Goldfire Innovation
Software
- Recent Developments

September 2011
The 7th TRIZ Symposium in Japan

Kiyoshi Shikakura
Invention Machine Japan K.K.
What is Goldfire

• Software solution platform, developed by Invention Machine Corporation, to assist companies to achieve sustainable innovation,

• Goldfire integrates the following product features
  • Proven problem analysis and idea generation methodologies
  • Patented semantic knowledge research capability to help engineers be knowledge-enabled in analyzing problem and opportunities, and generating solutions
  • Capture, share and re-use engineers’ thought process as corporate knowledge

Goldfire as TRIZ software
Putting TRIZ tools/contents into the enterprise innovation processes, as an engine to drive systematic innovation
“Innovation without Methodology is Just Luck”

• “There are lots of creative people in your company, and given half a chance they’ll probably create some great innovations.

• But if you rely on their random efforts then you’re risking your success on chance, and that’s not enough.

• You have to develop and apply methodologies, the right methodologies, to make the shift from luck to consistency, predictability, and sustainability”.

-“Permanent Innovation” (Langdon Morris, 2006)
Key Capabilities to Achieve Innovations

3 Challenges for Manufacturing Companies

- New product/technology pipeline which can sell
- Limited ‘Time’, ‘Budget’ and ‘Human resources’
- Maintain product quality (avoid quality issues)

Proposed in the Dec 2009 issue of “Nikkei Monodukuri”

Strong Product and Technology Development Capability

- Knowledge-enablement
  Leverage internal and external knowledge for faster and quality problem analysis and solutions
- Analytical capability
  Logically analyze problems to find new angles for problem analysis and solutions
- Conception capability
  Foresee potential issues, generate and select promising concepts for solutions

Call for Methods/Tools to empower engineers on these 3 critical capabilities
3 Key Elements for Innovation

- Information
- Communities
- Innovation Activities
The Innovation Solution

- Get the right information within the right time
- Capture & reuse expertise & new intellectual capital
- Work collaboratively with repeatable & effective methods
Recent enhancement of Goldfire (1)

- Introducing “Tasks” (Ver. 5)
  - Provides “Best Practice” workflow utilizing various Goldfire features for most-common innovation activities
Recent enhancement of Goldfire (2)

- Knowledge Navigator (Ver. 5.5)
  - Enable engineers to quickly become ‘knowledge enabled’ and make ‘informed decisions’ around topics and technologies

Goldfire’s Knowledge Navigator provides more than 40 “Concept Lenses” to assist with topic exploration
Recent enhancement of Goldfire (3)

- Problem sharing/discussions, Expert Finder (Ver. 6)
  Promote collaboration for innovations

Allows engineers to share problems in their organizations, have discussions online. All discussions are semantically indexed and captured as new ‘corporate knowledge’
Conclusions

• Product and technology ideas are needed at every phase of product development cycles
  • Planning, R&D, Product and production engineering, Q/A, etc.

• Need to leverage “information” as “knowledge”, allow “people” to work collaboratively in various “innovation activities”, to establish process to achieve sustainable innovations

• Goldfire puts TRIZ methodologies (tools/contents) into enterprises’ innovation processes, allowing engineers to benefit from TRIZ.

Goldfire as TRIZ software
Putting TRIZ tools/contents into the enterprise innovation processes, as an engine to drive systematic innovation