EEPTPP: Similar digital platforms

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Contents

Following are platforms like the one proposed for EEPTPP.

Collaborative Document Editors

A too basic option would be real-time collaborative editing in the sense that one may see other writers editing, for example: a Microsoft Word document in Next Cloud, Google Docs etc. having comments and track changes. A collection of LaTeX documents in the Cloud, one being input for the other, would already be an improvement.

Overview:

https://en.wikipedia.org/wiki/Collaborative_real-time_editor

From

https://tex.stackexchange.com/questions/27549/simultaneous-collaborative-editing-of-a-latex-file

(which also mentions PMWiki, see below) and

https://en.wikibooks.org/wiki/LaTeX/Collaborative_Writing_of_LaTeX_Documents

or

https://en.wikipedia.org/wiki/Collaborative_editing

are the following suggestions:

Sharelatex (currently overleaf?)

https://www.sharelatex.com/.

Based on Google Docs (simultaneous editing)

https://www.overleaf.com/

GIT based:

https://gobby.github.io/

GIT based but with locking in front-end

https://www.authorea.com/

Sagemath Cloud (also LaTeX documents)

https://cocalc.com/

https://www.fiduswriter.org/

Real-time (not needed) for example Yjs, see http://y-js.org/ and report https://www.tag1consulting.com/term/collaborative-editing

Also LaTeX editor https://github.com/y-js/latex-editor

Collaborative Research

See also wikiversity.

Virtual Research Environment

https://en.wikipedia.org/wiki/Virtual_research_environment

More general platforms used for research:

- Google Site http://sites.google.com
- Sharepoint e.g. https://www.edugroepen.nl
- quip.com,
- Etherpad.org,
- basecamp.org,
- authorea.com

etcera.

Collaborative Root Cause Analysis

Keywords: Dialogue mapping, Issue-based information system.

Philosophy:

https://en.wikipedia.org/wiki/Causal_model

and hard-copy encyclopedia.

Wikipedia entry and its references

https://en.wikipedia.org/wiki/Root_cause_analysis

do not mention 'lattice'.

Implication Inference in Formal Concept Lattices:

https://github.com/lucaliechti/FCAInference

https://www.researchgate.net/publication/322138219_Inference_of_mixed_information_in_Formal_Concept_Analysis

and so on.

RCASE:

https://en.wikipedia.org/wiki/RCASE

Cause and effects seem to be modeled as hierarchies (trees) whereas a lattice structure is more general.

Templates which seem to be designed for avoiding accidents of a technical nature:

https://www.smartsheet.com/free-root-cause-analysis-templates-complete-collection

Sologic, with templates:

https://www.automationworld.com/home/product/13307826/sologic-collaborative-root-cause-analysis

Taproot (intended for arctic engineering)

https://asmedigitalcollection.asme.org/OMAE/proceedings-abstract/OMAE2015/56512/V05AT04A059/279850

Microsoft's Sharepoint could be adapted for root cause analysis. Comparison to mediawiki:

https://www.mediawiki.org/wiki/Differences_with_SharePoint_wiki

Salesforce:

https://salesforce.quip.com/templates/root-cause-analysis

is geared towards production problems; the templates have exactly the same description.

Wikis

Wikimedia (See also Wikimedia in the 'similar organizations' document):

https://meta.wikimedia.org/wiki/New_project_policy

which directs

- to http://wiki.c2.com/?WikiFarms (Note the now defunkt wiki on cooperative societies) and
- to https://meta.wikimedia.org/wiki/Category:Proposed_projects with interesting proposals like Catalog of reasoning https://meta.wikimedia.org/wiki/Chains_of_Reason or https://meta.wikimedia.org/wiki/WikiLogic and via civics:

- Decision making https://meta.wikimedia.org/wiki/Wikicratie as 'the future of democracy' (voting on candidates etc.) and list (under 'Others') similar initiatives, which however do not seem to be applicable.
- Collecting information to empower citizens https://meta.wikimedia.org/wiki/Wikicitizens Concerned about vandalism and demonization.

Wikiversity offers learning resources and invites to carry out (non)standard research:

- https://en.wikiversity.org/wiki/Template:Original_research
- https://beta.wikiversity.org/wiki/Wikiversity:Research_guidelines/En

So, this allows problem analyses and definition of measures but reconsidering goals would be an extension. Note that on several pages, the exposition resembles Wikipedia lemmata.

Xwiki: User created data structures: https://en.wikipedia.org/wiki/XWiki

It allows semantic annotations and tagging (cf. stratML).

PMWiki last updated 2015:

https://www.pmwiki.org/

See

https://en.wikipedia.org/wiki/Comparison_of_wiki_software

and

https://en.wikipedia.org/wiki/Wiki_software

Hosting:

https://en.wikipedia.org/wiki/Comparison_of_wiki_hosting_services

Appropedia

runs wikimedia for technical approaches to environmental crises. Emilio Velis emilio.velis@appropedia.org on 12 aug 2020: Appropedia was already planning to add cause-effect categories.

Web Content Management Systems

A list of pros and cons:

https://en.wikipedia.org/wiki/Web_content_management_system

Content Management Systems

For an overview see

https://en.wikipedia.org/wiki/List_of_content_management_systems

and salesforce.com (free for nonprofit)

https://www.salesforce.com/blog/2019/10/what-is-a-cms.html

Collaborative Problem Solving, Crowdsourcing

An introduction is

https://en.wikipedia.org/wiki/Problem_solving#Collective_problem_solving

but without focus on a digital platform for such activities.

Program **CoSolve**

https://www.semanticscholar.org/paper/Roles-in-Online-Collaborative-Problem-Solving-Fan/e92bdbb8eef085b1b91a20f7e7afcebef155a28b

about which little else is found on the web and according to

https://www.semanticscholar.org/paper/CoSolve%3A-A-system-for-engaging-users-in-problem-Fan-Robison/2f1d1fcbe2268c337ab826ef38935024387734ce

it is (or was) a website. Via Wikipedia,

https://epjdatascience.springeropen.com/articles/10.1140/epjds/s13688-014-0013-1

which warns against vulnerability to attacks.

Coanalysis is a morphosyntactical concept: http://www.glottopedia.org/index.php/Co-analysis

Climate CoLab:

https://www.climatecolab.org/page/about

calls for entire proposals which are voted for or against by experts. There is also a (suspended) option to integrate winning proposals. The proposals from 2018 are inaccessible.

Unclear at first glance what will be done with the proposals, on which grounds they are accepted or rejected. Judging from the 2015 and 2016 conferences, there are technical solutions, appeals for public awareness and leadership, as well as economic measures (cap-and-trade, climate coins and solar dollars) but the latter category has no reference to any more information than these terms. Funded by UN. The following blog from April 2019 suggests that Climate CoLab is the only such initiative:

https://skepticalscience.com/Climate-Science-crowdfunding-crowdsourcing.html

The climate colab refers to various MIT programmes:

MIT Solve https://solve.mit.edu for tech-based social entrepeneurs

MIT Center for Collective Intelligence: https://cci.mit.edu

design of collectively intelligent systems (i.e. people included) which has as its programmes

- Climate Colab (see above)
- **The Deliberatorium** "is a web-based system that combines ideas from argumentation theory and social computing to address this critical challenge. Under development since 2007, it has been used by thousands of individuals in such institutions as Intel, the Federal Bureau of Land Management, and the Italian Democratic Party." No further information can be garnered from http://deliberatorium.mit.edu:8000/ci/login The old name Collaboratorium is mentioned in a video and in a comment. Issues and ideas raise new issues and ideas plus arguments (pro and con but still discussion thread according

to the co2 example). Contributions can be edited by everyone but moderators check syntax and publish them or delete them entirely. Users can discuss and rate. Mr. Klein intends to commercialise the deliberatorium.

- **Climate Plan Accellerator** https://cci.mit.edu/climateplanaccelerator/ mentions that proposals are evaluated but does not seem to be more specific. It is in a pilot phase.

Synthetron:

The site

https://synthetron.com/nl/how-it-works/

only offers an animated movie but does not seem to show the product. From

https://synthetron.com/nl/how-do-we-do-it-2/

emerges that it is about a moderated dialogue which, presumably, is recorded. Judging from

https://synthetron.com/nl/when-looking-for-wisdom-avoid-the-fast-thinking-trap-ask-slow-thinking-questions/

the more abstract questions and answers are advocated.

World Wild Life Fund:

The site https://www.wwfclimatecrowd.org/ gathers data and allows for colloborative problem solving at a local scale.

Crowdsourcing: quote from

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4639727/

"Crowdsourcing is a process of accumulating the ideas, thoughts or information from many independent participants, with aim to find the best solution for a given challenge."

Crowdsourcing about Sustainability (as all-encompassing as 'envrionmental')

https://crowdsourcingsustainability.org/

by Ryan Hagen is an appeal to let the reader of the site organize the crowdsourcing.

A model of crowdsourcing,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4639727/

mentions some developments in its introduction.

In

https://en.wikipedia.org/wiki/Crowdsourcing

the section on public policy shows that governments are susceptible to suggestions from the public if many people have deliberated on a particular issue.

Problem Analysis

From https://en.wikipedia.org/wiki/Problem_structuring_methods

strategic options development and analysis (SODA):

- Banxia Decision Explorer: https://banxia.com/ to make a “map” and “qualitative model” (scare quotes in the original) but not clear exactly whether this is of ideas or of problems. Rounded instead of rectangular post-its would also contribute to creativity.

- Group Explorer: confusion with exploration of mathematical groups?

According to

https://www.ifm.eng.cam.ac.uk/research/dstools/soda/

SODA is for a dozen of people to clarify problems.

Issue-Based Information System (IBIS)

https://en.wikipedia.org/wiki/Issue-based_information_system

for dialogue mapping: Compendium: according to http://www.cognexus.org/CompendiumBasicsEx-rev1j.pdf this allows to assemble problems and solutions into hierarchies, for which there is little need here. According to https://en.wikipedia.org/wiki/Compendium_(software)

it is no longer maintained.

Wisdom: not found.

Further all business analysis techniques like mentioned in

https://en.wikipedia.org/wiki/Structured_systems_analysis_and_design_method

and

https://en.wikipedia.org/wiki/Requirements_engineering

which start with feasibility of the goal, which is an indisputable fact (no co-creation).

Michael A. Jackson:

https://en.wikipedia.org/wiki/Problem_frames_approach

Users should focus on real-world problems, not those of the (computer) system.

Goal and Requirement Analysis

SMART

George T. Doran defined S.M.A.R.T. as a prerequisite for goals: specific, measurable, achievable, relevant, time-bound. This criterion is in use in business and industry.

Goal Modeling

In

https://en.wikipedia.org/wiki/Goal_modeling

the functional requirements are defined in terms of goals, so these goals again are indisputable. In i*, the reason for a goal is questioned in the **Strategic Rational (SR) Model**. According to

https://en.wikipedia.org/wiki/I*

the SR has means-end links (the reason for a goal) and decomposition of tasks as *internal* drivers of actors. Where UML (unified markup language) focuses on organizational ('external') goals, SR concentrates on stakeholders' intentions. The i* methodology would integrate with use cases.

From

https://en.wikipedia.org/wiki/Goal-oriented_Requirements_Language

which is about i* via

https://en.wikipedia.org/wiki/Business_Motivation_Model

to

https://en.wikipedia.org/wiki/Strategy_Markup_Language

where **stratML** can e.g. be embedded in Word documents and saved as XML:

https://stratml.us/

This gives bare xml from which can be distilled that objectives are linked to shareholders but this is more like a business-oriented data model. Yet, tags could well be reused for uniformity.

The site

https://joinup.ec.europa.eu/solution/core-public-service-vocabulary/document/strategy-markup-language-stratml-part-1-stratml-core-elements

has dangling references to other sites. Following

https://stratml.us/references/StratMLTraining.htm

one has to rely on local copies.

KAOS see

https://en.wikipedia.org/wiki/KAOS_(software_development)

Book:

https://www.wiley.com/en-gb/Requirements+Engineering%3A+From+System+Goals+to+UML+Models+to+Software+Specifications-p-9780470012703

As to **POLDAT,** see

https://en.wikipedia.org/wiki/POLDAT

for radically changing a business but CCPOLDAT and Catalyst according to

https://it.toolbox.com/question/what-is-poldat-in-simple-terms-please-062910

and so on seem to be methodologies rather than digital platforms.

Quoting https://netmind.net/business-vs-functional-requirements-who-cares. "The wrong way, though, is to go straight to a solution without understanding the business. […] But then, I get an aha! moment when

[people] start to realize why they need to understand and communicate true business requirements. That's when the innovation, real change, creativity, out of the box thinking comes in!"

Scenario-based requirements elicitation

https://www.info.ucl.ac.be/~avl/files/avl-tse05.pdf

Syntax: business Process Modeling Notation (BPMN)
https://ieeexplore.ieee.org/document/6032261

Overview, with some accents on SCRAM:

http://csis.pace.edu/~marchese/CS775/Papers/sutcliffe_scenario_based.pdf

'The process of extracting knowledge from and testing with scenarios is still in its infancy.**'**

UML: no clear purpose:

http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.50.1288

Goal discovery:

Colette Rolland and Camille Salinesi: *Supporting Requirements Elicitation through Goal/Scenario Coupling.* pp. 398–416 in Alex T. Borgida, Vinay Chaudhri, Paolo Giorgini, Eric Yu: *Conceptual Modeling: Foundations and Applications: Essays in Honor of John Mylopoulos*. Springer Science & Business Media, 6 jul. 2009. (Lecture Notes Computer Science 5600)

Based on l'Écritoire during project CREWS (Cooperative REquirements With Scenarios).

L'Écritoire is textual pairing of means and goal using several parameters (a verb, an adverb etc) along with scenarios (the path towards the goal). For a goal, scenarios are authored; the scenarios reveal new goals; and so on. There are textual style guidelines, as for Case. The initial narrative is converted to a formal model. Using AND, OR, and refinement, new goals are discovered. [This is not the sense in which goals are to be discovered in the context of environmental plans, which would be by introspection]

See also:

https://www.researchgate.net/publication/253782411_CREWS_-_l'Ecritoire_Analysis_for_the_Implementation_of_a_medical_image_database_for_mammography

and compared in 1999 to OOSE (more textual) i.e. Object-Oriented Software Engineering (use-cases):

https://www.semanticscholar.org/paper/1-Method-Enhancement-with-Scenario-Based-Techniques-Ralyté-Rolland/1d878e56ede9b51d30546399e2b6ba4fad630de7

More recent

Salinesi and Rolland about goal modeling:

https://dspace.utamu.ac.ug/bitstream/123456789/97/1/Engineering%20and%20Managing%20Software%20Requirements.pdf

p.192: 'A goal under the responsibility of a single agent in the software becomes a requirement'

EEML

https://en.wikipedia.org/wiki/Extended_Enterprise_Modeling_Language#Goal_Modelling

CATWOE

Acronym of 'Customers – Actors – Transformation process – World view – Owners – Environmental constraints.' Patty Mulder: "…makes it possible to identify problem areas, look at what a company wants to achieve, and which solutions can influence the stakeholders."

https://www.toolshero.com/problem-solving/catwoe-analysis/

SOAR (strengths, opportunities, aspirations, results)

Contrary to SWOT (strengths, weaknesses, opportunities and threats) it addresses goals ('aspirations').

https://www.groupmap.com/map-templates/soar-analysis/

OGSM (objectives, goals, strategies, and measures)

Geared towards business.

https://en.wikipedia.org/wiki/OGSM

Goals and Causality

See causal loop example on p. 10 of GFT (goals-function tree)

https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20140002994.pdf

GROW (goals, reality, options/obstacles, way forward)

https://en.wikipedia.org/wiki/GROW_model

Elicitation

Posing 2000 questions:

https://en.wikipedia.org/wiki/Requirements_elicitation

Goals

Jamie L. at 4.43 in

https://www.youtube.com/watch?v=YeGDi4DRWcA

asks: ''Is my goal more important than the status quo I am living?" the answer to which should become: yes. But these are personal goals. Rather, passion comes with attention to help others, says Terri Trespicio: https://www.youtube.com/watch?v=6MBaFL7sCb8

Purpose

As a spiritual concept. Says Mark Zuckerberg:

" Purpose is that sense that we are part of something bigger than ourselves, that we are needed, that we have something better ahead to work for. Purpose is what creates true happiness."

https://www.forbes.com/sites/margiewarrell/2017/05/30/feeling-stuck-take-zuckerbergs-advice-and-commit-to-a-purpose-bigger-than-yourself/#

Ontology Frameworks

This seems to be more than needed.

https://en.wikipedia.org/wiki/Open_Semantic_Framework

Participatory Democracy Software

CONSUL ('Consul Democracy' Foundation) and project D-CENT, etc. see consulfoundation.org/

and netdem.nl. (network democracy)

Egora (stockmarket of ideas) see

https://egora-ilp.org/

with an explanation on

https://www.youtube.com/watch?v=db5nIJVQ-3U&feature=youtu.be

You enter your ideas (GRDP?) and rank them for election e.g. "genocide should be combated internationally". Egora is affiliated to the International Logic Party:

http://www.collegeofcomplexes.org/Int-l-Logic-Party---Principles--Goals--Key-Concepts.html

but an idea dominance index in Egora is not an appeal to logic nor is dominance the best voting mechanism.

G1000?

Collaborative decisions

https://en.wikipedia.org/wiki/List_of_collaborative_software#Groupware:_Web-based_software

Thoughts and feelings about on-line citizens' assemblies:

https://medium.com/@PaulVittles/digital-deliberative-participative-democracy-the-future-is-here-now-9e7746fa9fdb

Related Concepts

Co-creation: producer and consumer jointly define a product

co-design.

design thinking.

service-dominant logic.

deontic logic.