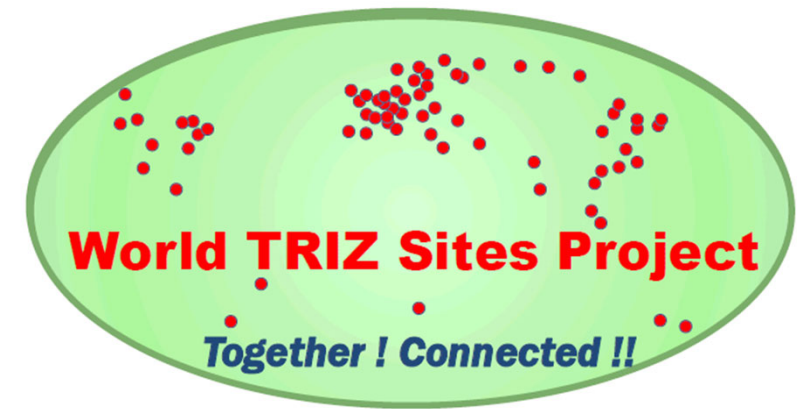


ETRIA TFC2022 Warsaw (online)

Sept. 27 - 29, 2022

**World TRIZ-related Sites Project
(WTSP) Global Co-editors**



**WTSP Report (5) Catalogs of
TRIZ and Around-TRIZ Sites in the World:**

We Can Learn Full Scope of TRIZ-related Works in the World



**Toru
NAKAGAWA
(Japan)**



**Darrell
MANN
(UK)**



**Michael
ORLOFF
(Germany)**



**Simon
DEWULF
(Australia)**



**Simon
LITVIN
(USA)**



**Valeri
SOUCHKOV
(Netherlands)**

[1A] Aims of WTSP (World TRIZ-related Sites Project):

To build Catalogs of selected websites of TRIZ and Around-TRIZ in the world.

- Unit of information resources : Websites
- Our scope: TRIZ and related methodologies for Creative Problem Solving

Req. 1: Collect, evaluate, select, and show websites in categories.

<---> Multiple criteria for evaluation, Grading of evaluation, Roles of site.

Req. 2: Describe individual websites for introducing users.

<---> Basic data; brief intro. by a surveyor, close description by the site owner

Req. 3: Easy to find websites which match with user's interest.

<---> Indexes, categorization, (internal search mechanism)

Expected results: Voluntary cooperation by many TRIZ people

[1B] Evaluation Criteria of Websites in WTSP

Our Multiple Criteria of Website Evaluation :

Quality (reliable, correct, novel, original, comprehensive, up-to-date, ...)

Attractiveness (interesting, easy-to-understand, illustrative, ...)

Usefulness (resourceful, reference, handy, practical, effective, ...)

Accessibility (open access, free/low charge, used by many, ...)

Scope (scope of the theme/field, scope of activities, ...)

Symbol marks for showing the evaluation

- ◎ **Most important (top about 30) in World Catalogs**
- **Important (next about 100) in World Catalogs**
- **Worthy in World Catalogs,**
- △ **Worthy in Country Catalogs,**
- **Insignificant/irrelevant.**

Evaluation is necessary from the early stage, and refine them later.

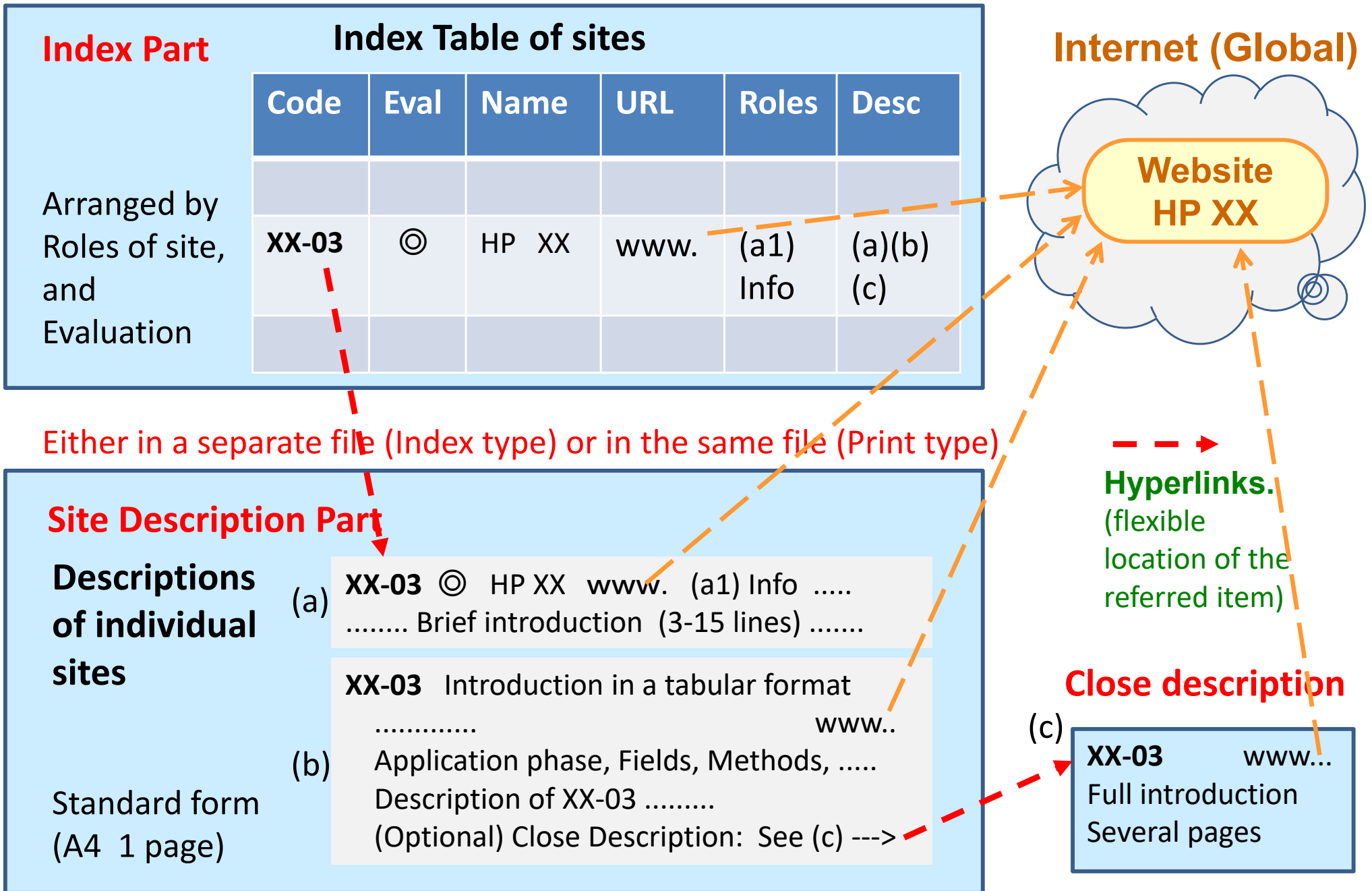
[2A] Site Description (Standard Form, to be written by the Site Owner)

Ex: Team: JP, Site Code: JP-01,

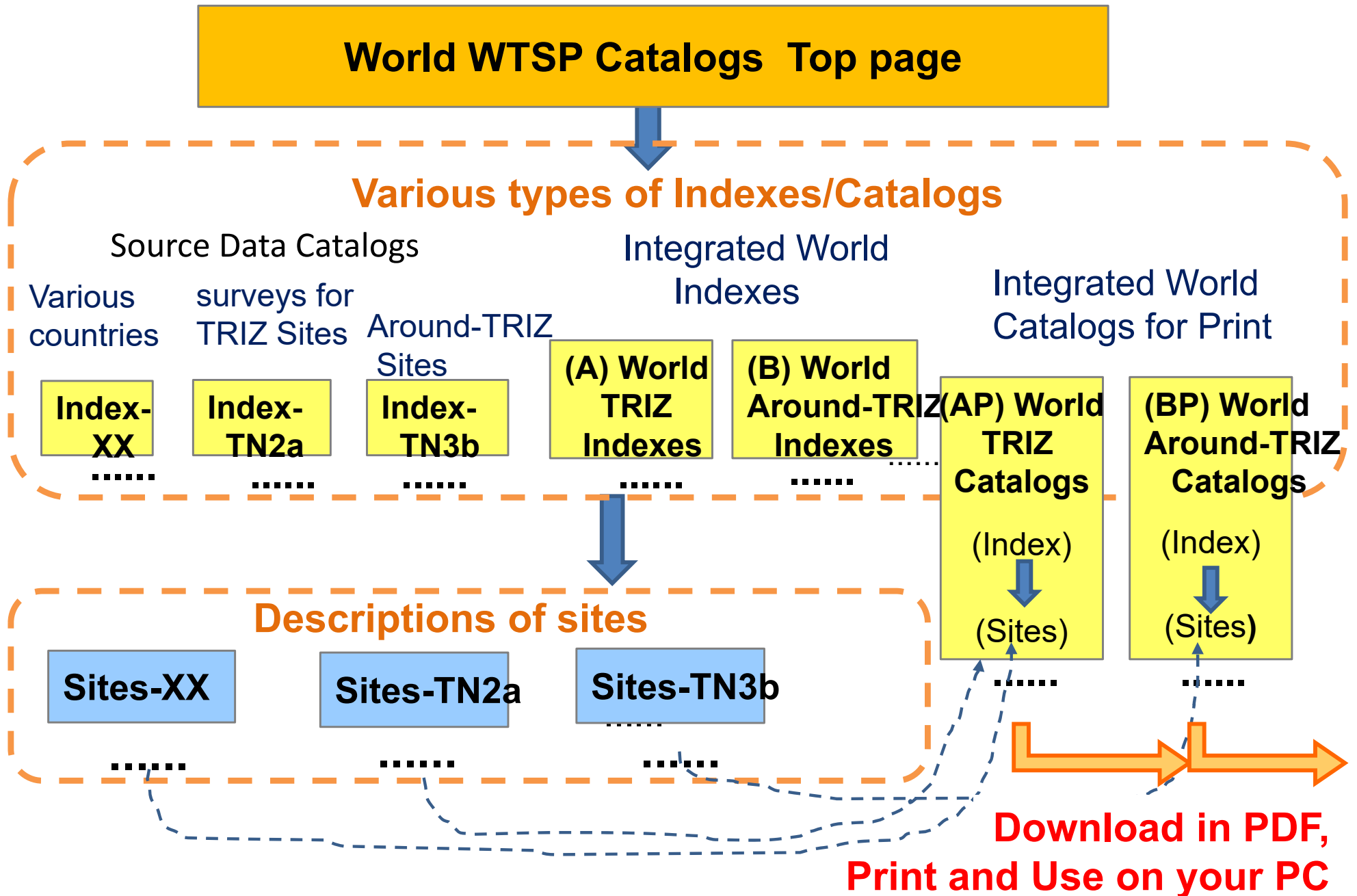
Site Name **	Ex. TRIZ Home Page in Japan (Toru Nakagawa)	
Site domain URL **	Ex. https://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/ (English), http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/ (Japanese)	
Site Location **	Ex. Japan	#
Site Language **	Ex. en, jp	#
Roles of Site **	Ex. (a2) Public Web site, (e1) Method developer, (a1) Dedicated for information sending	#
Evaluation **	Ex. ◎ (5 grades: ◎ ○ □ △ -)	#
Single-line Description *	Ex. Public Web site dedicated for TRIZ proliferation in Japan and in the world. Editor Toru Nakagawa	
Application phase *	Ex. (b) Problem finding and analysis phase, (c) Solution generation phase, (g) Others: Education	#
Application Fields *	Ex. (c) Engineering , (a) General/universal, (g) Humanity fields	#
Methods *	Ex. (e) Systems analysis, (g) Idea generation tools, (n) Modernized TRIZ methods; USIT method, Six-Box Scheme	#
Description of Introduction *	Ex. Active public site in TRIZ since 1998, publicizing many articles by various international authors besides the editor Toru Nakagawa. (Free format, in 5 - 10 lines)	
Further Detailed Information	(Optional) (Separate HTML file, Free format, 2-5 (or 10) pages in A4) Ex. SiteIntro-JP-01-THPJ.html (Written by Toru Nakagawa on Feb. 12, 2020)	
Note of description	Ex. Written by Toru Nakagawa (Site Owner), Feb. 13, 2020	

** Mandatory, * Desirable; #: Use codes for categorizations (See detail in the WTSP website).

[2B] Structure of a sample page in WTSP Catalog



[2C] Structure of the World WTSP Catalogs (Users' View)



[3A] Building the WTSP Catalogs of Around-TRIZ Sites (2nd Pillar)

Aims: To cover 'Creative Problem Solving Methodologies in general where TRIZ users want to/should refer.

People in such relevant areas will also use the WTSP Catalogs and will get interested in and familiar with TRIZ.

We also hope integral use of methods of different origins.

Keywords used in the 5 cases of Internet surveys (simplified here).

Creative Thinking Method ;

Problem Solving Method ;

Innovation ;

Quality/Value/Cost/Productivity Management ;

Patent/IP

Visiting about 1000 websites one by one, we wrote brief introductions.

Basic Catalog of Around-TRIZ Sites (©○) in the World was publicized. (2019)

By visiting all the sites again,

we revised the World Basic Catalog (©○) and

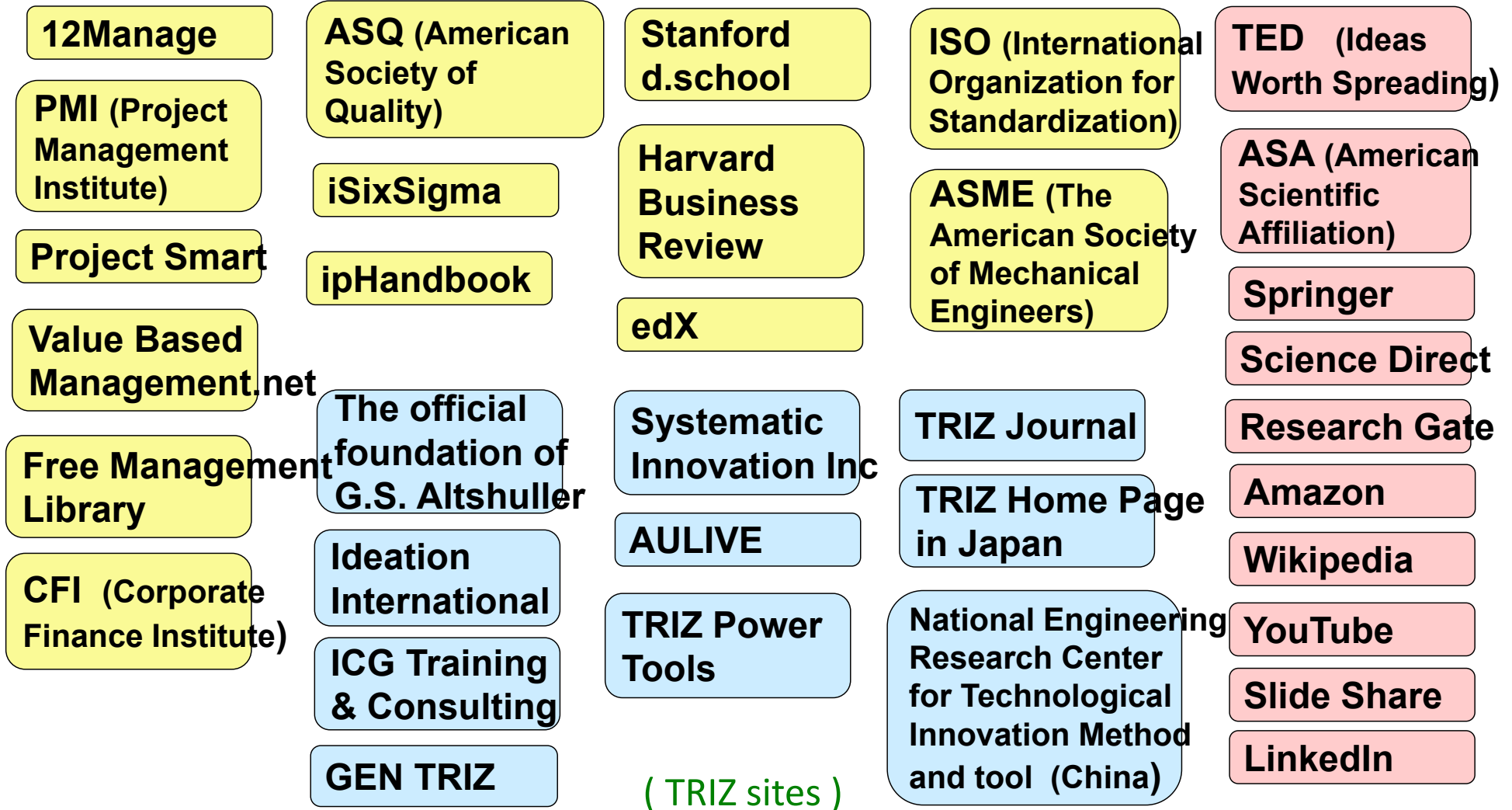
newly built the World Extended Catalog (□). (2022)

[3B] World Around-TRIZ Sites Catalog © 33 Most Important sites

(Jun. 2020, Jul. 2022 Toru Nakagawa)

(Specific methodologies around TRIZ)

(General sites)



Selected from about 1000 sites,
with brief introductions (5-15 lines) of all the sites

[3C] WTSP World TRIZ-related Sites Catalogs at Present (Jul. 6, 2022)

(Main) Role of site	WTSP World Catalogs					
	(A) TRIZ Sites (2020)			(C) Around-TRIZ Sites (2022)		
	◎ Most Important	○ Important	□ World Worthy	◎ Most Important	○ Important	□ World Worthy
(a) Information sending sites	9	4		10	20	12
(b) Promotor organizations	5	4		3	8	6
(c) Public organizations	1	1		3	10	24
(d) Academia	0	0		2	17	33
(e) Developer organizations	5	8		5	37	84
-- (e5) Training organizations	2	7		0	9	19
(f) Publisshing organizations	0	6		5	17	13
(g) Information sharing	1	7		5	12	21
(h) User organizations	0	2		0	12	27
(i) Personal	0	0		0	0	5
(Total number of sites)	23	39		33	142	244

[3D] Survey of TRIZ Sites in 52 Individual Countries (Nov. 2021)

Reg	Country	Det.	TRIZ	Around TRIZ
A-Europe				
	Austria	26	4	0
	Belgium	22	Not Selected yet	
	Czech Republ	24	5	0
	Denmark	14	0	0
	Finland	21	5	0
	France	55	Not Selected; Many good.	
	Germany	68	Not Selected; Many good.	
	Greece	8	1	1
	Hungary	13	2	2
	Iceland	11	1	6
	Italy	50	Not Selected; Many good.	
	Netherlands	33	5	0
	Norway	4	2	0
	Poland	50	Not Selected yet	
	Portugal	15	4	1
	Romania	9	4	2
	Spain	27	7	8
	Sweden	19	Not Selected yet	
	Switzerland	21	6	4
	UK	39	Not Selected; Many good.	
B-Russian				
	Russia	Already shown.		
C-MidEast				
	Iran	64	6	0
	Israel	24	4	3
	Turkey	27	9	1
D-Asia				
	Bangladesh	3	0	0
	China	Already shown.		
	Hong Kong	16	5	8
	India	45	5	10
	Indonesia	37	9	1
	Japan	Already shown.		
	Korea	72	Not Selected; Many good.	
	Malaysia	Already shown.		
	Pakistan	11	3	4
	Philippines	11	0	2
	Singapore	15	7	3
	Sri Lanka	6	Not Selected yet	
	Taiwan	45	Not Selected; Many good.	
	Thailand	31	Not Selected yet	
	Vietnam	24	11	1
E-Oceania				
	Australia	23	Not Selected yet	
	New Zealand	7	3	1
F - N America				
	Canada	30	1	3
	USA	Already shown.		
G- CS America				
	Argentina	10	1	4
	Bolivia	6	0	3
	Brazil	41	6	1
	Chile	12	1	5
	Colombia	19	2	7
	Costa Rica	12	3	3
	Mexico	23	4	0
	Nicaragua	6	0	1
	Peru	13	2	2
	Uruguay	7	1	1
H- Africa				
	Egypt	8	2	0
	Kenya	6	2	0
	Morocco	13	7	1
	South Africa	9	6	0
Total		725	146	89
Total (Not Sel.)		480		

40 countries: Detected 725 sites, rated: $\triangle \square$ (or higher) TRIZ 146 sites, Around-TRIZ 89 sites

12 countries: Detected 480 sites, not rated yet.

Including major countries: UK, France, Germany, Italy, Korea, Taiwan, Australia
 5 other countries, Already shown in the Catalogs: Japan, Malaysia, China, Russia, USA

[3E] World TRIZ Sites Catalog

© 23 Most Important Sites

(Jun. 2020; Jul. 2022. Toru Nakagawa)

OTSM (Nikolai Khomenko)

Methodologist

Institute of Innovative Design

Academy of Instrumental Modern TRIZ (Michael Orloff)

TRIZ Master Igor Vikentjev

Education for a New Era

TRIZ-Art school "TRIZ-CREATIVITY" (Roman Florescu)

The official foundation of G.S. Altshuller

(-- 2008)

Ideation International, Inc.

GEN TRIZ

ICG Training & Consulting

National Engineering Research Center for Technological Innovation Method and tool (China)

Systematic Innovation Inc.

AULIVE & Innovation Logic

TRIZ Power Tools

TRIZ Journal

(-- 2020)

TRIZ Home Page in Japan

Wikipedia

MATRIZ (The International TRIZ Association)

Altshuller Institute for TRIZ Studies

ETRIA (European TRIZ Association)

TRIZ Summit / TDS

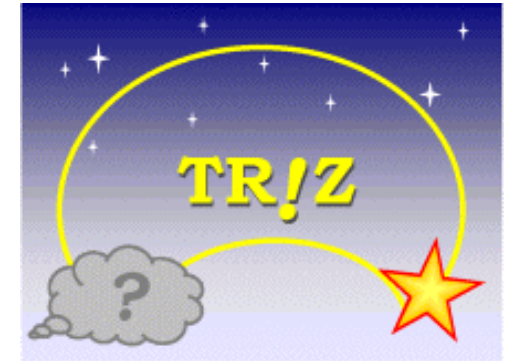
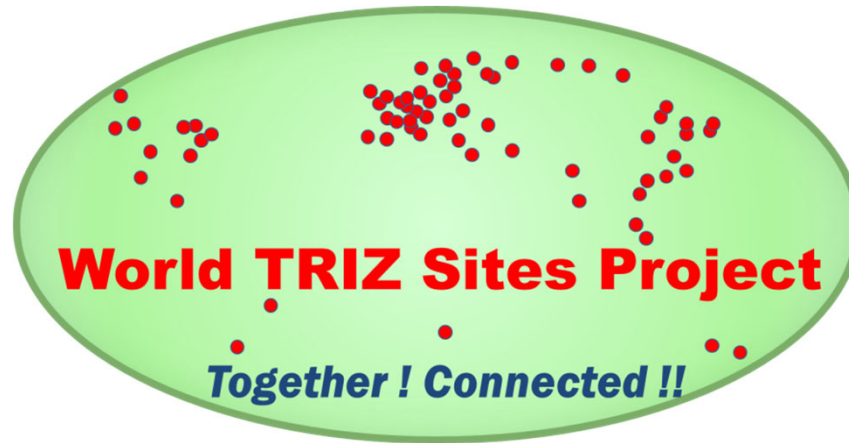
MyTRIZ (Malaysia TRIZ Innovation Association)

Based on the manuscripts from only 4 countries (Japan, Malaysia, China, Russian region) and 2 cases of Internet surveys (USA, World).

Important sites from various countries are missing.

[4] Concluding Remarks

- WTSP Catalogs already contain a wealth of selected information:
Various Approaches in TRIZ, and even more Around-TRIZ;
Diversity of Application methods and cases; Various Tools, etc.
- Various websites are working for developing methods/tools, information dissemination, training, consulting, eLearning, etc.
- Due to the lack of WTSP Team work in many countries, Catalogs of TRIZ Sites are quite insufficient, in contrast to Catalogs of Around-TRIZ Sites which were built by intensive internet surveys.
- Appeal 1: Enjoy using the World Catalogs of TRIZ-related Websites.
- Appeal 2: Form a Team & make your Country's TRIZ Sites Catalogs.
- Appeal 3: Write introductions to the website you are involved in.
- New Proposal: Let's create a representative TRIZ website where excellent papers/articles on various TRIZ approaches come together to be published regularly.
("Systematic Innovation Review" Website)



Thank you for your attention.

Toru Nakagawa (Osaka Gakuin University, Professor Emeritus)
nakagawa@ogu.ac.jp

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

World TRIZ-related Sites Project (WTSP) Project Leader

Let's work Together ! Connected !!