

Knowledge application systems: Knowledge Application Systems support the process through which some individuals utilize knowledge possessed by other individuals without actually acquiring, or learning, that knowledge

Key components of knowledge management

In order to manage knowledge effectively, attention must be paid on to four key components. knowledge, People, Processes and Technology (KP²T). In essence, the focus of KM is to connect people, processes, and technology for the purpose of leveraging knowledge. Knowledge is described as an essential part of KM. Without having knowledge to manage, there would be no KM.

> knowledge, People, Processes and Technology (KP²T) are the key components of knowledge management. In essence, the focus of KM is to connect people, processes, and technology for the purpose of leveraging knowledge.

Knowledge basically refers to a collection/or a body of information. This could mean that the information is embedded in the form of theories, processes, systems, or it could be voiced in form of opinions, theories, ideas and analysis. Knowledge is the insights, understandings, and practical know-how that people possess. It is the fundamental resource that allows people function intelligently. It can then be stated that knowledge is an invisible or intangible asset, in which its acquisition involves complex cognitive processes of perception, learning, communication, association and reasoning. *Knowledge as information combined with experience, context, interpretation, reflection, and perspective that adds a new level of insight.* knowledge becomes meaningful when it is seen in the larger context of culture,

which evolves out of beliefs and philosophy. Knowledge is a capacity to act on information and thereby make it valuable, therefore knowledge can be ineffectual if not used. In organizations, knowledge becomes embedded not only in documents or repositories, but also in organizational routines, processes, practices, norms and cultures. Second, people are the sources of knowledge. The ability of humans to think creatively and uniquely, coupled with experiences and talents, make humans valuable sources of knowledge.

People are the creators and consumers of knowledge because individuals consume knowledge from various sources on a daily basis, in addition to creating **K**. In essence, KM begins, revolves around, and ends, with people. It is therefore pertinent to consider people in KM strategy and implementation. People face emergent **K** needs as part of daily assignment or routine. These needs should be met through tools, processes, systems and protocols to seek integrate and apply relevant K.

In essence, KM begins, revolves around, and ends, with people.

People/workers need to be able to seek out **K**, experiment with it, learn from it, and even teach others as they innovate so as to promote new K creation. Having a KM program that enables the sense of the importance of people is a very important to organizational success. Processes are mechanical and logical artifacts that guide how work is conducted in organizations.

Processes govern work in organization and are critical to the functioning of organization. Processes might be made of, and executed by, humans, machines, or a combination of the two. A critical requirement for KM is to be able to understand work processes and how to map them. By so doing, inputs, outputs, personnel, resources and work being conducted in a given process can be easily described. Mapping of processes helps to depict what is really going on in the organization and how tasks are being accomplished. **K** needed to accomplish tasks can then be articulated and requisite technology or human intervention can be deployed to meet these needs with the goal of increasing effectiveness and efficiency in the organization.

Table 1. KM Processes, mechanisms, and technologies

KM Process	Km sub-Process	Illustrative KM mechanism	illustrative KM Technologies
K Discovery	Combination	Meeting, telephone conversation, and documents, collaborative creation of documents	database, web-based access to data, data mining, repositories of information, web-portals, best practices and lessons learned
	Socialization	Employee rotation across departments, conferences, brain storming departures, cooperative projects, initiations	Video conferencing, electronic discussion groups, email
K Capture	Externalization	Models, prototypes, best practices, lessons learned,	expert systems, chat groups, best practices, and lessons learned

KM Process	Km sub-Process	Illustrative KM mechanism	illustrative KM Technologies
	Internalization	Leaning by doing, on-the job training, leaning by observation, and face to-face meeting	Computer-based communication, computer-based simulation
K Sharing	Socialization	Employee rotation across departments, conferences, brain storming departures, cooperative projects, initiations	Video conferencing, electronic discussion groups, email
	Exchange	memos, manuals, letters, presentation	team collaboration tools, web-based access to data, data bases, and repositories of information, best practices database, lessons learned from system
K Application	Direction	Traditional hierarchical relationships in Organizations, help desk, and support center	capture and transfer of experts' knowledge, case-based restoring system, decision support system
	Routines	Organizational policies, work practices, and standards	Expert systems, enterprise resource planning stems, management information systems

Dimensions of knowledge

Knowledge as taking five distinct forms: embodied, embedded, embrained, encultured, and encoded (Blackler, 1995). Embodied knowledge is gained through training of the body to perform a task. It is impossible to totally disembody this knowledge from people.

Embedded K is a K that is found in routines and systems. Organizational common tasks, routines or the common ways people go about their jobs, can hold embedded knowledge, as the routines facilitate learning amongst the employees that go beyond their job tasks. K that is embedded in work practices is simultaneously embodied by the workers who carry out these practices.

Embrained K is a k that a person can possess, but has difficulty expressing in words or sharing with other. It is further described as a K that one cannot easily write down, talk about with others, or represent with pictures or other tools. It is gained through experience over time and may reflect one's perceptions, opinions, values and morals.

Encultured K is described as a set of knowledge that is shared among groups of people who share a similar environment or culture, such as what is accepted, what actions and opinions are considered normal, and what behaviors are expected of people.

Encoded K is a form of K that can be easily written down, expressed in words or diagrams, and is transferrable through multiple channels and means. Procedure manuals, guidelines, process diagram, flowcharts, recipes and instructions are all examples of encoded knowledge, because they are encoded in a physical form that is understandable by a number of people.

Barriers of knowledge management

- Culture (organizational, personal, etc.)
- Top management's failure to signal importance

- Lack of shared understanding of strategy
- Organizational structure
- Lack of ownership of the problem
- Non-standardized process
- Information/communication technology restraints
- Incentive system
- Staff turnover
- Physical features of the workplace

Knowledge management models

Knowledge creation always begins with the individual. A brilliant researcher, for example, has an insight that ultimately leads to a patent. Or a middle manager has an intuition about market trends that becomes the catalyst for an important new product concept. Similarly, a shop floor worker draws upon years of experience to come up with a process innovation that saves the company millions of dollars. In each of these scenarios, an individual's personal, private knowledge (predominately tacit in nature) is translated into valuable, public organizational knowledge. Making personal knowledge available to others in the company is at the core of this KM model. This type of knowledge creation process takes place continuously and occurs at all levels of the organization. In many cases, the creation of knowledge happens in an unexpected or unplanned way.

Knowledge Conversion

There are four modes of knowledge conversion.

1. From tacit knowledge to tacit knowledge: the process of socialization.
2. From tacit knowledge to explicit knowledge: the process of externalization.
3. From explicit knowledge to explicit knowledge: the process of combination
4. From explicit knowledge to tacit knowledge: the process of internalization.
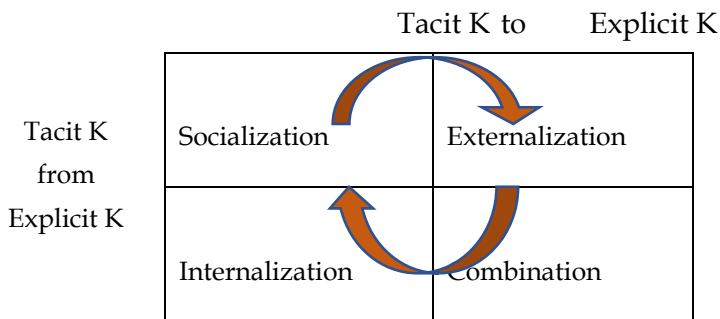
Figure 1 Knowledge Conversion

Socialization (tacit-to-tacit) consists of sharing knowledge in face-to-face, natural, and typically social interactions. It involves arriving at a mutual under- standing through the sharing of mental models, brainstorming to come up with new ideas, apprenticeship or mentoring interactions, and so on. Socialization is among the easiest forms of exchanging knowledge because it is what we do instinctively when we gather at the coffee machine or engage in impromptu corridor meetings. The greatest advantage of socialization is also its greatest drawback: because knowledge remains tacit, it is rarely captured, noted, or written down anywhere. It remains in the minds of the original participants. Although socialization is a very effective means of knowledge creation and sharing, it is one of the more limited means. It is also very difficult and time- consuming to disseminate all knowledge using only this mode.

Tacit, complex knowledge, developed and internalized by the knower over a long period of time, is almost impossible to reproduce in a document or a database. Such knowledge incorporates so much accrued and embedded learning that its rules may be impossible to separate from how an individual act.

The process of externalization (tacit-to-explicit) gives a visible form to tacit knowledge and converts it to explicit knowledge. It can be defined as "a quintessential knowledge creation process in that tacit knowledge becomes explicit, taking the shapes of metaphors, analogies, concepts, hypotheses, or models". In this mode, individuals are able to articulate the knowledge and know-how and, in some cases, the know-why and the care-why. Previously tacit knowledge can be written down, taped, drawn, or made tangible or concrete in some manner. An intermediary is often needed at this stage; it is always more difficult when we transform one type of knowledge into another. A knowledge journalist is someone who can interview knowledgeable individuals in order to extract, model, and synthesize in a different way (format, length, level of detail, etc.) and thereby increase its scope (a wider audience can understand and apply this content now).

Once externalized, knowledge is tangible and permanent. It can be shared more easily with others and leveraged throughout the organization. Good principles of content management will need to be brought into play in order to make future decisions about archiving, updating, and retiring externalized knowledge content. It is particularly important not to lose attribution and authorship information when tacit knowledge is made explicit. This involves codifying metadata or information about the content along with the actual content.

The next stage of knowledge conversion in the Nonaka and Takeuchi model is combination (explicit-to-explicit), the process of recombining discrete pieces of explicit knowledge into a new form. Some examples would be a synthesis in the form of a review report, a trend analysis, a brief executive summary, or a new database to organize content. No new knowledge is created per se; it is a new combination or representation of existing or already explicit knowledge. In other words, combination occurs when concepts are sorted and systematized in a knowledge system. Some examples would be populating a database when we teach, when we categorize and combine concepts, or when we convert explicit knowledge into a new medium such as a

computer-based tutorial. For example, in developing a training course or curriculum for a university course, existing, explicit knowledge would be recombined into a form that better lends itself to teaching and to transferring this content.

The last conversion process, internalization (explicit-to-tacit), occurs through diffusing and embedding newly acquired behavior and newly under- stood or revised mental models. Internalization is strongly linked to "learning by doing."
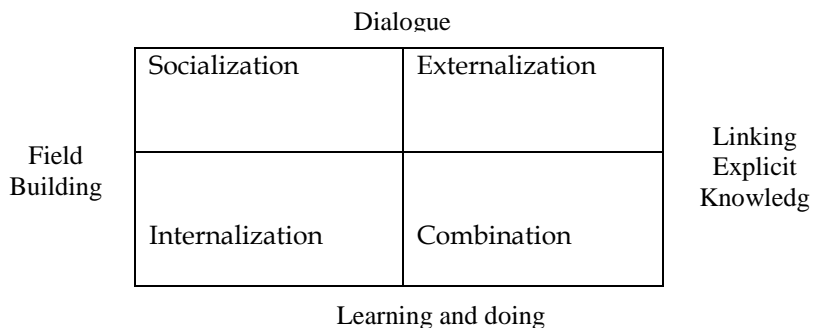
Internalization converts or integrates shared and/or individual experiences and knowledge into individual mental models. Once internalized, new knowledge is then used by employees who broaden it, extend it, and reframe it within their own existing tacit knowledge bases. They understand, learn, and buy into the new knowledge, and this is manifested as an observable change; that is, they now do their jobs and tasks differently.

Knowledge, experiences, best practices, lessons learned, and so on go through the conversion processes of socialization, externalization, and combi- nation, but they cannot halt at any one of these stages. Only when knowledge is internalized into individuals' tacit knowledge bases in the form of shared mental models or technical know-how does this knowledge become a valuable asset to the individual, to their community of practice, and to the organization. In order for organizational knowledge creation to take place, however, the entire conversion process has to begin all over again: the tacit knowledge accumulated at the individual level needs to be socialized with other organizational members, thereby starting a new spiral of knowledge creation. When experiences and information are transferred through observation, imitation, and practice, then we are back in the socialization quadrant. This knowledge is then formalized and converted into explicit knowledge, through use of analogy, metaphor, and model, in the externalization quadrant. This explicit knowledge is

then systematized and recombined in the combination quadrant, whereupon it once again becomes part of individuals' experiences. In the internalization quadrant, knowledge has once again become tacit knowledge.

Knowledge Spiral

Knowledge creation is not a sequential process. Rather, it depends on a continuous and dynamic interaction between tacit and explicit knowledge throughout the four quadrants. The knowledge spiral shows how organizations articulate, organize and systematize individual tacit knowledge. Organizations produce and develop tools, structures, and models to accumulate and share knowledge. The knowledge spiral is a continuous activity of knowledge flow, sharing, and conversion by individuals, communities, and the organization itself.

Dialogue

Socialization	Externalization
Internalization	Combination

Field Building

Linking Explicit Knowledg

Learning and doing

Knowledge sharing and use occurs through the "knowledge spiral," which, "starting at the individual level and moving up through expanding communities of interaction, crosses sectional, departmental, divisional and organizational boundaries".

Bibliography

Dalkir, K. (2005). Knowledge management in theory and practice. Elsevier.

Leeuwis, C. and Van den Ban, A. 2004. Communication for Rural Innovation. Rethinking Agricultural Extension. Third Edition.

Annex

Knowledge management planning by trainees

Group 1

Ato Desta from FPCMU
W/ro Nigist   FPCMU
Ato Bekele   SNNPR
Ato Tadele   Oromiya
Ato Shiferaw   Amara
Ato Bekele   Oromiya
Ato Anteneh   Oromiya

PASDIP Planning for KM and communication

S. No	What to do	When	Resources †	tools
1	Baseline data collection on each scheme (about project beneficiaries)	PY1	Expertise's, logistics.	Guide line
2	Need assessment for the capacity development	1st Q	Expertise's, logistics.	Checklist, guideline
3	Providing capacity development training	2nd Q	Trainers, logistics	Training document
3	Discovering best practices in each component	In all season	Expertise's, logistics.	Guide line, planning & reports
4	Capturing best practices	3rd Q	Expertise's, logistics.	Printout, Newspaper, Video
5	Workshop (internal review learning meeting)	Monthly, Quarterly, Bi-annually & Annually	Expertise's, logistics.	Printout, Newspaper, Video
6	Facilitating Learning forum at different level	Monthly, Quarterly, Bi-annually & Annually	human, financial, physical resources	Boucher, Report, best practice documents
7	Information dissemination and Sharing the best practices	Monthly, Quarterly, Bi-annually & Annually	Expertise's, logistics.	Printout, Newspaper, Video, Boucher, Report, best practice documents, mass-media

† human, financial, physical resources required

Planning KM and Communication in PASIDP_II

Group Member

1. Tamirat Debebe   ESS
2. Solomon Ayele   Agronomist
3. Gezahegn Gelebo   CD
4. Lemelemneh Zekarias   AB
5. Melkie Fenta   CCWS
6. Gedefaw Beyene   WSM
7. Mesfin Abera   -WSM

Planning of KM and Communication for PASIDP_II on CA Practices

S. No	What to do	When				Resources †	tools
		Q 1	Q2	Q3Q4			
1	Training on CA		*			Trainer, Trainee, Budget, Manual	Presentation, discussion
2	Workshop		*	*		Budget, participant,	Discussion
3	Experience Sharing			*		BUDget Other facilities (Car…)	Visit, Report, Observation
4	Preparation of Dissemination material				*	Video Camera, Budget, Printed Document (leaf let, Brochure, clip chart)	Media
1	Training on CA		*			Trainer, Trainee, Budget, Manual	Presentation, discussion

Planning KM and Communication in PASIDP
Group 3 members
1. Tesfaye Assefa   M & E specialist
2. Antigegn Belachew   CB specialist
3. Tesfaye Mengistu   Agronomist
4. Moges Kassie   M & E specialist
5. Adugna Fite   CB specialist
6. Getenet Kassahun   ESSS

What to do	When	Resources †	tools
Training on KM to FPs & other stakeholders	2nd Q	Trainers, facilitators, finance (transport, perdiem, refreshment), stationary, conference hall, manuals	PPT presentation, manuals, group discussion, field observation
Internal review & learning meeting with stakeholders	Q2 & Q4	Facilitators, finance (transport, perdiem, refreshment), stationary, conference hall,	Report PPT, discussion, case studies, field visit
Best practice identification/collection/Filter	Q3 & Q4	Telephone, internet facility, fax machine, written reports, expertise, office facility	Telephone call, internet message exchange/web, field visit, fax message, reports, observations, interviews, physical conversation,
Documentation & dissemination of lessons learnt	Q4	Camera, tablet, GPS, stationary (formats, logbooks), CD, Flash,	printed documents (leaflets, brochures, pamphlets), mass media
Sharing of best practices to others	Q4	Transport access, required finance, computers, audiovisual equipment, IT specialist	Identification of areas/interested groups, orientation/exposure visit, web portal

† human, physical