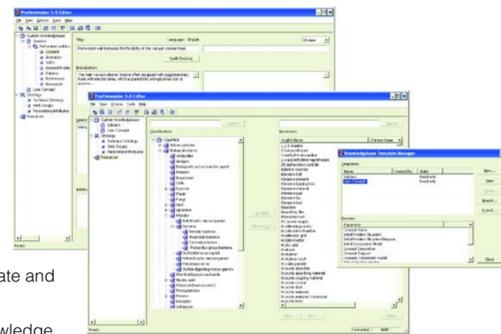




Knowledgebase Editor

Pro/Innovator™ Editor is a key component in Pro/Innovator™ Knowledge Management platform. It is designed to drive the enterprise innovation knowledge management.



- ◆ Knowledge Template Manager contains various types of contents which help users define their own knowledge structure;
- ◆ Editor provides open port to collect and manage the User Concepts from Pro/Innovator™. This mechanism helps accumulate and reuse enterprise innovation knowledge;
- ◆ Batch import/export function facilitates knowledge transfer and backup;
- ◆ Enterprise can build domain ontology to merge and integrate enterprise innovation knowledge and Pro/Innovator™ Solutions KB;
- ◆ Permission management mechanism allow enterprise manage knowledge more effectively and safely.

Unique Features

- Solutions Knowledgebase contains more than 12,000 elite inventive solutions that are extracted from millions of worldwide patents of the last 30 years; and the solutions have easy-to-use interface
- Pro/Innovator™ provides systematic and repeatable software workflow for inventive problem solving
- Pro/Innovator™ integrates innovation methodologies and proven problem-solving techniques into the full process of software application, stimulates and guides the out-of-the-box thinking
- Multi-project and multi-model operation helps engineers multiplex between models and projects
- Patent Generator facilitates patents application draft by planning protection scope and generating claims automatically
- Pro/Innovator™ and Editor provides open port for enterprise innovation knowledgebase accumulation and management

User Benefits

- Supports problem solving and innovation management in R&D engineers and managers daily work
- Enables corporations to develop innovative products and processes and improve existing ones
- Shortens R&D cycle dramatically by speeding up inventive and feasible concepts generation
- Enhances competitiveness by understanding and surmounting competitors' technologies and protecting your IP
- Achieves close integration between R&D process and knowledge management process by one platform
- Optimizes and accelerates corporations' innovation by systematic knowledge sharing and management
- Enhances R&D return on investment and return on innovation

Application Industries

Aerospace, Automotive, Shipbuilding, Telecommunications, Electronics, Transportation, Metallurgy, Chemical Manufacturing, Energy & Power, Consumer Goods, Construction,

KEEP on innovation, holding future!



IWINT USA
1875 Century Park East, Suite 700
Century City, CA 90067 USA
Tel: +1-310 284-3118
Fax: +1-310 407-5499
E-mail:info@iwint.com

IWINT Hongkong
Unit 1203-1205 Yu Yuet Lai Bldg
43-55 Wyndham Street,
Central Hong Kong
Tel: +852-28109697
Fax: +862-30121417

IWINT Beijing
5A/F, Office Tower A, Winterless Center,
No.1 West Dawang Road, Chaoyang District,
Beijing 100026, P.R. China
Tel: +86-10-65388988
Fax:+86-10-65388102
E-mail:info@iwint.com

IWINT Chengdu
Room A 737/738/739 Lidu Plaza No. 8,
Dakejia Lane Chengdu, 610016 P.R.C.
Tel: +86-28-86670700
Fax: +86-28-86675190



Pro/Innovator™ 5.0

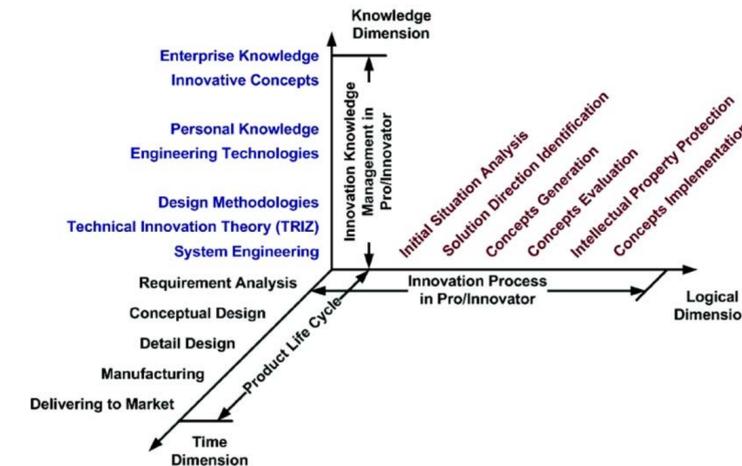
—The Computer Aided Innovation Design Platform

● IWINT, Inc.

● Pro/Innovator™



With Pro/Innovator™, all R&D related divisions can co-work in the same platform during the whole product life cycle to achieve technical innovation, innovation knowledge management and intellectual property protection.



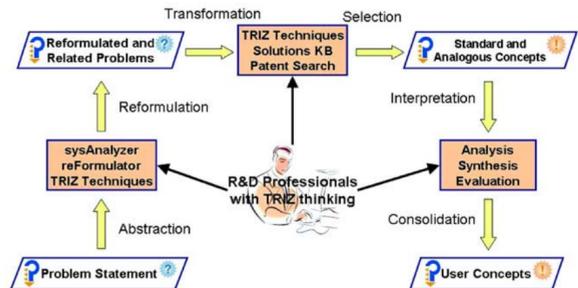
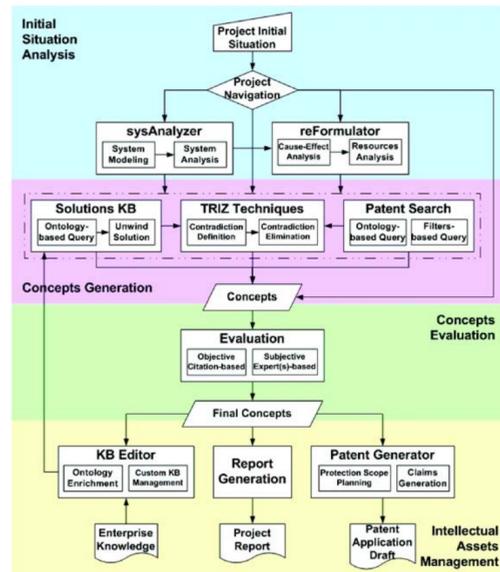
- ★ Pro/Innovator™ is knowledge-based. By integrating TRIZ, ontology-based knowledge representation and reuse, and invention-orientated knowledgebase, Pro/Innovator™ helps R&D professionals develop innovative concepts effectively and helps corporations manage innovation knowledge systematically.
- ★ Pro/Innovator™ is methodology-based. By integrating TRIZ and modern design methodologies, Pro/Innovator™ guides strategic thinking through the whole problem solving and product innovation procedures, from identifying problem, developing concepts, evaluating alternative concepts, to generating patent application and enriching enterprise knowledgebase.
- ★ Pro/Innovator™ is a unique Computer Aided Innovation Design Platform that integrates R&D process and enterprise knowledge management process, this mechanism allows R&D, IP and knowledge engineers to cooperate in the same platform.

Workflow

Pro/Innovator™ includes ten major components: Project Navigator, sysAnalyzer, reFormulator, Solutions KB, TRIZ Techniques, Patent Search, Patent Generator, Concepts Evaluation, Report Generator and KB Editor. The workflow based on these components can facilitate technical engineers' daily work such as.

- ★ Pre-research of new R&D project
- ★ New product/process conceptual design
- ★ Existing product/process improvement
- ★ Failure diagnosis and troubleshooting
- ★ Innovation knowledge management
- ★ Patent protection

Aligned with the core idea of TRIZ problem solving (Specific Problem → TRIZ Generalized Problem → TRIZ Generalized Solution → Specific Solution), the navigating mechanism in **ro/Innovator™** helps clearly distinguish, record and manage the heuristics provided by the software and the users' innovative thinking based on them.



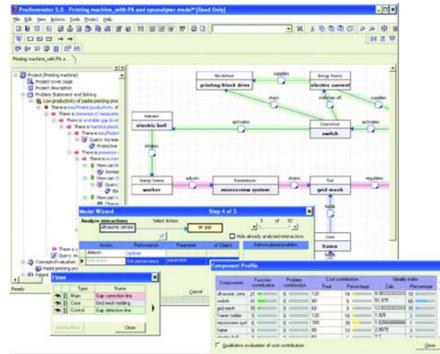
Project Navigator

- ◆ Supports project initiation, project description, inter-module interaction and switch, concept evaluation, patent generation and project report generation and guides problem solving workflow. Navigator has unified and clear interface which helps track the whole problem-solving flow and manage the project;
- ◆ Automatically hierarchizes the problems (Problem Statements, Reformulated Problems and Related Problems), the problem queries (solution KB queries and patent search queries), and the concepts (Standard Concepts, Analogous Concepts and User Concepts) in the navigator tree and enables display-filter function;
- ◆ Supports the transformation from Standard Concept to Analogous Concept and User Concept, system modeling and implementation risk analysis of Analogous Concept and User Concept, supports citation between different concepts to records the thinking process of concept transformation and transition;
- ◆ Supports inter-model information sharing and inter-project collaboration.

Initial Situation Analysis

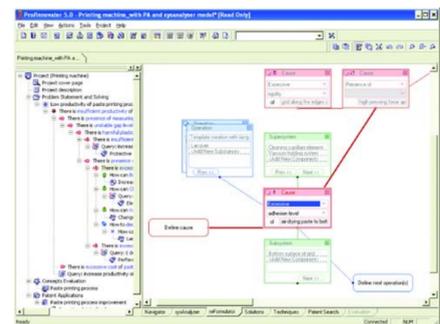
Technical System Analysis: sysAnalyzer

- ◆ **ro/Innovator™** allows users to use several methods to build component model (system components and interactions between components), methods including bottom-up, top-down, manual and wizard-based, to analyze technical system and identify the directions for system improvement;
- ◆ Component role analysis and system energy flow analysis help users fully and accurately understand the technical system and review the system from higher level;
- ◆ Non-optimal and undesirable interactions identified in the component modeling and energy flow analysis are converted automatically into problem statements and categorized in the project navigator tree. This helps users identify system problem clearly and formulate problems systematically;
- ◆ Based on value engineering, component profile analysis helps engineers locate the weak points in the technical system and thus identify the components to be simplified or improved;
- ◆ Beside initial situation analysis, sysAnalyzer can also be applied in concept analysis (Analogous Concept and User Concept). The advantage of this mechanism is that it facilitates the generation of patent application and enterprise innovation knowledge management.



Problem Reformulation: reFormulator

- ◆ From any problem statement listed in the project navigator tree, user can start cause-consequence analysis and resource analysis to discover the latent root causes of the initial problem and identify all available resources that might be used in further problem solving;
- ◆ Cause-consequence analysis enables engineers to treat the root causes of the problem rather than the symptom of the problem;
- ◆ Resource analysis based on TRIZ multi-scheme thinking method encourages engineers to use available resources in the space scale and time scale to tackle the identified root causes;
- ◆ All the analysis completed in the three dimensional problem reformulation map can be converted automatically into reformulated problems and listed in the navigator tree. The well-formatted reformulated problems can be used directly for contradiction definition or problem solving in TRIZ Techniques module, Solutions Knowledgebase or Patent Search module.



Concepts Generation

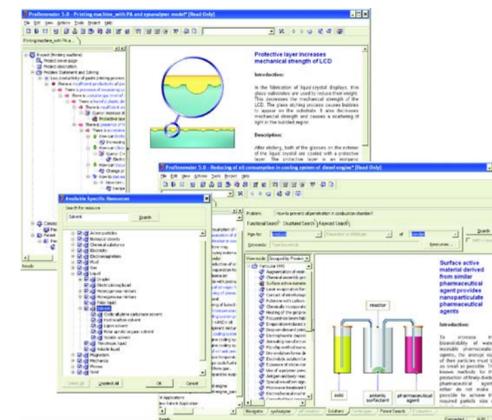
After finishing the initial situation analysis phase which generates problem statements and reformulated problems, users come to the concepts generation phase. **ro/Innovator™** provides three modules to help solve the identified problems:

- ▲ Solutions Knowledgebase: ontology-based and interdisciplinary engineering solutions extracted from high level inventions;
- ▲ Patent Search: ontology-based query expansion patent search engine;
- ▲ TRIZ Techniques: solving contradictions without compromise.

Solutions Knowledgebase

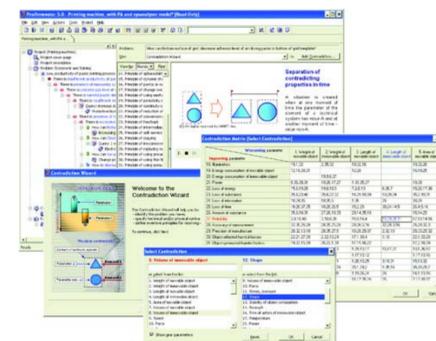
This module contains effective and workable solutions that are based on extensive analysis of millions of patented inventions in different industries all over the world.

- ◆ Knowledgebase contains more than 12,000 elite inventive solutions that are extracted from millions of worldwide patents of last decades;
- ◆ Ontology-based knowledge organization and query expansion ensures efficient and precise search result;
- ◆ Second functional unwind search provide links to more solutions to implement current solution;
- ◆ Each solution is concise and paired with an animated illustration to help quick grasp of its working principle.



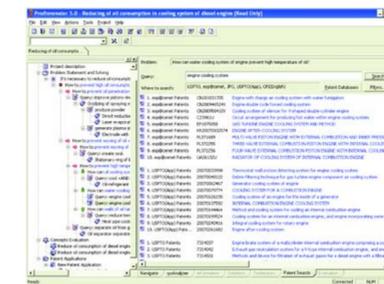
TRIZ Techniques

- ◆ Techniques module provides three means to define technical contradiction: classical contradiction matrix, advanced general parameter table powered by semantic technology, and contradiction wizard. The three means are designed to satisfy different users and assist in solving different contradictions;
- ◆ Each inventive principle is paired with animated illustration, which helps users understand the core idea of the inventive principle; and each principle is supported by varied engineering application examples that are extracted from highly-cited patents, this helps users understand how to apply the principles to resolve real problems.



Patent Search

- ◆ Universal mechanism for online patent search;
- ◆ Ontology-based search engine expands query automatically and improves the patent search recall ratio;
- ◆ Access to powerful source of innovation – millions of inventions from USPTO, EPO, JPO, and China Patent Office.

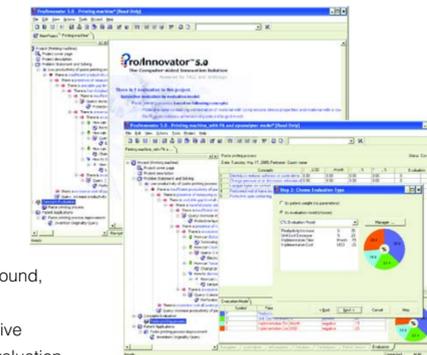


In the concept generation phase, **ro/Innovator™** not only allows users to access proven knowledge from a wide scope of domains in Solutions Knowledgebase and the cutting-edge knowledge via Patent Search module, but also allows users with different familiarity with TRIZ to use Techniques module to resolve contradictions innovatively. These three modules are heuristic, help engineers generate Standard Concepts effectively; also, these three modules are interactive, Analogous Concepts or User concepts can be recorded to the system with engineer's thinking process.

Concepts Evaluation

Evaluation module

- ◆ Embedded concept evaluation model allows consideration of positive and negative effects that each solution may have. Engineers also can modify or add new evaluation models to the system and adopt different models to evaluate concepts;
- ◆ Allows single/multiple experts evaluation. In case of multi-expert, each expert can be assigned a certain weighting depending on engineering background, experience or others;
- ◆ Allows subjective and objective evaluations. Subjective evaluation is done by expert(s) with user-defined evaluation model; objective evaluation is performed by referring to the citation index of referred patent.



Intellectual Property Management

Patent Generator

- ◆ Assists users in drafting technical disclosure and patent application;
- ◆ Automatically process technical solution and build component model to assist users in understanding essentials of invention;
- ◆ Inventor could plan protection scope instantly and reasonably based on component model;
- ◆ Automatically create the draft of technical disclosure and patent application, including claims and the main body of description;
- ◆ Generated description has a consistent frame with claims and provide potent argument for supporting;
- ◆ Help inventor achieve high-quality and more valuable patent application.

