World TRIZ Sites Project

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World TRIZ Sites Project (WTSP):

for Building and Maintaining
Catalogs of Global TRIZ Resources

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TR!Z
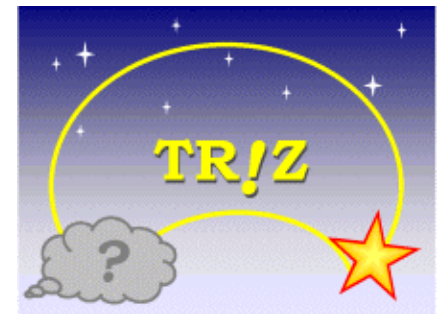
[1] Back ground Situations around TRIZ

[2] Aims of WTSP

[3] Pilot projects in Japan: Japan WTSP Catalog

[4] Plan of the WTSP Project

[5] Difficulties / Problems   <== How to Solve them

[6] Concluding Remarks

[1] 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
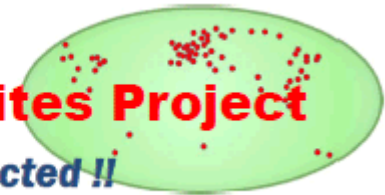- Many TRIZ-related Websites, working separately and competing

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

[2] Aims of WTSP

- **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**

[3] Pilot projects in Japan: Japan WTSP Catalog

In 2008 (T. Nakagawa): Annotated lists of TRIZ Sites

100 TRIZ sites in Japan

11 Active information sending, 21 Consultancy, 16 Societies/journals,
26 Universities, non-profit organizations, 10 Personal, etc.

120 TRIZ sites in the World

10 Japan, 34 USA, 33 Europe, 16 Russia, 6 Korea, etc.
(Most sites in their own languages, and some in English as well)

Spent 4 months for making these lists with annotation.

These lists were never updated for 10 years
        because of necessity of so much efforts.

==> Proposal of WTSP in Nov. 2017

2018 (T. Nakagawa): WTSP Catalog of Japan : Completed

(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 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 of 24 selected sites in English was posted publicly.

Japan WTSP Catalog in English: Selected 24 Sites

- 01 (d) **TRIZ Home Page in Japan (T.Nakagawa)**
- 02 (c) (Former）Japan TRIZ CB
- 03 (c) **Japan TRIZ Society (NPO)**
- 04 (c) Nikkei BP
- 05 (b) MRI Research Associates
- 06 (b) Sozo Kaihatsu Initiatives
- 07 (b) Cybernet Systems Co.
- 08 (b) ITEQ International, LLC.
- 09 (b) IDEA Corp. (M. Zenko)
- 10 (b) MOST LLC. (K. Yamaguchi)
- 11 (b) SANNO Inst. of Management
- 12 (b) Ideation Japan (T. Kamimura)

- 13 (b)(c) I-TRIZ Promotion Ass.
- 14 (g) TRIZ Study (S. Kurosawa)
- 15 (b) Creativity Engineering Inst. (Y. Mihara)
- 16 (b) Pro-Engineers (S. Kasuya）
- 17 (b) IdeaPlant (R. Ishii）
- 18 (e) **Monodukuri.com (O. Kumasaka)**
- 19 (c) J-STAGE (operated by JST)
- 20 (c) SlideShare
- 21 (c) YouTube
- 22 (f) Wikipedia
- 23 (g) Mechanical Design Memo 2
- 24 (g) Dai1 Kousha (A. Katahira)

shown in slides (3)

shown in paper (11)

24 sites of type (a):
active information resource

Types of sites:
(b) Consultants/vendors
(c) associations, journals
(d) Universities, public o

(e) seminars, e-learning
(f) books, news, communities
(g) personal sites,
(h) personal sites useful
without mentioning RIZ

01 (a) (d) TRIZ Home Page in Japan　　(Toru Nakagawa)

http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/　　(in Japanese）
http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/　(in English）

20th Anniversary

A Public Web Site in TRIZ on a not-for-profit basis.

Editor: Toru Nakagawa (Osaka Gakuin Univ.) (Professor (1998-2012)/Professor Emeritus (2012-)).
He established this site on **Nov. 1, 1998,** and has been posting new TRIZ-related information
　actively with unfixed interval of 2 to 4 weeks constantly till present.

Pages in Japanese and pages in English are posted more or less in parallel.

The site posts **introductory articles, overviews, papers, conference reports, etc.**
　on TRIZ with a wider scope.

The articles/papers are written not only by the Editor (in Japanese and in English), but
　also **by many Japanese authors** (in Japanese and some in English translation) and
　by many overseas authors (in Japanese translation and some in English).

It has **four 'Entrance Pages'** adapted for four types of readers
　(i.e., for Children and high school students, for Students and the general public,
　　for Engineers and researchers novice to TRIZ, and for Practitioners and experts of TRIZ);
　they show categorized lists of many recommended pages with annotation.

The Editor's research themes have evolved from
(a) introduction and proliferation of (classical and modernized) TRIZ, to
(b) introduction and extension of USIT (Unified Structured Inventive Thinking),
(c) proposal of Generalized Methodology for Creative Problem Solving (CrePS), and
(d) Research on the Principal Contradiction ('Liberty vs. Love') of Human Culture.

03 (a) (c) Japan TRIZ Society (NPO)

http://www.triz-japan.org/   (in Japanese)
http://www.triz-japan.org/english_top.html   (in English)

Japan TRIZ Society is the **nation-wide Center** for promoting and proliferating TRIZ in Japan, established officially in Dec. 2007 on the basis of Japan TRIZ CB.

It has been **organizing Japan TRIZ Symposium every year** (from 4th in 2008 to 13th in in 2017)

The Symposium till 2012 was held for 3 days with actively calling for international participation/presentation, but later
since 2013 it was held for 2 days and with mostly-domestic participation/presentation except invited Keynote speakers from abroad.

Every year **many user industries gave their presentations** on TRIZ usage and promotion.
All the presentations were shown **with slides in Japanese and in English** in parallel.
Keynote Lectures and Award-winning presentations (about 5 papers every year, voted by the participants) are publicly posted in the Web site about 3 months later, and all other presentations are posted in the 'Members only' pages of the site.

In Japan TRIZ Society, four study groups are running for several years.

HP posts **the announcements of JTS, the Symposium, and presentations** at the Symposium.
The short TRIZ introduction article in this HP is rather poor unfortunately, I think.

18 (a) (e) Monodukuri.com   (Osamu Kumasaka)

https://www.monodukuri.com/ **(in Japanese)**

This is a nice portal site which has produced and implemented **a mechanism for connecting**
 (a) Issues in monodukuri (or manufacturing in general) (and the industries having them)
 with (b) Methods useful for solving the issues (and the professionals in such methods).

The basis of this mechanism is **the 'Monodukuri Engineering Matrix'** which O. Kumasaka built
 during his R&D work for Pioneer Corp.

The Matrix **has rows of 60 Issues for monodukuri** (i.e., Planning 7, Development & design 15,
 Manufacturing 22, and Quality in market 6) and **columns of 118 Methods** for solutions
 (including Strategy techniques 9, TRIZ 8, USIT 1, Quality engineering 8, etc.).
 In the Matrix cells, **applicability and usefulness of each method** for the issue is shown
 with the 4-grade evaluation (i.e., 3, 2, 1, and 0).

Kumasaka started this Monodukuri.com site in 2012 after his retirement.
 First he obtained **supports and registrations by many professionals (currently 138),** and obtained their
 contributions of introductory articles on individual methods and their usage (1600 articles, 2-3 pages),
 training texts (490 documents), and application case studies (950 cases), for publicly posting in the site.

Users (in industries) may choose an issue most relevant to his problem from the 60 Issues,
 then is led by the Matrix to possibly applicable/useful methods, and can further study
 the methods closely by reading their introductions and case studies.

If a user asks a question (or raise his own issue) openly at the site, any professionals may reply
 to it openly at the site as well.

All these basic use of the site is **free of charge for the users**, while there are additional services of
 seminars and individual consultation with charge.
The site is now operated with annual support money and payback from the registered professionals.

Useful information and nice business model make this portal site growing year after year.

[4] Plan of the WTSP Project

World TRIZ Sites Project
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Proposal (T. Nakagawa, Nov. 2017):

Let's Build Catalogs of TRIZ-related Sites in the World.

Start of WTSP (Dec. 2018)

Pilot Project in Japan (Apr. 2018)

WTSP Appeal by 6 Global Co-editors (Jun. 2018)

Basic Plan:

・ **Project by many volunteers** working together in the world. Anybody can join.

・ **Catalogs of each country** in their own language, then **World Catalog in English**.

・ **Platform for cooperative work** in Bitrix24 groupware system in cloud.

・ Use **of ordinary Word files and email communications** for practice.

・ **Open announcements**, communications through a Web site, TRIZ Home Page in Japan.
   http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/eWTSP/eWTSP-index.html
   (Membership Application Form is downloadable here.)
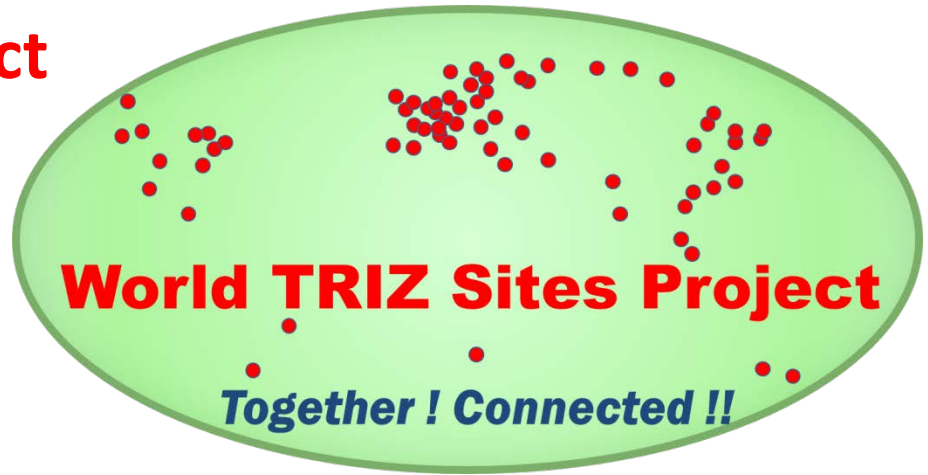
Document Management and Team Organization

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Public Use

Documents

Open Public Main Folder

List of Sites

Individual Site

Global

Regional

Country

Sites

Publicizing

Project Internal Main Folder

List of Sites

Individual Site

Regional

Country

Sites

Review & Refining

Project Draft Main Folder

List of Sites

Individual Site

Country

Sites

Drafting

Contribution
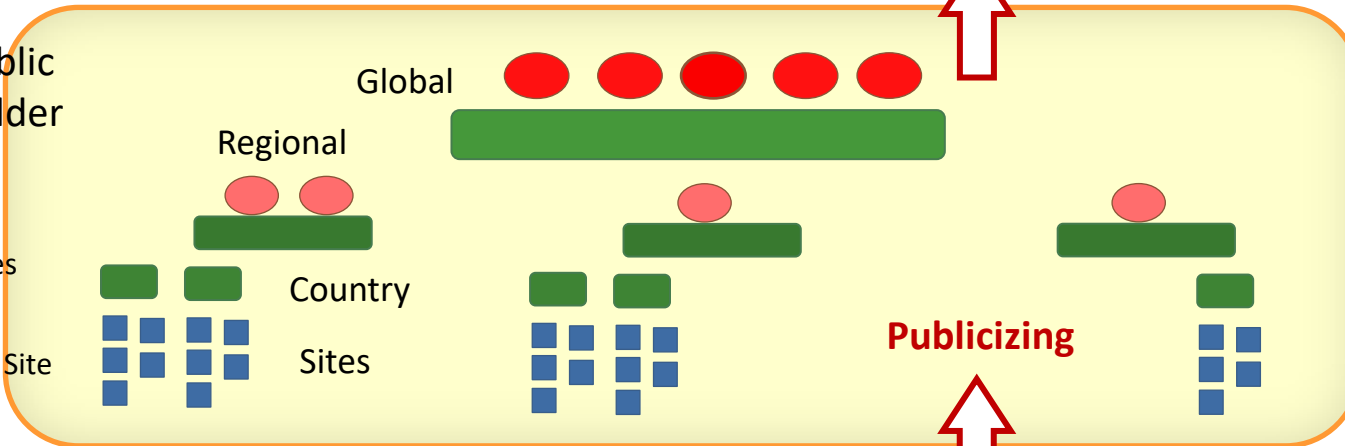
Team Organization

Project Leader & Global Co-editors

Regional editors
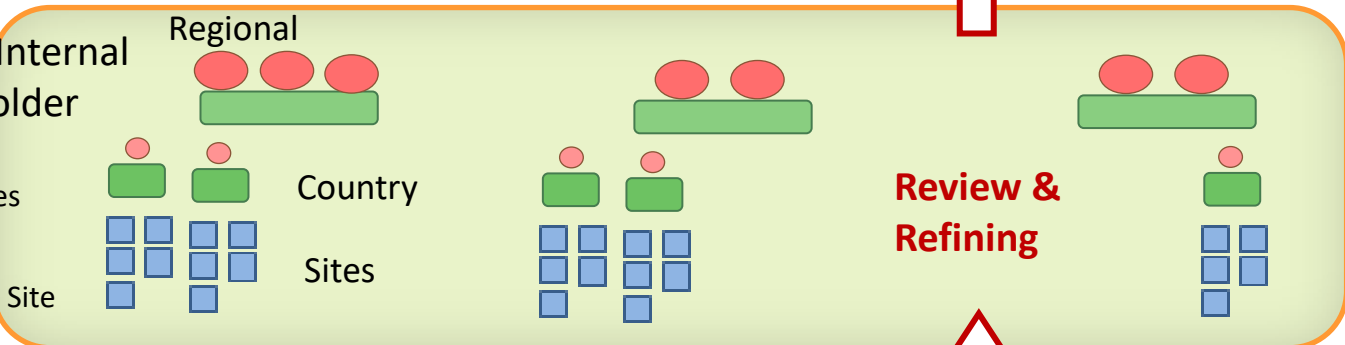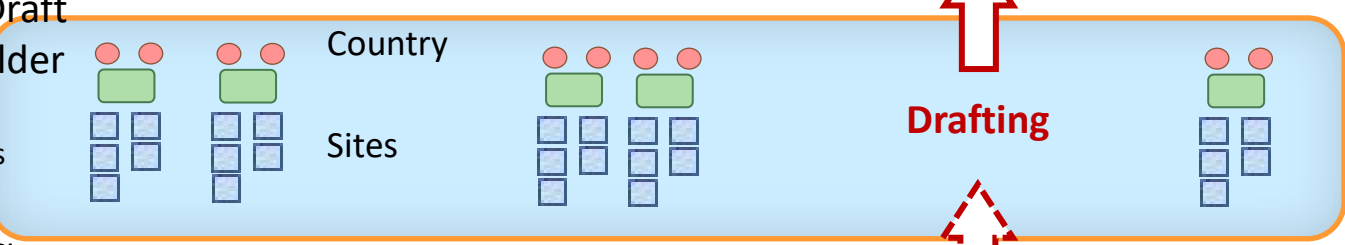
Country editors and Project members

Contributors (outside the Project)

Current Status: ● achieved in Japan;
Working Plan ✸ facing with difficulties in many other countries

● 1. **In every country, to get voluntary members and form a WTSP team with a Country Editor**.
✸
Please send Membership Application Form to the WTSP Project Leader (T. Nakagawa).

● 2. **To survey TRIZ-related sites, visit the sites one-by-one and describe introductions.**
✸
Preliminary Internet Searches have been done for 33+ countries. (noisy & insufficient).
Contributions of site introductions should be encouraged for site owners.
WTSP members should prepare for the introductions of (all) significant sites.

● 3. **To compile a WTSP Catalog of TRIZ-related Sites in each country.**

First in their own language. ==> Useful for people in the country.
Then in English (translation) of selected sites. ==> For the people in the world.

4. **To edit the World WTSP Catalog by integrating WTSP Catalogs of various countries.**

To review and revise the documents by many members in the world, in parallel.

5. **To publicize the completed WTSP Catalogs for open, public use. (in many countries)**

World Catalog (in English) and Catalogs of individual countries (in English and other).

6. **To translate the World WTSP Catalog into languages of various countries,**
and to publicize them in each country (to see the world in their own languages).

[5] Difficulties / Problems   <== How to Solve them

**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.**

   <== Divide the tasks into smaller jobs for easier handling.

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

Because: **A question: Why catalogs of 'sites' instead of 'pages' ?**

   <==   Because good sites contain many good articles, and will add more in future.

Because: **Not known how many (or how few) significant sites exist in our country**

   <==   With Internet survey and background knowledge, make a list first.

Because**: There are many sites, besides my own. Why should I work for others?**

   <==   Anyway, write the introduction of your own site, and contribute.

      Encourage others to write about their own sites, if they think them important.

Because: **Other sites are my competitors'. Why should we make a joint Catalog?**

   <==   Many people will access to the WTSP Catalogs, when they are publicized.

      Do you like your site information missing in the Catalog?

Because: **Describing many sites closely in fair and attractive ways is**
            a difficult job.

   <== Difficult, but we can overcome! WTSP Catalogs must be fair and reliable.
     Note: Peer reviews may be done in fair and critical attitude, while
         Introductions in WTSP should be done in fair and recommending attitude.
     We can refine them with reviews/revisions and future updating.

Because**: I am just a novice/user/non-expert in TRIZ. How can I contribute?**

   <== Please write your impressions/suggestions of good TRIZ sites,
     and/or of WTSP Catalogs and send them to TRIZ leaders in your country.

Because**:   I do not see it worthy of spending my time to build WTSP Catalogs.**

   <== You see, if 100 TRIZ colleagues like you work together in WTSP, you
     all can achieve the results of 100 times of your efforts.
     WTSP Catalogs are wanted by many people inside and outside of TRIZ.
     If you are teaching/promoting TRIZ, WTSP Catalogs certainly help your
     students/users to learn TRIZ better.

[6] Concluding Remarks

Anyway, NO Difficulties can stop us to build the WTSP Catalogs.

Once we find the Aims of our WTSP project meaningful
  for proliferating TRIZ further,
  we should proceed toward the goal step by step
  with open and collaborative mind.
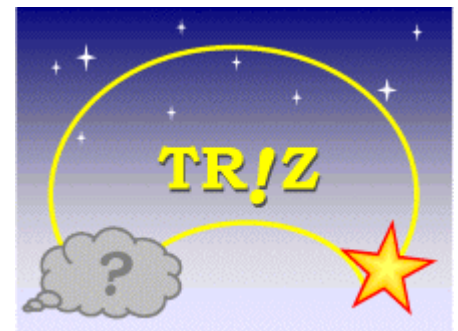
Let's work Together ! Connected !!

Thank you for your attention.

Toru Nakagawa (Osaka Gakuin University, Professor Emeritus)
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World TRIZ Sites Project (WTSP) Project Leader

Editor of "TRIZ Home Page in Japan"
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