MANAGING COMPETENCIES WITH PCPACK

PCPACK will enable development of a full performance and competency model . It will reduce the time and resources required for development and management while providing an easily accessible and effective format for review, validation, analysis, and reporting.

k-based
knowledge technologies

K-Based: We help novices perform like experts

We specialize in knowledge elicitation skills and the tools and technology to represent knowledge for use by humans and machines.

Our knowledge elicitation expertise is research-based and developed over the past twenty years . The methods are proven and documented in eliciting knowledge from experts and representing it to share with others.

The tools, processes, and technology to capture, represent, and share expertise is developed from Psychology, Philosophy, Artificial Intelligence, Computer Science, Web Technologies and Engineering.

Jerry Marino, M.A. – Managing Director

30 years' experience in performance technology, publishing, and information architecture. He has extensive Task Analysis (TA) and Competency Development (CD) experience and expertise and initiated the implementation of IT systems integrating TA and CD requirements with training and performance support solutions. He is Chief Knowledge Engineer and manager of day-to-day operations.

Paul Taggart – Chief Technology Officer

B.S in Cognitive Science Paul and extensive expertise in translating business requirements into workable software solutions. Paul has extensive expertise in Internet technologies, C++, Java programming, Unix System Administration, and new software best-practices such as Design Patterns. He has also deep knowledge of Java development, Web Enterprise solutions, and advanced techniques such as Model Driven Architecture. With several Microsoft Enterprise certifications, Paul envisions complete Enterprise solutions with a Cognitive Science perspective. Paul has been trained in Knowledge Engineering and Technologies by Nick Milton, Chief Knowledge Architect for Tacit Connexions and author of Knowledge Acquisition in Practice.

PCPACK KNOWLEDGE WORKBENCH

LADDER TOOL

PROTOCOL TOOL

ANNOTATION TOOL

DIAGRAM TOOL

MATRIX TOOL

RDF IMPORT/ EXPORT TOOL

TEMPLATE TOOL

PUBLISHER TOOL

ADMIN TOOL

LANGUAGE TRANSLATOR TOOL

PCPACK KNOWLEDGE WORKBENCH

Request a demonstration from info@k-based.com.

A powerful competency development and performance model management toolset

PCPACK is a powerful knowledge engineering software suite that enables rapid and comprehensive task analysis and competency development and supports the retention, sharing, management and re-use of tasks and competencies across an organization.

Released commercially in 1994, PCPACK has undergone continual development in response to market demands, technological advances and customer feedback. Major global corporations have benefited from the use of PCPACK, now at Version 6. These include Airbus, BAE Systems, Comic Relief, PTTEP, Prudential, QinetiQ, Rolls-Royce, and Sony Corporation.

Ten powerful tools in one integrated suite

The PCPACK Knowledge Workbench is an integrated suite of 10 knowledge tools that support all aspects of competency development, analysis, and distribution within an organization. Whether used for training design and development or integrated in a talent management program, the tools support a number of key activities:

❑ Analyzing competency elements from text documents

❑ Structuring competencies for job descriptions and training design

❑ Eliciting and validating tasks, skills, and knowledge from experts

❑ Publishing and implementing competencies in training development

❑ Traceability of competencies to learning and performance assets

One integrated toolset manages all elements

PCPACK eliminates the need for multiple applications because all tools are integrated in one suite.

PCPACK saves developers time and resources since it eliminates the need for individual programs like spreadsheets, databases, text editors, and diagramming tools. PCPACK includes all functions in one, integrated toolset.
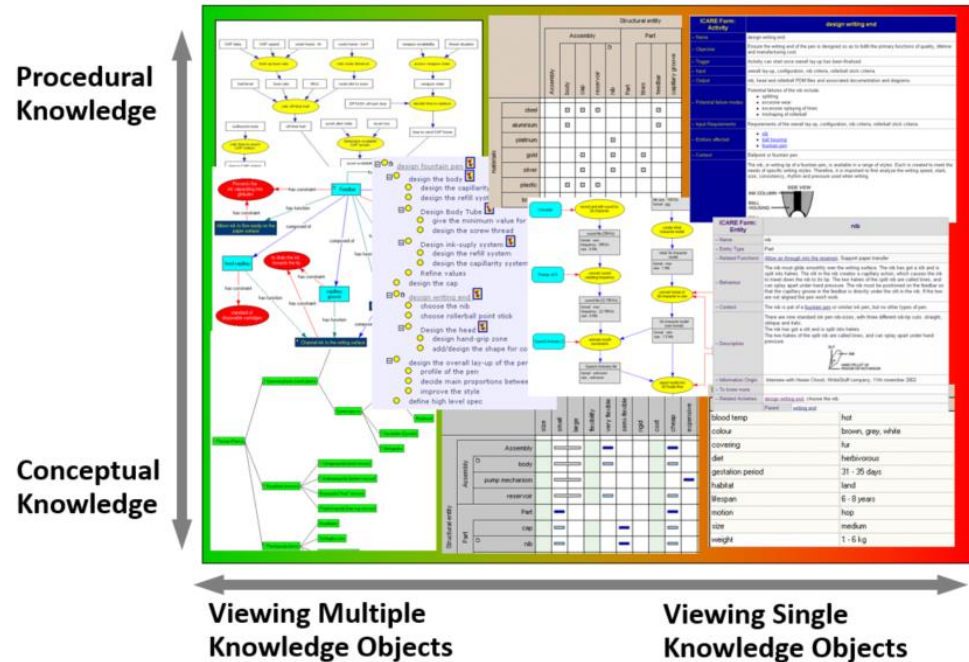
View elements as diagrams or text

PCPACK tools and views make content easier to understand and faster to review. Subject Matter Experts can quickly review elements in overview mode or drill down for specific content and details.

Easy access to detailed reports and information

Custom reports are accessible to all users

All users can easily pull information from reports.

PCPACK is built on an XML base and uses XSLT stylesheets to transform data into useful information and reports.

You can program reports to show any specific information important for reporting for your project: e.g., knowledge and skills required for each task; tasks that require specific knowledge and skills; or tasks, knowledge or skills across roles.

The report shown on the right uses drop down lists to select which elements and relationships to report on and shows comparisons of tasks across several functional areas..

Show detail in template created text pages

Customized Annotation Pages show the detail relevant to your project. Descriptions, links to reference material, images, and parent or child relationships present a complete range of information to users.

Annotation Pages are easy to set up using templates and embedded formulas. When you set up an Annotation Page template for an element, all instances display the specific information for that element.

ICARE Form: Activity	design writing end
– Name	design writing end
– Objective	Ensure the writing end of the pen is designed so as to fulifil the primary functions of quality, lifetime and manufacturing cost.
– Trigger	Activity can start once overall lay-up has been finalised.
– Input	overall lay-up, configuration, nib criteria, rollerball stick criteria.
– Output	nib, head and rollerball PDM files and associated documentation and diagrams.
– Potential failure modes	Potential failures of the nib include: • splitting • excesive wear • excessive splaying of tines • mishaping of rollerball
– Input Requirements	Requirements of the overall lay-up, configuration, nib criteria, rollerball stick criteria.
– Entities affected	• nib • ball housing • fountain pen
– Context	Ballpoint or fountain pen.
	The nib, or writing tip of a fountain pen, is available in a range of styles. Each is created to meet the needs of specific writing styles. Therefore, it is important to first analyze the writing speed, slant, size, consistency, rhythm and pressure used when writing. SIDE VIEW INK COLUMN BALL HOUSING BALL POINT

ICARE Form: Entity	nib
– Name	nib
– Entity Type	Part
– Related Functions	Allow air through into the reservoir, Support paper transfer
– Behaviour	The nib must glide smoothly over the writing surface. The nib has got a slit and is split into halves. The slit in the nib creates a capillary action, which causes the ink to travel down the nib to its tip. The two halves of the split nib are called tines, and can splay apart under hand pressure. The nib must be positioned on the feedbar so that the capillary groove in the feedbar is directly under the slit in the nib. If the two are not aligned the pen won't work.
– Context	The nib is pat of a fountain pen or similar ink pen, but no other types of pen.
– Description	There are nine standard ink pen nib-sizes, with three different nib-tip cuts: straight, oblique and italic. The nib has got a slit and is split into halves. The two halves of the split nib are called tines, and can splay apart under hand pressure. SLIT NIB HARD PELLET OF IRIDIUM OR RUTHENIUM
– Information Origin	Interview with Howie Chosit, WriteStuff company, 11th november 2002
– To know more	
– Related Activities	design writing end, choose the nib
	Parent	writing end

Trace competencies to curriculum

PCPACK allows training developers and managers traceability of competencies to developed training and performance support materials. And because PCPACK is an integrated suite of tools, changes to any competency or relationship to learning and performance objects changes all representations and aspects of the competency its relevant relationships.

Developers and managers work in one toolset so have accurate traceability and save the time and effort of going back and forth between several applications.

Competency

Skills

Lesson 1

Lesson 2

Knowledge

Lesson 3

Lesson 4
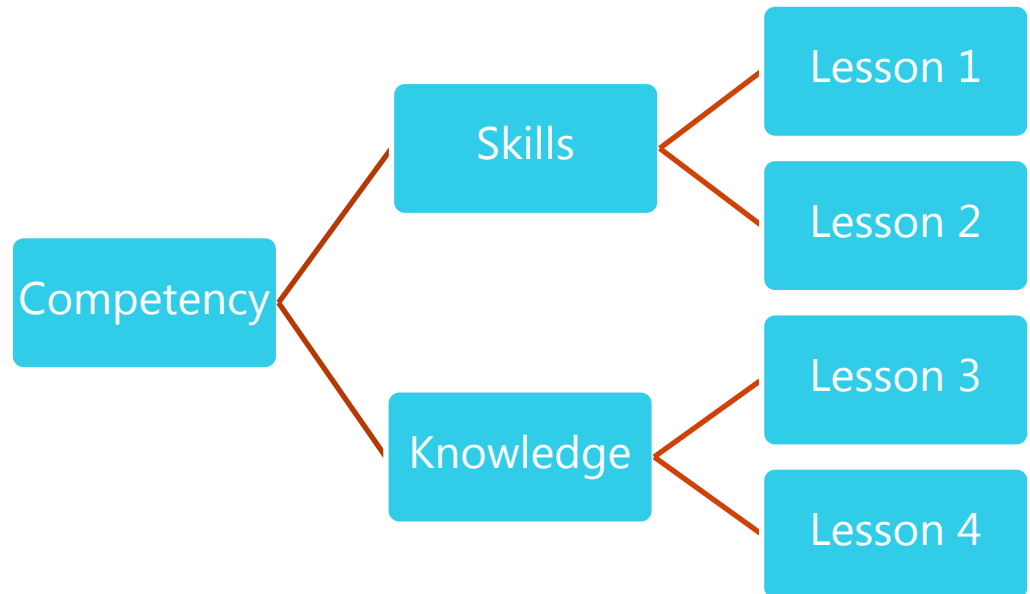
Diagram elements to fit the model
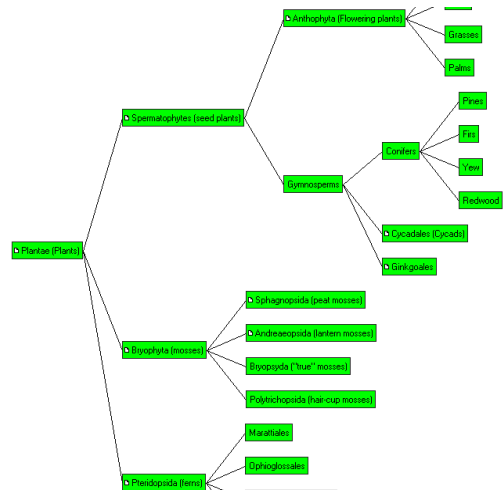
Ladder Tool

Hierarchical relationships

PCPACK allows you to diagram elements and their relationships while maintaining data integrity. Diagrams are "live data" and if changed will change the underlying data and relationships.
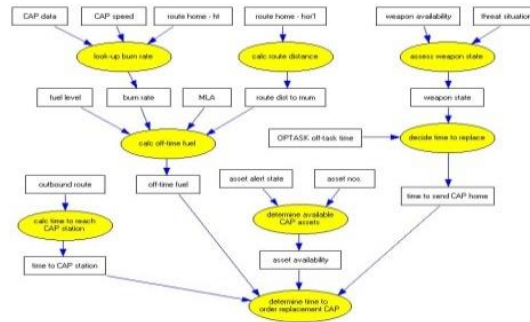
Process diagrams

Procedures and process flows

Show sequential tasks, decision trees, or process flows. Users can drill down into each element for details of sub-processes and additional granularity and details .
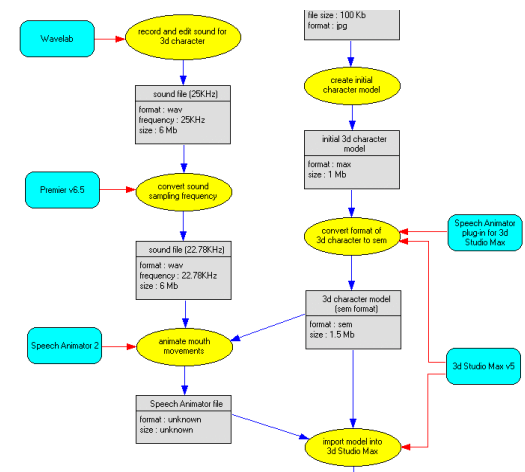
Drill down for sub-processes

Break tasks into steps

Drill down from a task (in the middle diagram to the left) and see the individual steps and inputs for a task or competency.

Quickly input data several ways

Users save time by quickly inputting data through several tools in the PCPACK Workbench. And whichever tool they use the data is proliferated throughout the knowledgebase and shows in any view selected.

The **Protocol Tool enables** users to markup imported documents with marker pens they define. Marked up text becomes categorized elements in the knowledge web.

Ladders enable users to drag and drop elements onto other elements to quickly create relationships and show subsets, sub-processes, or other relationships established in the k-base.

Matrices enable immediate connections between elements though the click of a mouse.

Protocol Markup

Ladders

Matrix input

Link to references, images, videos, and websites

Embed links in Annotation Pages or drill down from diagrams

PCPACK is created according to W3C standards and supports internal or external web links to reference or support material such as images videos, websites, 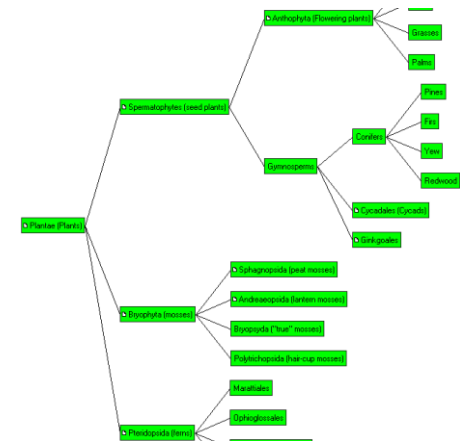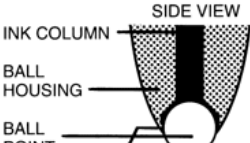or documents, saving. The integrated interface and repository saves users time as they implement competencies in their work.

ICARE Form: Activity	design writing end
– Name	design writing end
– Objective	Ensure the writing end of the pen is designed so as to fulifil the primary functions of quality, lifetime and manufacturing cost.
– Trigger	Activity can start once overall lay-up has been finalised.
– Input	overall lay-up, configuration, nib criteria, rollerball stick criteria.
– Output	nib, head and rollerball PDM files and associated documentation and diagrams.
– Potential failure modes	Potential failures of the nib include: • splitting • excesive wear • excessive splaying of tines • mishaping of rollerball
– Input Requirements	Requirements of the overall lay-up, configuration, nib criteria, rollerball stick criteria.
– Entities affected	• nib • ball housing • fountain pen
– Context	Ballpoint or fountain pen.
	The nib, or writing tip of a fountain pen, is available in a range of styles. Each is created to meet the needs of specific writing styles. Therefore, it is important to first analyze the writing speed, slant, size, consistency, rhythm and pressure used when writing. SIDE VIEW INK COLUMN BALL HOUSING BALL POINT

Savings with PCPACK

PCPACK saves time and resources for task and competency development in the following areas:

❑ Integrated workspace. An integrated workspace in one desktop environment eliminates the need for several software applications. There is no need to use a spreadsheet, word processing, database, or diagramming tools because all functions are contained in PCPACK.

❑ No normalization of data. Data is normalized naturally in the process of input and analysis. This is a major time saver since generally projects require creation of a data structure and normalization of data to fit that structure.

❑ Quicker review by analysts and SMEs. Visual representations enable rapid review. When detailed review is required users can drill down into detailed forms and descriptions.

❑ Less time spent researching and looking for related information. PCPACK integrates links to reference information, documentation, images, videos, and stores it for easy retrieval.

❑ Quick data entry through import of documents and easy markup of content using "marker pens" to categorize and store concepts and tasks identified within the documents.

❑ An integrated user interface with several views that are all connected. The PCPACK tools keep data configuration managed and aligned. A change in one view changes all views of the related information.

For information on deployment of PCPACK and other knowledge-based performance and productivity solutions contact k-Based.

k-based
knowledge technologies

1160 Hunter St
San Diego CA 92103-1323
619.299.6827 · www.k-based.com

info@k-based.com