

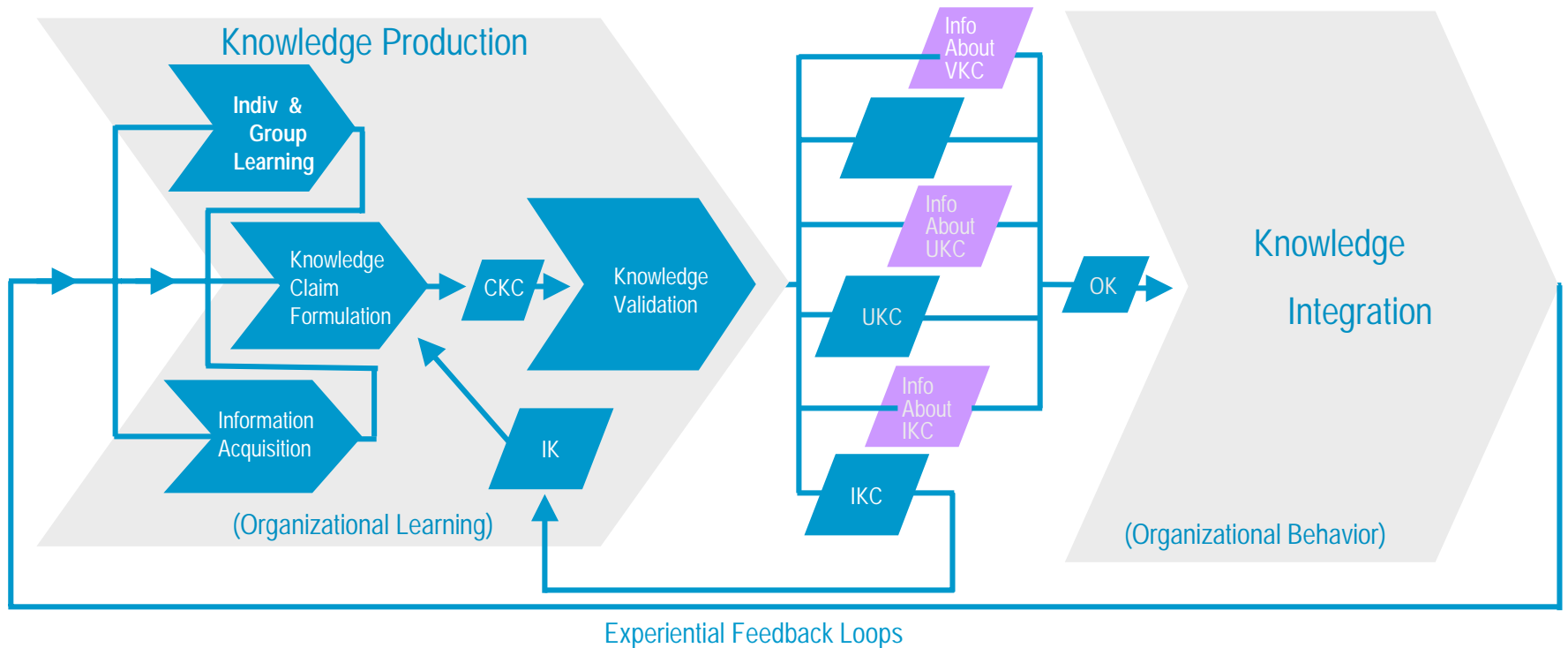
The Knowledge Life Cycle



An Executable Model For The Enterprise

Presented By **Mark W. McElroy**

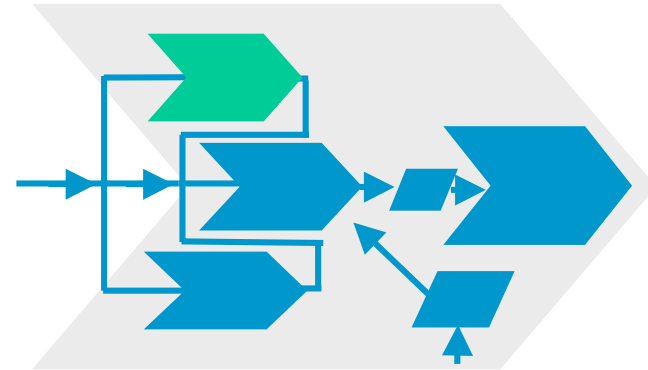
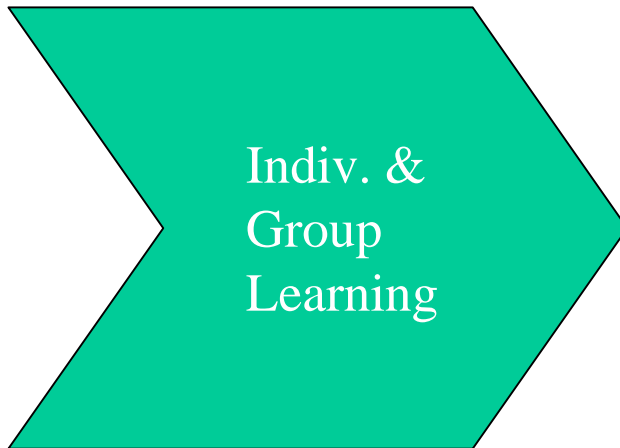
ICM Conference on Knowledge Management, April 1999
Miami, FL

The Knowledge Life Cycle (Knowledge Processes)



	Knowledge Processes	CKC - Codified Knowledge Claim
	Knowledge Sets	UKC - Unvalidated Knowledge Claim
		VKC - Validated Knowledge Claim
		IK - Invalidated Knowledge
		IKC - Invalidated Knowledge Claim
		OK - Organizational Knowledge

Individual & Group Learning



Definition

- A process involving human interaction, knowledge claim formulation, and validation by which new individual and/or group knowledge is created.
- Unfolds in accordance with same life cycle process, but at an individual and group level.
- The first step in organizational learning:
“Organizations learn only through individuals who learn.”

Peter Senge

The Fifth Discipline

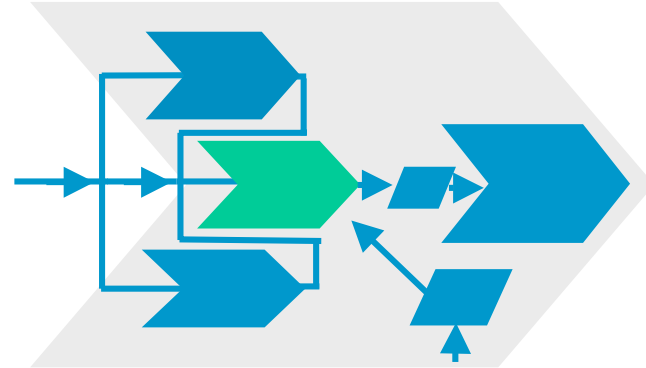
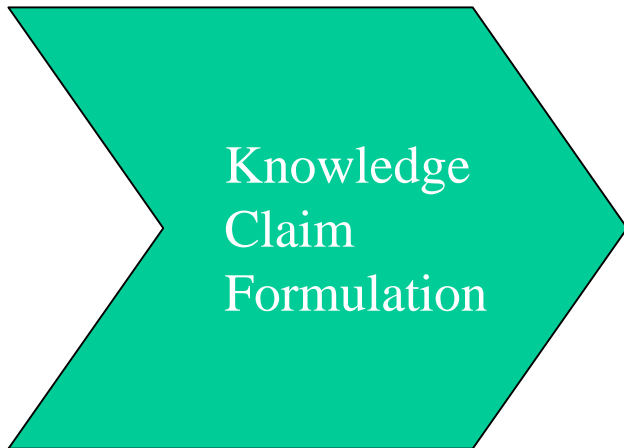
Dynamics

- Influenced by feedback from prior validation efforts.
- Produces input to Knowledge Claim Formulation process.
- Knowledge to some is only information to others until it is validated.

Potential KM Interventions

- Innovation initiatives at the individual and group level.
- Formalized feedback mechanisms between knowledge integration phase and individual and group learning activities.
- Formalized feed-*forward* mechanisms to knowledge claim formulation.
- User-driven desktop environments (Demand-side KM technologies).

Knowledge Claim Formulation



Definition

- A process involving human interaction by which new organizational knowledge claims are formulated.
- The codification of knowledge claims at an organizational level.

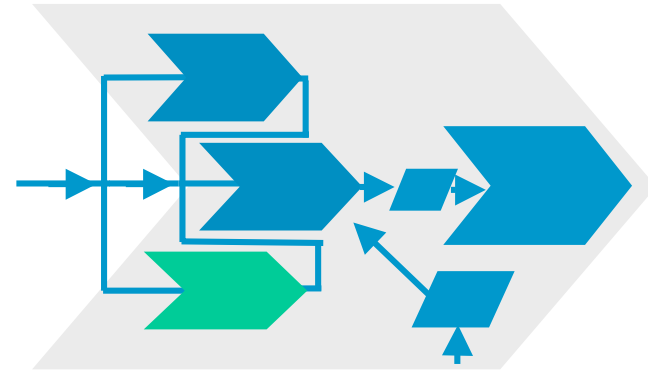
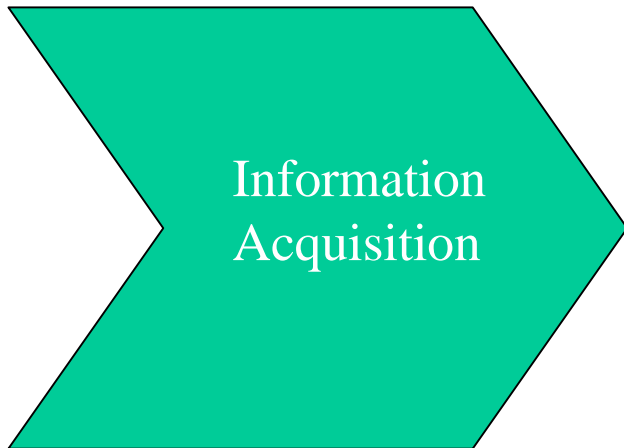
Dynamics

- Consolidates knowledge claims derived from individual and group learning, as well as information acquired from outside sources.
- Results in production of codified knowledge claims for submission to organizational validation process.

Potential KM Interventions

- Create formalized procedure for receipt and codification of individual and group innovations at an enterprise level.
- Formalize concept of “knowledge structures” and associated expressions of knowledge claims (e.g., business process vs. strategy innovations, etc.).
- Formalize with designated people, process, and technology resources.
- Decentralize innovation!

Information Acquisition



Definition

- A process by which an organization either deliberately or serendipitously acquires knowledge claims or information produced by others external to the organization.

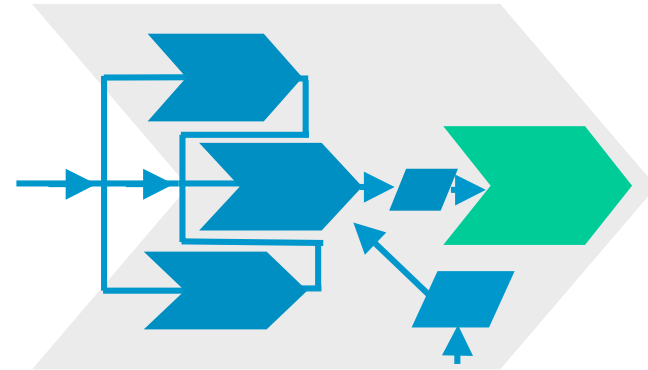
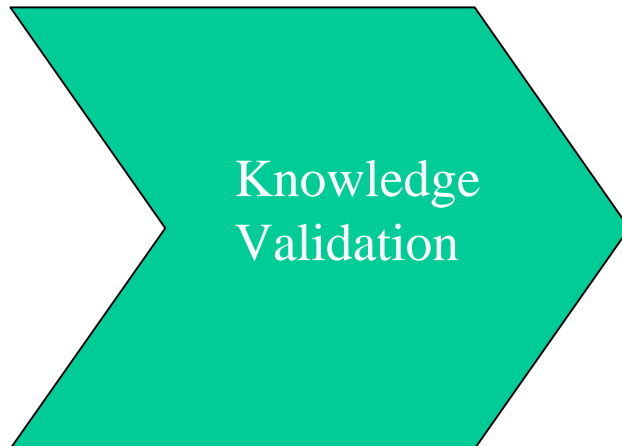
Dynamics

- Plays a fundamental role in the formulation of new knowledge claims at the organizational level in conjunction with knowledge claims put forth by individuals and groups.
- Also influenced by feedback received from knowledge integration activities.

Potential KM Interventions

- Significant involvement in outside initiatives, consortia, think tanks, etc.
- Research initiatives.
- Industry conferences and outside training programs.
- Targeted subscription services (Gartner, etc.).
- In-house IA functions (library services, etc.).
- Highly customized desktop systems that enable self-styled research on an individual basis.

Knowledge Validation



Definition

- A process by which knowledge claims are subjected to organizational criteria to determine their value and veracity.

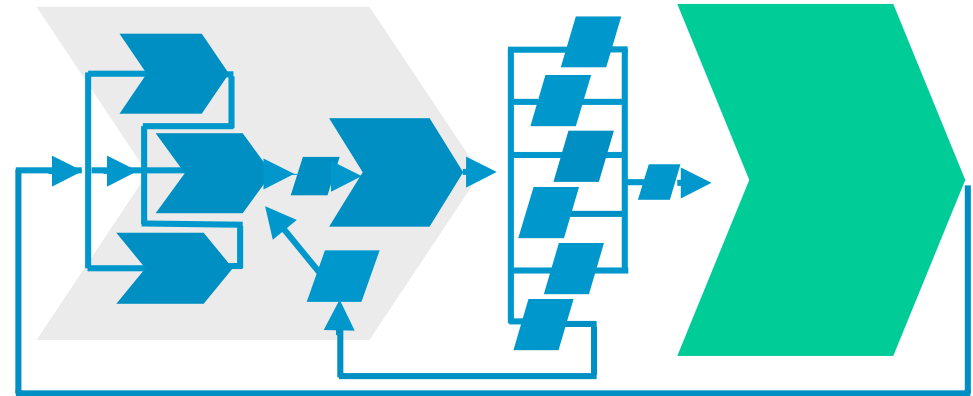
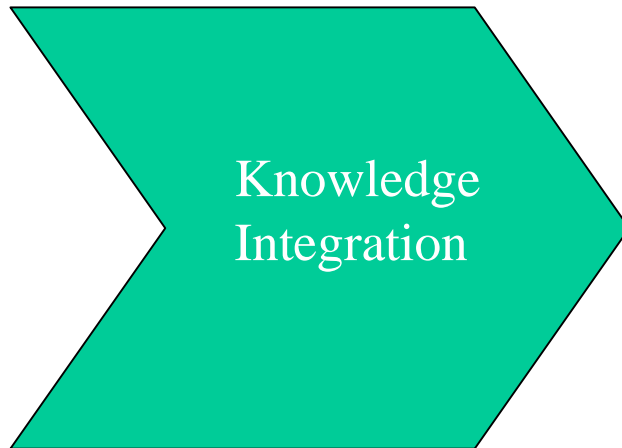
Dynamics

- A managed function which formally evaluates competing knowledge claims when put forth by the Knowledge Claim Formulation process.
- A process which precedes the transformation of organizationally held knowledge in cases where new knowledge claims are deemed to be of a higher value to the firm than "currently held rules."

Potential KM Interventions

- Institutionalize validation process as a formalized way of processing new knowledge claims.
- KM practitioners must establish validation criteria (i.e., the rules by which new rules will be evaluated: "meta-rules").
- Requires the maintenance of codified organizational knowledge for use as a backdrop in considering newly formulated knowledge claims ("knowledge structures").
- Initiating Corporate "Memome" projects.

Knowledge Integration



Definition

- The process by which an organization introduces new knowledge claims to its operating environment and retires old ones.
- Knowledge Integration includes all knowledge transmission, teaching, knowledge sharing, and other social activity that communicates either an understanding of previously produced organizational knowledge to knowledge workers, or the knowledge that certain sets of knowledge claims have been tested and that they and information about their validity strength is available in the organizational knowledge base, or some degree of understanding between these alternatives.

Dynamics

- Knowledge integration processes may also include the transmission and integration of information.
- Driven by outcome of knowledge validation process with emphasis on implementation of new knowledge sets and associated business behaviors.
- Produces feedback for reference in future knowledge production activities.

Potential KM Interventions

- A complex array of business model redesign activities focusing on knowledge structure transformation (business processes, strategies, etc.).

Glossary

- **Codified Knowledge Claims** - Information that has been codified, but which has not yet been subjected to organizational validation.
- **Experiential Feedback Loops** - Processes by which information concerning the outcomes of organizational learning activities are fed back into the Knowledge Production phase of an organization's knowledge life cycle as a useful reference for future action.
- **Individual and Group Learning** - A process involving human interaction, knowledge claim formulation, and validation by which new individual and/or group knowledge is created.
- **Information About Invalidated Knowledge Claims** - Information that attests to the existence of invalidated knowledge claims and the circumstances under which such knowledge was invalidated.
- **Information About Unvalidated Knowledge Claims** - Information that's attest to the existence of unvalidated knowledge claims, and the circumstances under which such knowledge was tested and neither validated nor invalidated.
- **Information About Validated Knowledge Claims** - Information that attests to the existence of validated knowledge claims and the circumstances under which such knowledge was validated.
- **Information Acquisition** - A process by which an organization either deliberately or serendipitously acquires knowledge claims or information produced by others external to the organization.
- **Invalidated Knowledge** - A collection of codified invalidated knowledge claims.
- **Invalidated Knowledge Claims** - Codified knowledge claims that have not satisfied an organization's validation criteria. Falsehoods.
- **Knowledge Claim** - A codified expression of potential knowledge which may be held as validated knowledge at an individual and/or group level, but which has not yet been subjected to a validation process at an organizational level. Information. Knowledge claims are components of hierarchical networks of rules, that if validated would become the basis for organizational or agent behavior.

Glossary (cont.)

- **Knowledge Claim Formulation** - A process involving human interaction by which new organizational knowledge claims are formulated.
- **Knowledge Integration** - The process by which an organization introduces new knowledge claims to its operating environment and retires old ones. Knowledge Integration includes all knowledge transmission, teaching, knowledge sharing, and other social activity that communicates either an understanding of previously produced organizational knowledge to knowledge workers, or the knowledge that certain sets of knowledge claims have been tested and that they and information about their validity strength is available in the organizational knowledge base, or some degree of understanding between these alternatives. Knowledge integration processes, therefore, may also include the transmission and integration of information.
- **Knowledge Production** - A process by which new organizational knowledge is created. Synonymous with "organizational learning."
- **Knowledge Validation** - A process by which knowledge claims are subjected to organizational criteria to determine their value and veracity.
- **Organizational Knowledge** - A complex network of knowledge and knowledge sets held by an organization, consisting of declarative and procedural rules (validated knowledge claims).
- **Organizational Learning** - A process involving human interaction, knowledge claim formulation, and validation by which new organizational knowledge is created.
- **Unvalidated Knowledge Claims** - Codified knowledge claims that have not satisfied an organization's validation criteria, but which were not invalidated either. Knowledge claims requiring further study.
- **Validated Knowledge Claims** - Codified knowledge claims that have satisfied an organization's validation criteria. Truth.