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Zen Suido Kaikan (Tokyo)*



## **World TRIZ Sites Project (WTSP) (2): World WTSP Catalogs of TRIZ-related Sites in the World:**

**Sept. 5, 2019**

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and Valeri Souchkov (Netherlands)**



# **Contents of Talk**

- [1] Aims, plan, appeal, trials, platform, and difficulties  
——Report in Sept. 2018**
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(ideal and practical)**
- [4] World WTSP Catalogs First Preliminary version  
Completed on Aug. 4, 2019**
- [5] Extension of scope of the World WTSP Catalogs  
Sites Around TRIZ**
- [6] Concluding remarks**

# [1] Aims, plan, appeal, trials, platform, and difficulties

(2018.10.29 TFC2018)

## [1A] Back ground Situations around TRIZ

- A lot of activities and knowledge accumulation of TRIZ
- Slowly decreasing interests in TRIZ in the world
- Internet Searches for TRIZ give messy/noisy information
- Many TRIZ-related Websites, working separately and competing



55 main sites are displayed here. Probably 10 - 50 times of these (?).

# [1B] Aims of WTSP

World TRIZ Sites Project

Together ! Connected !!

(2018.10.29 TFC2018)

- **To build Catalogs of TRIZ-related Sites**
  - **of each country** (in their own language, then in English) and
  - **of the whole world** (in English, then in many languages)
  - with appropriate (brief but close) **introduction of individual sites**
  - with **appropriate selection** of (useful and important) sites
  - **for various people** (unfamiliar, beginners, users, and experts in TRIZ)
  - in the field of **TRIZ and relevant methodologies**
  - as **reliable sources of information** (on theories, applications, activities)
- **To keep the Catalogs up-to-date**
  - accepting new and revised information regularly
  - revising all the Catalogs every two years
- **For promoting TRIZ and relevant methodologies further in the world**
- **By voluntary collaboration of many TRIZ colleagues in the world**

**Bottom-up  
Strategy**

## **[1C] Pilot projects in Japan: Japan WTSP Catalog (Apr. 2018)**

### **(1) Selected the Search Engine and its options:**

Yahoo!.Japan is selected, with the options of  
Keyword = 'TRIZ', Location = 'Japan', Language = 'Japanese, English',  
Displaying only one main page of each site + URL for site internal search.

### **(2) Visited individual sites one by one and described introductions to them:**

400 Sites were hit. Visiting them one by one, 70 sites were found significant.  
Reading main articles, site's structure, contents, nature, quality, etc. are found.  
Introductions of individual sites were written in 3-10 lines in a free format.

### **(3) Added relevant sites around TRIZ, using background knowledge**

20 sites of significant importance were added, resulting in 92 sites in total.

### **(4) Japan WTSP Catalog of 92 TRIZ-related sites was compiled in Japanese**

Classifying them with types (or roles) of the sites, and arranged in an appropriate order.  
2/3 of the sites are found new since the annotated list in 2008.

### **(5) Japan WTSP Catalog (in English) was posted publicly. (Apr. 2018)**

92 sites in total, including 24 Selected



### **(6) Revised into "World WTSP Catalog (Japan Part)" (Jul. 2019)**

Reevaluates with World WTSP Criteria: © 1 site, ○ 8 sites, □ 17 sites.:

## **[1D] Plan and the current state of WTSP project**

(2018.10.29 TFC2018)

Appeals were often sent to many TRIZ colleagues to work along 'the Japan model'.

(a) In each country, to get voluntary members and form a team with a Country Editor.

b) To survey TRIZ-related sites and to visit and describe introduction to it one by one.

Nakagawa made Internet surveys for TRIZ sites in 33+ countries.

==> Outputs are a lot but noisy and yet insufficient, missing important sites.

(c) To build the WTSP Catalog of TRIZ-related sites in each country

Build the Catalog in the own language, then build Catalog of selected sites in English.

## **[1E] Difficulties -- The activities (a)(b)(c) did not start well .**

Many people support the aims of the WTSP project,  
but very few actually join to work together.

Because: Talented, active persons are always too busy.

**Solution** ==> Divide the tasks into smaller jobs for easier handling.

Jobs to do in each country. Many jobs can be done individually in parallel.

However, some person should coordinate the people for dispatching the jobs and integrated their outputs. "WTSP Country Editor".

Many countries do not have such organization/voluntary leaders.

## [2] Organizing activities (Sept. 2018 -- Aug. 2019)

### [2A] Bottom-up activities in each country

'18 Sept. Nakagawa: Internet surveys for TRIZ related sites in 33+ countries. 50 - 100 sites/country.

**Bottom-up  
Strategy**

'18 Oct. Presentation at ETRIA TFC 2018.  
40 participants signed to join WTSP after individual invitation

'18 Nov. Plan: "Complete World WTSP Catalog and report it at TFC2019"

'18 Dec. Due: To form WTSP Teams in each country -- Almost no progress

'19 Mar. Due: To build Country WTSP Catalog by visiting & describing TRIZ sites..  
--- Almost no progress  
Nakagawa: started top-down surveys for TRIZ-related sites..

'19 Jun. Preliminary contributions from Russia, Czecho, Malaysia, China

'19 Jul. Nakagawa: WTSP Practice Guide, World WTSP Catalogs (Japan Part)..

**(Till present, almost no progress has been made in WTSP Team formation and Country WTSP Catalogs preparation in many countries.)**

## [2B] Top-down Strategy and Quick preparation of World WTSP Catalogs

'19 Mar. Nakagawa: Started the Top-down Surveys of TRIZ-related sites in the world

'19 Apr.-May Nakagawa: Proposal of WTSP Database System (Ideal image)



Top-down Strategy

'19 Jun. Nakagawa: Vision of World WTSP Catalogs and Practical process

'19 Jun. Preliminary contributions from Russia, Czecho, Malaysia, China

'19 Jul. Nakagawa: WTSP Practice Guide, World WTSP Catalogs (Japan Part)..

'19 Jul. Shift to Top-down Strategy to quickly complete World WTSP Catalogs

'19 Aug. First Preliminary version of World WTSP Catalogs  
(Aug. 4, 2019) TRIZ sites ◎ 19 sites, ○ 41 sites.

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'19 Sept. 30 Plan: Revised Preliminary version of World WTSP Catalogs  
TRIZ sites (◎○□), Around-TRIZ sites (◎○)

'19 Oct. 9-11 Plan: Presentation at ETRIA TFC2019

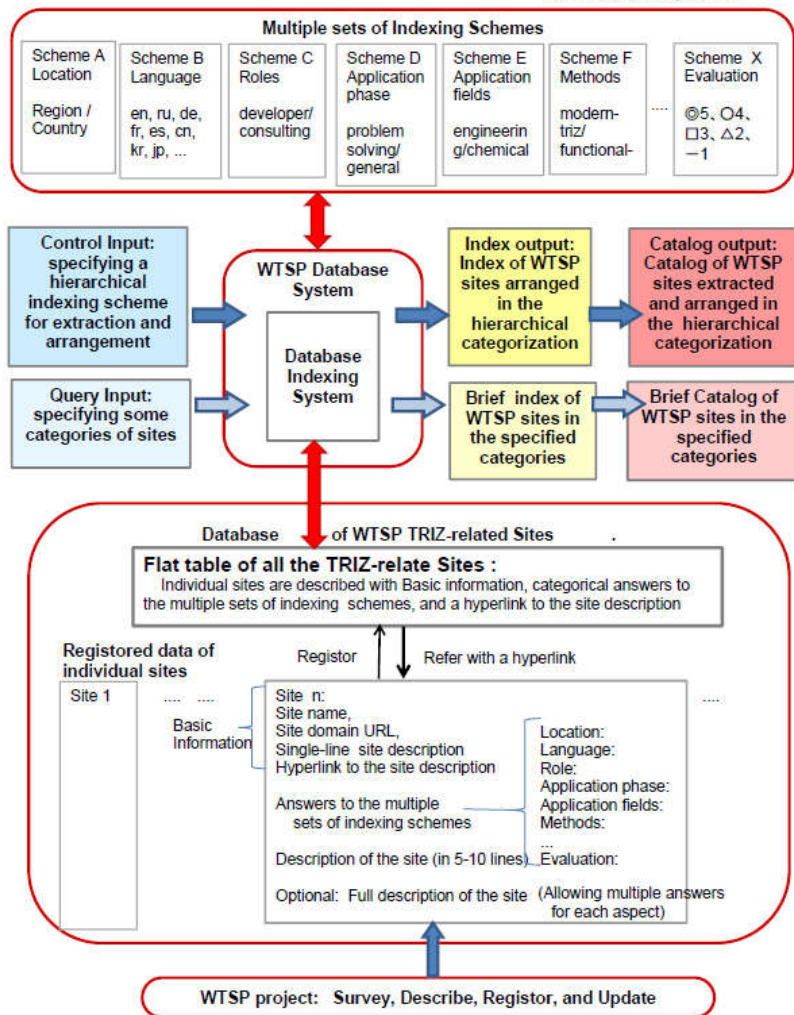


### [3] Proposals of structure of the WTSP Catalogs (Ideal vs Practical)

#### [3A] Proposal of the WTSP Database System (Ideal Form) (Apr.-May, 2019)

**Top-down Strategy**

Structure of the WTSP Database System Proposal Toru Nakagawa Apr. 29, 2019  
Minor revision: May 18, 2019



Classify/Index from various aspects

Control input

Index output

Retrieval input

Catalog output

Table of Sites ("Flat Table")

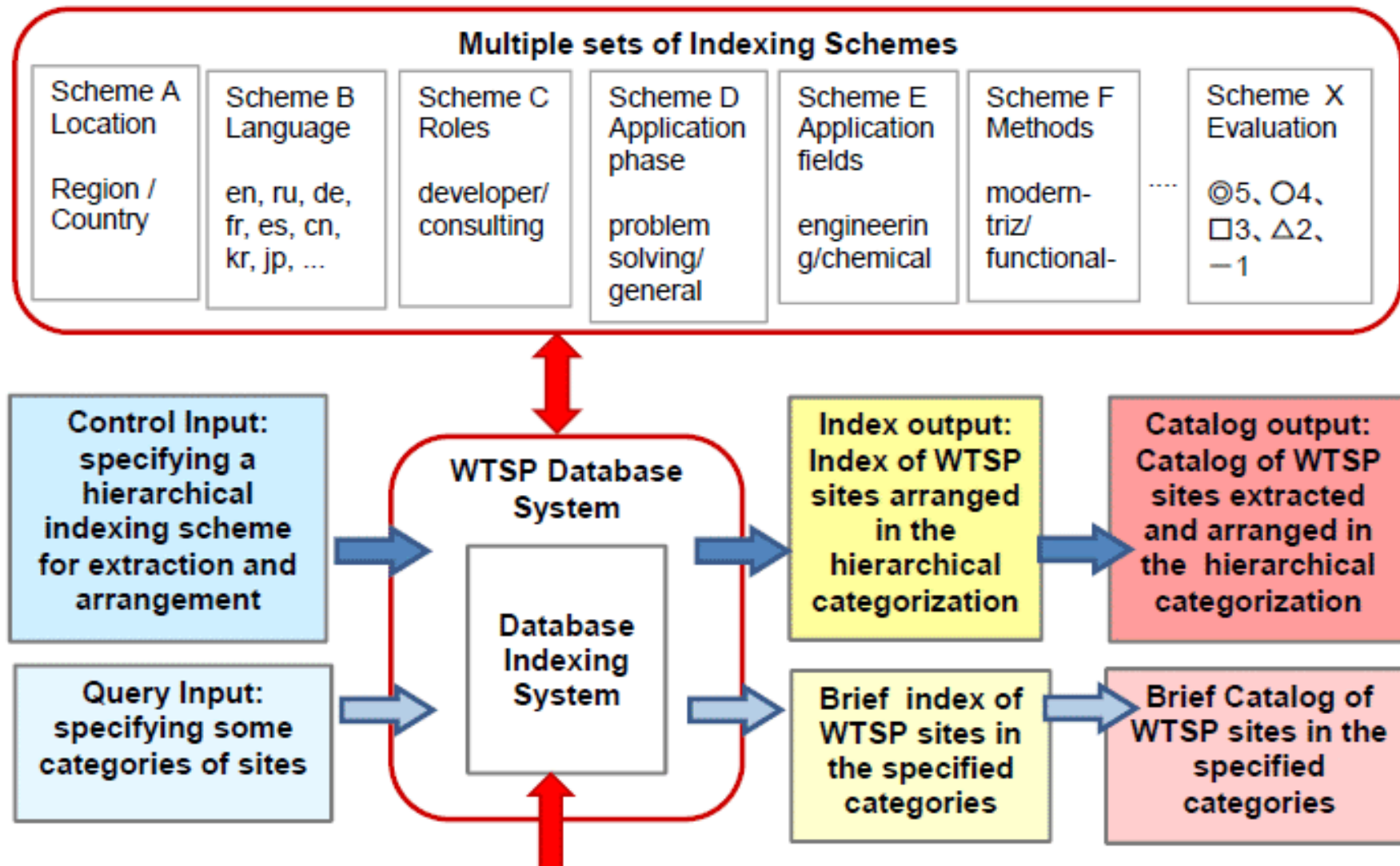
Database of site descriptions

WTSP activities:

Manuscripts by WTSP Teams

# Structure of the WTSP Database System Proposal Toru Nakagawa Apr. 29, 2019

Minor revision: May 18, 2019



**Database of WTSP TRIZ-related Sites**

**Flat table of all the TRIZ-related Sites :**

Individual sites are described with Basic information, categorical answers to the multiple sets of indexing schemes, and a hyperlink to the site description

**Registered data of individual sites**

Site 1  
.....  
.....

Basic Information

Site n:  
Site name,  
Site domain URL,  
Single-line site description  
Hyperlink to the site description

Answers to the multiple sets of indexing schemes

Description of the site (in 5-10 lines)

Optional: Full description of the site (Allowing multiple answers for each aspect)

Location:  
Language:  
Role:  
Application phase:  
Application fields:  
Methods:  
...  
Evaluation:

Registrar

Refer with a hyperlink

**WTSP project: Survey, Describe, Registrar, and Update**

# [3B] World WTSP Catalogs

## Practical process

Tasks Requested to Individual WTSP Teams Toru Nakagawa Jun. 12, 2019

### Manuscripts to be prepared by WTSP Teams

- (b) Table of sites (.xlsx)  
Basic data for indexing
- (a) Descriptions of sites (.docx)

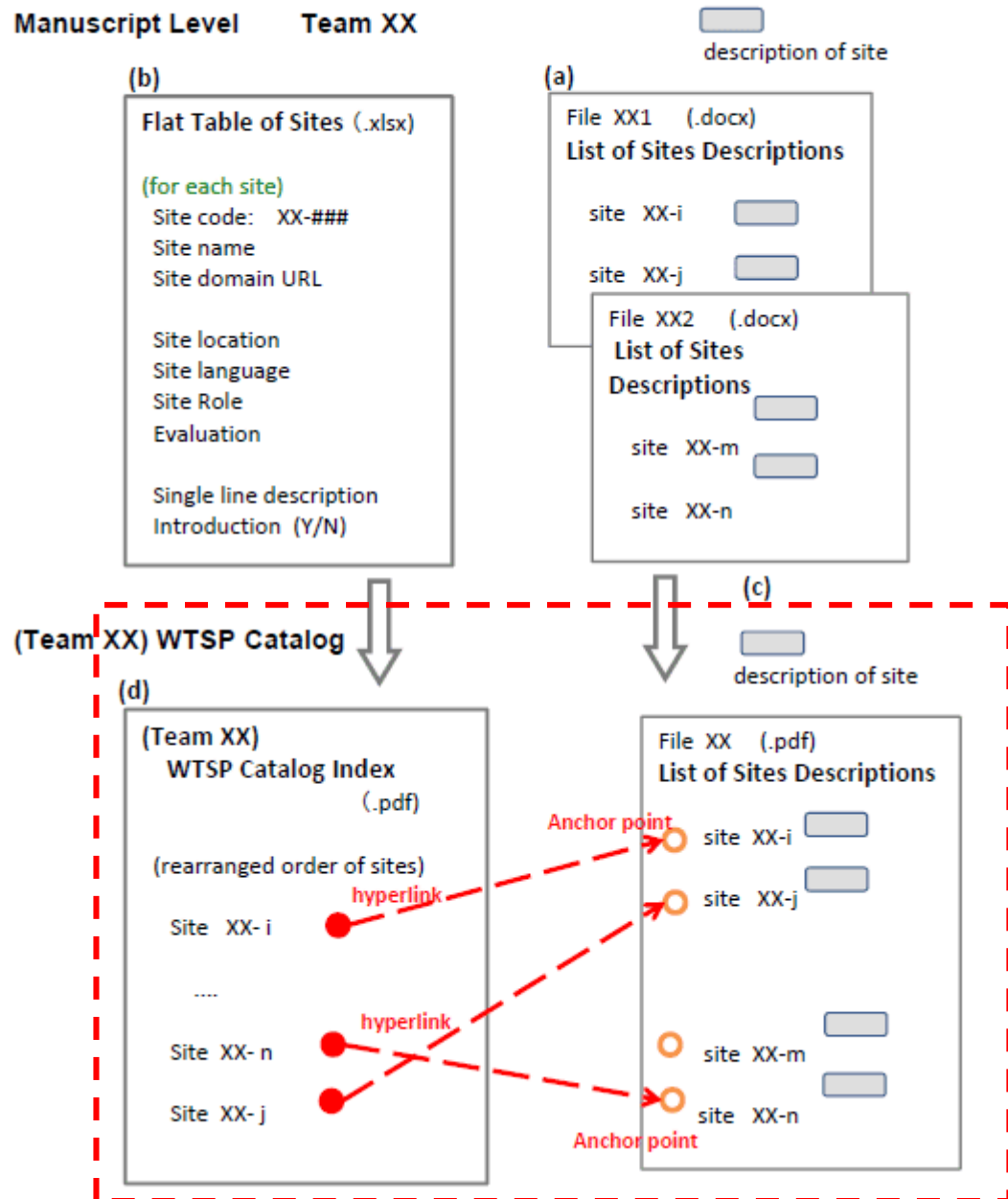
↓ Convert into HTML

### Country WTSP Catalog

- (d) Index page (.html)
- (c) Site description page (.html)

↓ Integrate Catalogs of many Teams

### World WTSP Catalogs



# **WTSP Practice Guide (Practical process for WTSP Teams)**

- (1) Any person who understands the significance of the WTSP project may voluntarily join WTSP as a member.**

We should get as many voluntary members as possible.

In each country, we should form a Team having a coordinator (WTSP Country Editor).

- (2) List up Web sites related to TRIZ in each country.**

First we should just list up known and recommendable TRIZ-related sites.

Show the list openly to the Team members and others for adding any sites.

Carry out internet surveys to pick up some more sites not known widely.

- (3) Describe the basic information and brief introduction of each site. (.docx)**

**Request the site owners to fill in the standard form of site description.**

Refer to the standard classification criteria concerning to the aspects of indexing.

**For the sites picked up by Internet surveys, a WTSP member describes the site by actually visiting it.**

Starting at the page shown in the survey, visit its top page, 'About us' page, and some other main pages (quickly).

Internet search inside the site is often very useful.

You may write in a relaxed format any items you understand.

Depending on the tentative evaluation of the site, you may describe the site closely step by step.

**(4) Evaluate each site (tentatively).**

To be shown in World WTSP Catalogs:    ⊙ Most important (about top 30)  
  ○ Important (about top 100)  
  □ Worthy of World Catalog

To be shown in Country WTSP Catalogs :    △ Worthy of Country Catalog

Not to be shown in WTSP catalogs:         — Irrelevant, no significance, etc.

**(5) Make a Table ('Flat Table') of sites with basic information for indexing. (.xlsx)**

Site name, Site domain URL, Site location, Site language (possibly multiple languages),  
Roles of the site, Site evaluation (⊙○□△), and Site number (in the country Catalog).

**(6) Make these manuscripts (3) (5) open for review and revision in the country.**

**(7) Convert these manuscripts into HTML pages (i.e., Web pages).**

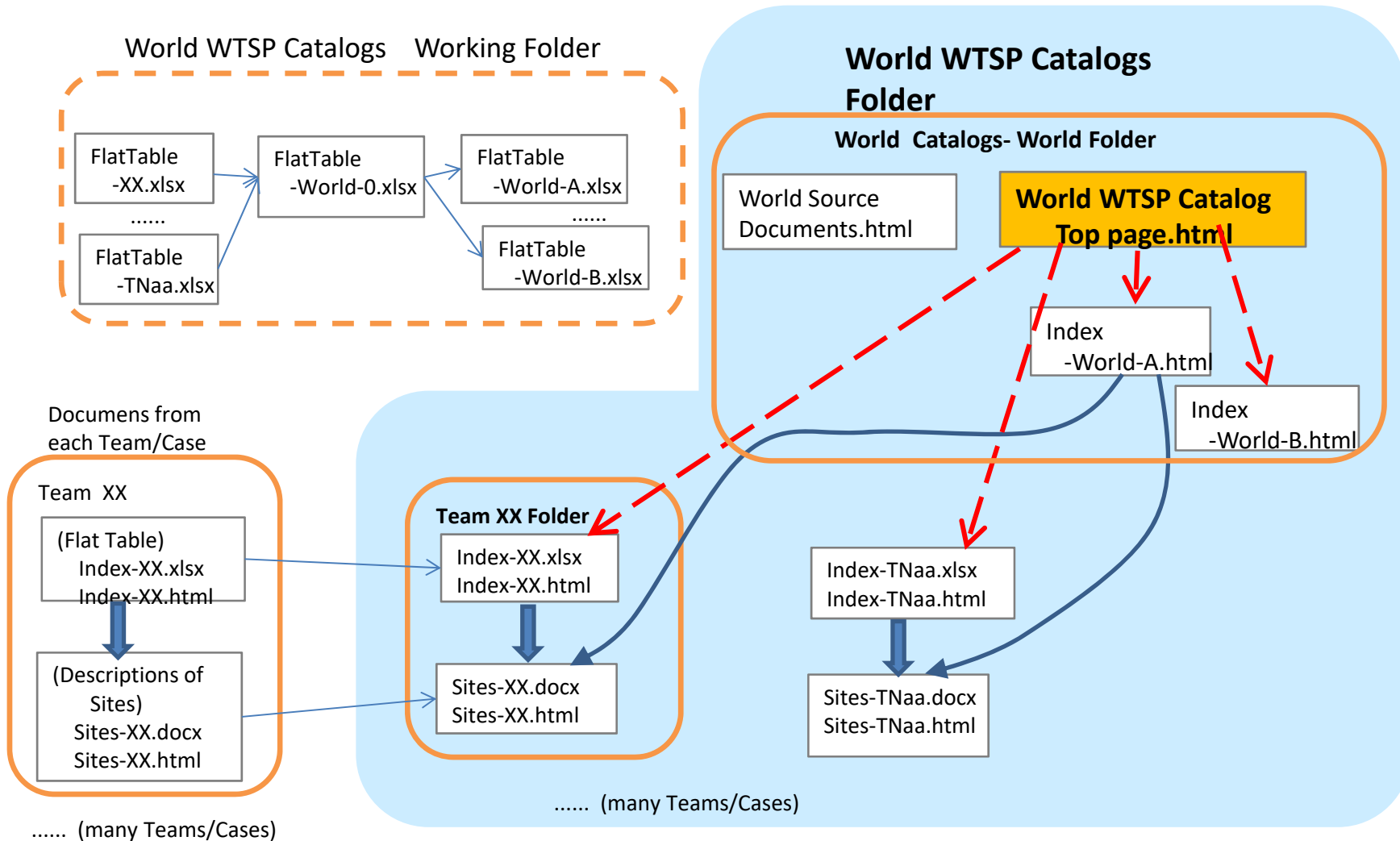
Attach a hyperlink at the Site number in the Flat Table, and the hyperlink must indicate the anchor point placed at its site description in the Sites Description page.  
Use a browser for testing the operations and hyperlinks of the Country WTSP Catalog.

**(8) Submit the completed manuscript of the Country WTSP Catalog to the Project Leader.**

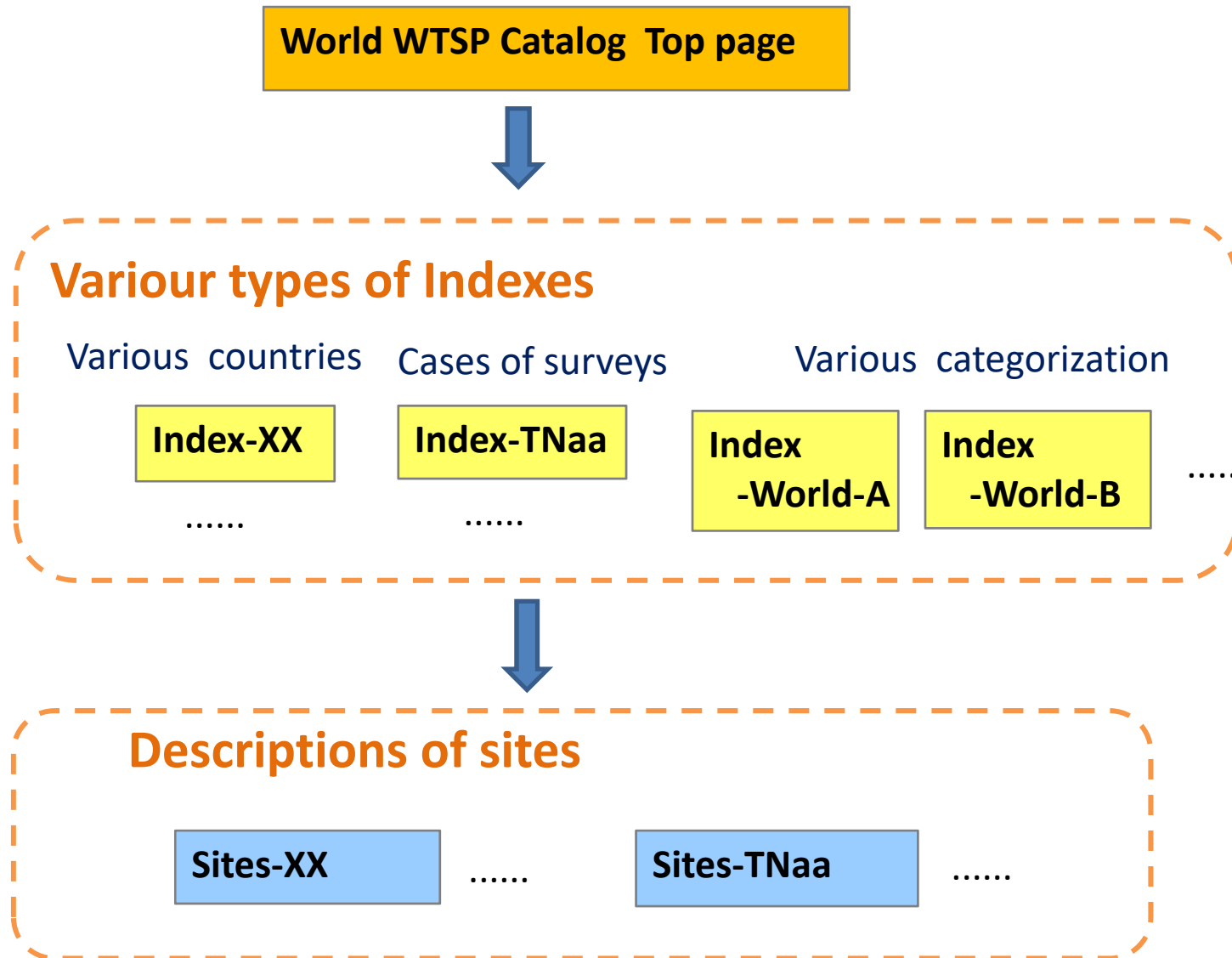
**(9) Review the World WTSP Catalogs and adjust/revise them if necessary.**

**[3C] Plan of the World WTSP Catalogs (Practical system) (Nakagawa, Jul. 2019)**

**World WTSP Catalogs Document Management and Folder Structure  
Toru Nakagawa 2019. 8. 4**



# World WTSP Catalogs Structure (User's View)





## [4] World WTSP Catalogs First Preliminary Version (Aug. 4, 2019)

### [4A] Contributed manuscripts (1) Japan Part

#### Japan TRIZ Sites

- © 01 TRIZ Home Page in Japan (Toru Nakagawa)
- 03 Japan TRIZ Society (NPO)
- 09 IDEA Corp. (Mamoru Zenko)
- 10 MOST LLC (Kazuya Yamaguchi)
- 12 Ideation Japan Ltd. (Teruyuki Kamimura)
- 14 TRIZ Study (Shinsuke Kurosawa)
- 18 Monodukuri.com (Osamu Kumasaka)
- 02 (Former) Japan TRIZ CB
- 07 Cybernet System Co., Ltd.
- 16 Pro-Engineers (Shigeru Kasuya)
- 17 Idea Plant (Rikie Ishii)
- 29 MEMODAS (Kimihiro Hasegawa)

#### Japan Around-TRIZ Sites

- 36 Idea Marathon Institute (Takeo Higuchi)
- 19 J-STAGE (JST)
- 24 Daiichi Kousha (Akihiro Katahira)
- 37 Netman (Ken-ichi Nagaya)
- 39 JST (Japan Science and Technology Agency)
- 40 NEDO (New Energy and Industrial Technology Development Organization)
- 42 Japan Creativity Society
- 43 JUSE (Union of Japanese Scientists & Engineers)
- 44 JSQC (Japanese Society for Quality Control)
- 45 SJVE (Society of Japan Value Engineering)
- 48 JIII (Japan Institute of Invention and Innovation)
- 58 JAIST (Japan Advanced Institute of Science & Tech.)
- 59 i.school, The University of Tokyo
- 60 Keio SDM, Keio University Graduate School

## Contributed manuscripts :

### (2) Malaysia TRIZ sites (Eng Hoo Tan)

- ◎◎ 01 MyTRIZ (Malaysia TRIZ Innovation Association) Official Website
- 02 TRIZ Malaysia Group in Face book (Zulhasni Abdul Rahim)
- 05 Malaysia Productivity Corporation
- 06 PSDC (Penang Skills Development Centre)
- 07 IEMTC (IEM (Institution of Engineers, Malaysia) Training Centre)
  
- △ 11 other sitges

### (3) China TRIZ sites (Runhua Tan)

- ◎ 01 National Engineering Research Center for Technological Innovation Method and tool (Hebei University)
- 04 Innovation Method Website of Hebei Province
- 13 other sites (site of each Province)

## Contributed manuscripts :

### (4) TRIZ Sites in Russian language in the world (Michael Orloff)

- © 01 The official foundation of G.S. Altshuller
- © 02 OTSM by Nikolai Khomenko
- © 03 Methodologist (Alexander Kudrjajtsev)
- © 04 MATRIZ (The International TRIZ Association)
- © 05 Education for a New Era (Anatol Hin )
- © 07 Global Russian Academy of Modern TRIZ (Michael Orloff) (Germany)
- © 12 Institute of Innovative Design (Yuri Salamatov)
- © 20 TRIZ-Art school "TRIZ-CREATIVITY" (Roman Florescu) (Moldova)
- © 30 (Study of geniuses and professional creativity) (Leonard Vikentjev)
- 06 Creatime (Anatol Hin )
- 10 Web-site (Nikolai Khomenko) (Belarus)
- 11 Center for Creative Technologies "Ideal Solutions" (Viktor Timokhov)
- 13 Academy of TRIZ (Michael Orloff)
- 14 Web-site (Nikolai Shpakovsky and Elena Novitskaya) (Belarus)
- 17 TRIZ-SOLVER.com (Yury Danilovsky) (South Korea + Russia)
- 18 RA TRIZ (Association of Russian Developers, Teachers and Users of TRIZ)
- 19 TRIZ encyclopedia (Vladimir Koroljov) (Ukraine)
- 23 Custodian of the TRIZ Materials Fund in Chelyabinsk (Ljubov Kozhevnikova)
- 24 Flow Academy - International Children's University (Irina Melnichenko)
- 25 Open business methods and technologies with TRIZ (Sergei Sychev)
- 26 System of consulting firms "TRIZ-CHANCE" (Leonard Vikentjev )
- 27 Ideal Solutions Company (Viktor Timokhov and Vladimir Bubentsov)
- 29 DIOL-group and TRIZ ○ 31 Group of TRIZ experts □ 14 other sites

## Contributed manuscripts : Top-Down Surveys

### (5) Case TN2A in English, in the world (Toru Nakagawa)

- ◎ 01 MATRIZ (International TRIZ Association)
- ◎ 02 AI (Altshuller Institute for TRIZ Studies)
- ◎ 03 ETRIA (European TRIZ Association)
- ◎ 04 TJ (TRIZ Journal)
- ◎ 05 TRIZ Home Page in Japan
- ◎ 06 ICG (ICG Training & Consulting)
  
- 07 JTS (Japan TRIZ Society)
- 08 Design Society
- 09 Oxford Creativity
- 10 GEN-TRIZ
- 11 AiMTRIZ (Academy of Instrumental  
Modern TRIZ )
- 12 Wikipedia
- 13 YouTube
- 14 SlideShare
- 15 LinkedIn
- 16 Research Gate
- 17 Science Direct
- 18 SpringerLink
- 19 Amazon
- 33 IET (Inst. of Engineering & Technology)
- 38 12Manage
- 23 other sites

## Contributed manuscripts : Top-Down Surveys

### (6) Case TN2F in USA in English (Toru Nakagawa)

- © L 01 MATRIZ (International TRIZ Association)
- © L 02 AI (Altshuller Institute for TRIZ Studies)
- © L 03 Wikipedia
- © 04 Ideation International, Inc
- © L 05 ICG (ICG Training & Consulting)
- © 06 TRIZ Power Tools (OpenSourceTRIZ.com)
  
- L 07 GEN-TRIZ
- 08 iSixSigma
- L 09 YouTube
- L 10 SlideShare
- 11 GoodReads
- 12 Vimeo
- L 13 Science Direct
- L 14 SpringerLink
- 15 ACM (Association for Computing Machinery) Digital Library
- 16 Strategies for Creative Problem Solving
- L 17 LinkedIn
- 27 other sites.

# [4B] Completion of World WTSP Catalogs First Preliminary Version (Aug. 4, 2019)

## Source Documents: Established the preparation & treatment processes

Clear guide, mutually independent, easy to update,  
 Manuscripts from Japan, Malaysia, China, and Russia  
 Top down surveys: TN2A (world), TN2F (USA)

## Top Page: Established How to show & How to use

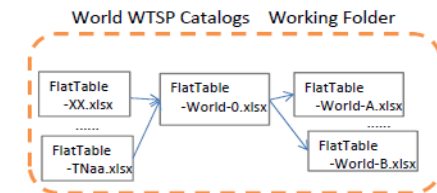
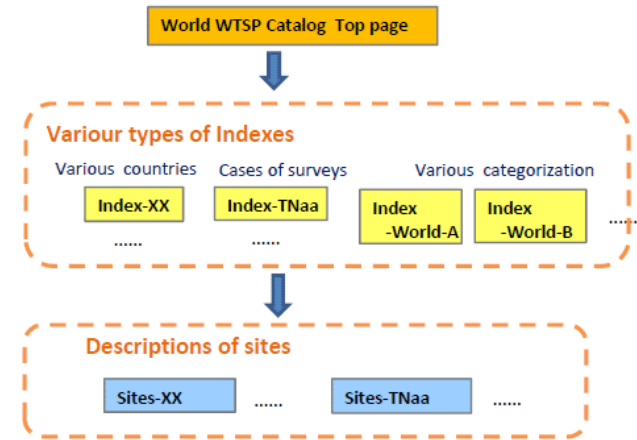
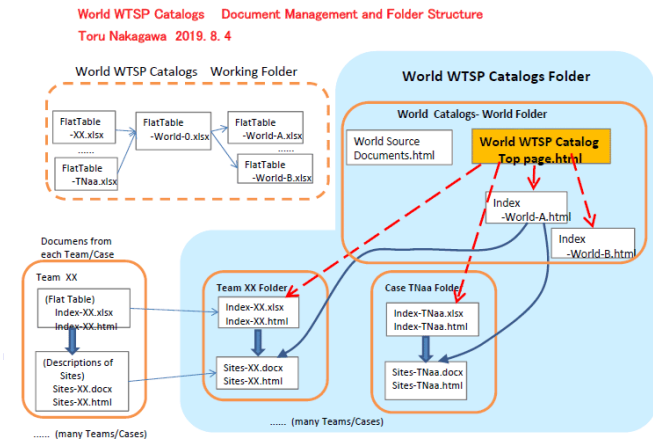
Index to and Direct reference to the individual source documents  
 Categorized index of all the world documents,  
 reference to individual sites

## World WTSP Index: Established the preparation process and Display forms.

Integrating all the source documents from countries and surveys, prepares the World Index. Classifying & arranging the sites (according to evaluation, roles, etc.)

## World TRIZ Sites Basic Index (© 19 sites, ○ 41 sites)

Will revise the Basic Index by accepting extended and revised manuscripts from many countries,  
 Will build World TRIZ Sites Extended Index (©○□)



## [5] Extension of scope of the World WTSP Catalogs: Sites Around TRIZ

World WTSP Catalogs (Japan Part) Site around TRIZ (○ 1 site, □ 14 sites)

Top- down surveys for the sites around TRIZ in the world (sites in English).  
(Nakagawa May, 2019 --)

Case	Search keyword	Number of investigation result sites
(3A2)	<b>Creative Think Method</b>	◎1, ○15, □ 65, △31, L (Another place has been published) and –56.
(3B)	(Creative OR innovative OR Systematic) <b>Problem Solve</b> (Method OR Process OR Technique)	◎ 10 (L8), ○26 (L 7), □ 64 (L 7), △ 32 (L 1), –39
(3C)	<b>Innovation</b> (Process OR Strategy OR Method OR management OR Technology)	◎ 3 (L 3), ○36 (L 11), □ 76 (L 8), △ 70 (L 0), –19
(3D)	<b>(Quality OR Value OR Cost OR Productivity)</b> (Deploy OR Engineering OR Management OR Control OR Analysis) (Method OR Technique OR Theory OR Process OR "Case Study")	223 (under process )
(3E)	<b>(Patent OR IP OR "Intellectual Property")</b> (Analysis OR Protect OR Circumvent OR Mapping OR Strategy)	186 (not processed yet)

## **Policy on World WTSP Index of Around-TRIZ Sites**

**To cover the relevant areas widely where TRIZ users want to/should refer.**

**Double pillars with 'TRIZ Sites Catalogs' and 'Around-TRIZ Sites Catalogs'.**

Separating TRIZ from Around-TRIZ fits better with users' interests on the fly.  
Sites are classified into the two areas, allowing some duplications.

**Areas become much wider, where we are often unfamiliar or poor.**

**<==> There can be new findings in methods, applications, organizations, site types etc.**

Understanding, describing, and evaluating sites are often difficult for us.  
Thus the evaluation should be handled as tentative.

Excerpts from top pages and About us pages may be suitable for site descriptions.

**In addition to the Roles, it is useful (though difficult) to characterize the sites with respect to Application phases, Application areas, Applied methods, etc.**

We should not try to make things complete.

We should better put our efforts mostly to highly evaluated sites (◎○)。

**We should make Basic Index (◎○) first tentatively, and revise/extend it later.**

**Plan: World WTSP Catalogs Around-TRIZ Sites Basic Index (First Preliminary version) is to be built on Sept. 30, 2019**



## **[6] Concluding Remarks**

### **[6A] What is the crucial issue for the success of the WTSP project?**

The WTSP project has been facing with the same difficulty from the beginning.

**"Many people support the aims of the WTSP project,  
but very few actually join to work together."**

**Because active TRIZ leaders are too busy to squeeze their time for WTSP.**

Each country has their own language (forming some barrier), own history of TRIZ, and various TRIZ activities. For introducing many TRIZ sites in the world, responsive work of each country, and cooperation of people inside the country are necessary.

**In each country we need to have a Team and its Leader (WTSP Country Editor).**

The Team leader should have the image of the goal (i.e., completed Catalogs), understand what to do and how to do in practice, be confident that the goal is reachable, and encourage and guide the Team members.

He/she should also be confident that by squeezing their valuable time in their busy schedule, working effectively in short time, and cooperating with members, they will certainly achieve the goal and get the results, which are fruitful for many people and for themselves

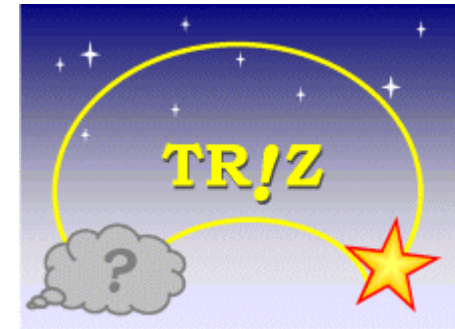
For this purpose, I have been endeavoring, as the Project Leader, for showing guiding directions, making pilot projects, devising the process of making the final Catalogs, and showing the overall final image (as the Preliminary version).

I am now looking forward to the progress and accumulation of WTSP activities in various countries (including Japan).

## **[6] Concluding Remarks:**

### **[6B] TRIZ spirits in the WTSP project**

- (1) Have a vision, overcome difficulties one by one, and achieve the goal.
- (2) Divide the tasks appropriately and divide the systems appropriately as well, build the overall system so as to function effectively, and make the work by all the people cooperating together fruitful
- (3) Build the Catalogs of Web sites in the whole world in the areas of TRIZ and related methodologies, connect the activities, accumulated knowledge, and results by the huge number of people working in such areas, and form a basis for developing and proliferating such methodologies in cooperative ways.
- (4) Promote the project by relying on the passion of those people in the world who are inspired with TRIZ and holding TRIZ as an important guiding principle.



Thank you for your attention.

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Editor of "TRIZ Home Page in Japan" (in Japanese and in English)  
<http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/>

**World TRIZ Sites Project (WTSP) Project Leader**

**Let's work Together ! Connected !!**