METHODOLOGY FOR THE IMPLEMENTATION OF KNOWLEDGE MANAGEMENT SYSTEMS

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PHASES	ACTIVITIES	TECHNIQUES	EXPECTED RESULTS	COMPUTER SUPPORT TOOLS
PHASE I. Identification	• Identify the conceptual blocks of knowledge • Classify into ontological categories • Define the target knowledge (knowledge requirements)	• Templates and questionnaires to identify blocks of knowledge • Reference models concerning the target knowledge	• Conceptual blocks of knowledge • Target knowledge • Categories	• Office automation tools • Modelling tools
PHASE II. Extraction	• Extract knowledge from sources in order to define the input variables and categorise it • Define the extraction and calculation procedures	• Templates to define the input variables • Reference models for extracting and calculating target knowledge	• Set of input variables • Extraction and calculation procedures	• Office automation tools • Modelling tools
PHASE III. Representation	• Establish the relations within the target knowledge • Draw up the knowledge map	• Metamodelling (UML) • Ontologies • Conceptual maps	• Model of the Knowledge map	• Modelling tools • Ontology engineering tools
PHASE IV. Processing	• Develop the technological infrastructure supporting the knowledge map by following an object-oriented methodology for the development of computer systems	• BPM techniques • ETL techniques •Document/DBMS • Data warehouse • OLAP • Data mining	• Knowledge portal (Executable knowledge map)	• BPM tools • ETL tools • Document/DBMS • Data warehouse • OLAP • Data mining
PHASE V. Utilisation	• Establish training and continuous improvement mechanisms among the members of the organisation • Carry out maintenance and the feedback process on the knowledge management system	• e-Learning • Groupware • TQM • ISO standard of quality	• Efficient use of knowledge within the organisation	• Office automation tools • Modelling tools • Learning tools

Fig. 1. KM-IRIS Methodology for knowledge management in an organisation.

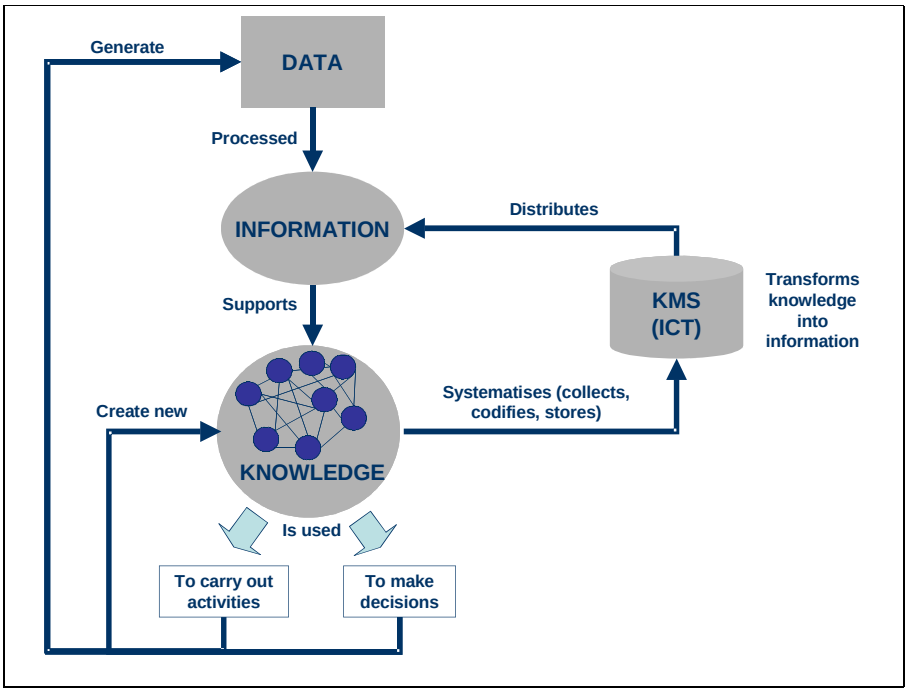

Fig. 2. KMS relation with information and knowledge.

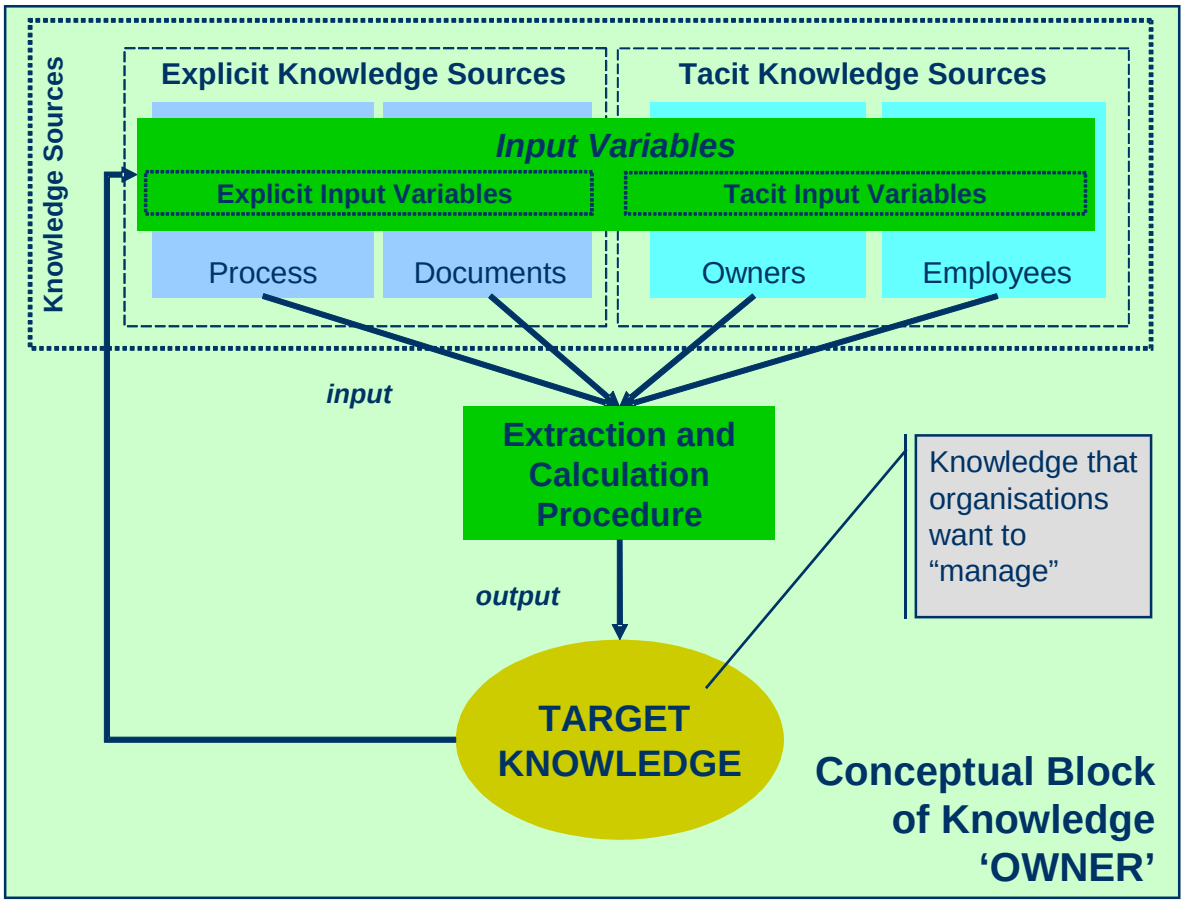

Fig. 3. Phase II of the KM-IRIS Methodology for knowledge management.

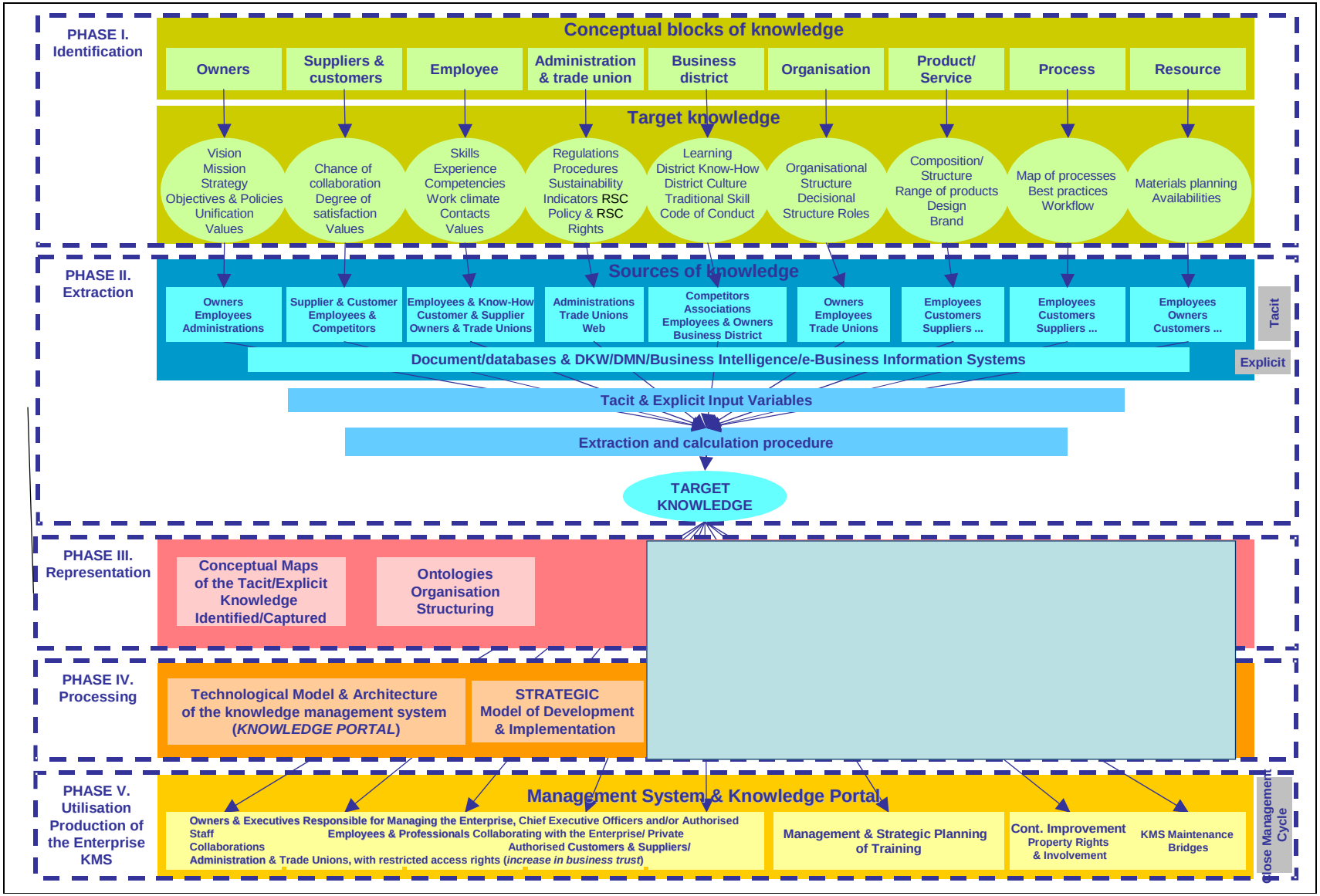

Fig. 4. Specialised version of the KM-IRIS Methodology for knowledge management in an enterprise.

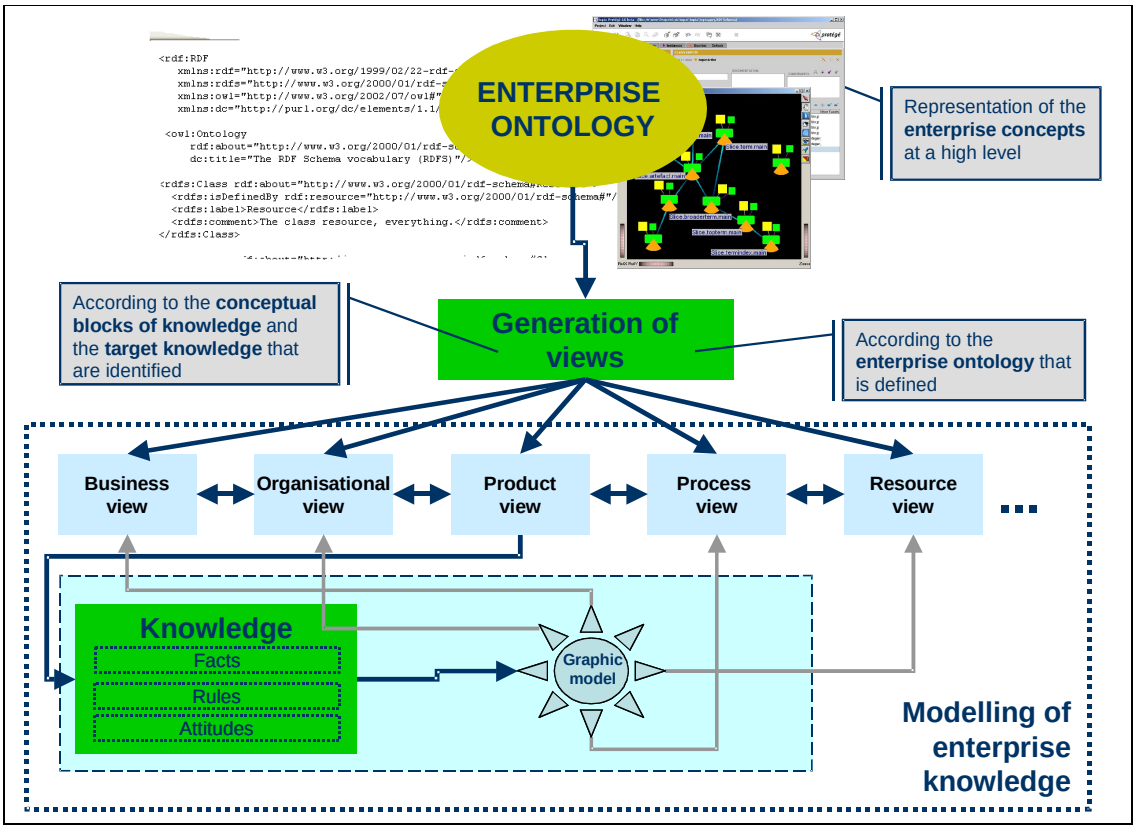

Fig. 5. Conceptual diagram for obtaining the map of enterprise knowledge at the CIM level.

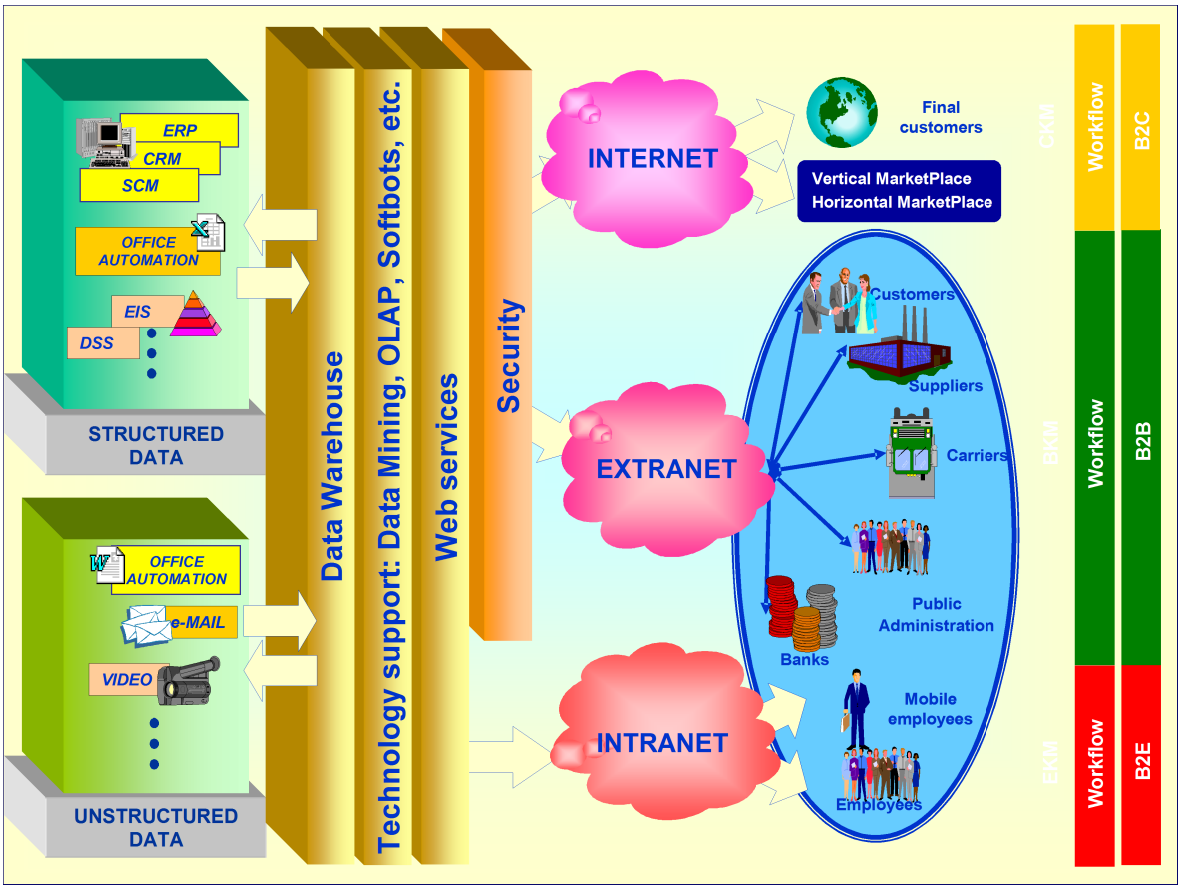

Fig. 6. Technological infrastructure proposed to support a knowledge portal.