MANAGEMENT SYSTEM FOR THE EXCHANGE OF EXEMPLARY PROJECTS OF CIVIL SERVANTS:VDEDL1 PROJECT USER INTERFACE.

Abstract

Evolutionary interactive object identified — **E**xemplary **D**ouble of Digital transformations, Lifelong Learning, AI for project teams (**ED**). Goal, problem: — How best to the promotion of sustainable development ED on base of our arrow theory? Now begin it practically realization in project "**V**irtual **L**abs for **E**xchange exemplary**D**T, Learning ideas, samples for projects teams, VLEDL" (demo.vledl1.org). The common context ED is shifting Understanding, Paradigms related of opportunities, problems, issues,challenges in AI era for everyone We represent conceptual framework sustansible development ED using VDEDL1 project means. Also represent sustansible development ED by VDEDL1 project instrumentaries . It includes the mobile application and site project for exchange ideas and the best solutions and practical validation of our arrow theory.

INTRODUCTION:-

> Educators, students, administrators, policymakers, program implementers, and lifelong learners are invited to explore and assess current practices, opportunities, issues, and challenges related to AI and recommendations for building education and learning system (UNESCO,2024).

Unprecedented global changes have been observed in the virtual and traditional worlds, associated with a acceleration of digital transformations (DT), a change in scientific and technological paradigms and the spread of innovative artificial intelligence technologies (AI). In the conditions of the "shift of understanding" the problem is the change of thinking and understanding, and explanation based on the integration of scientific and technical achievements of various disciplines in various fields of application, territories.

The problem is that the huge potential of using advanced Management system for the exchange of exemplary projects of civil servants is still not mass used in practices for various purposes. It requires solving many complex scientific and practical problems, tasks, such as understanding and explanation, adoptation, aligment, management, forecasting, control, evaluation, leadership, evolution, variability, complexity, scalability, property protection and confidentiality, reliability, elimination of uncertainty, compatibility, harmonization with existing official and de-facto standards, procedures, protocoles, regulations.

> The results of authoritative studies show that less than half of projects have a digital strategy. 41% of organizations claim that they lack the right digital skills, and 30% claim that they know which technologies should be adopted, but 79% of organizations have not fully implemented AI governance at scale (PwC) (Farrell, 2024, p. 1). At the same time, demand for lifelong learning education services, training and advice on digital and AI literacy is growing rapidly (UNESCO[2], 2025)

Management system user interface models an Demo are proposed for civil service project teams (S) —Virtual labs for exchange exemplary solutions. It is practically implemented in our evolutional project "**V**irtual **L**abs for Exchange exemplary **D**igitaltransformation and **L**earningprojects, **VLEDL**" (demo.vledl1.org). See also about Digital Learning in (UNESCO[1], 2025). Exchange covers very defined processes and events patterns, templates such as identification, інтеграція, joint sensing, measurement, collection, cleaning, processing, storage, visualization of information, real time analytics, evaluation, providing forecasts, insights, recommendations. This will allow all stakeholders to best personally manage the exchange of exemplary solutions in a variety of contexts and effects. See also about our arrow theory in (Manako, 2024), (Manako1-4, 2025).

Content. **Conceptual framework**: Examples of fragments from our learning-oriented Glossary, Background and knowledge gap, Problem and conceptual idea,**Basic models**,**User interface Demo,Results. Conclusion. References**.

Conceptual framework:-

> "The future isn't just happening to us any more; We make decisions every day that determine what decisions we will be able to make tomorrow … None of us is as smart as all of us - That's good, because the problems we face are too complex to be solved by any one person or any one discipline". (Hodgins, 2000).

Examples of fragment from our learning-oriented Glossary: -

Common, fashionable concepts in the era of increasingly rapid DT and advanced AI have many different definitions, meanings and explanations. It dynamically change in different contexts from the point of view and perspectives of fundamental scientific disciplines. Moreover, this is a complex problem.

In this fragment described concepts: **Digital Transformation, DT, AI system, S , Best FIrst Search (Search, Heuristic search), BFS (General Model S, <>, →, ←, Arrow content, <S>, Notation X → Y, Paradigmatic model <S >;: GUI Paradigm, Arrow content, Resource, Context , ED (Exemplary Double),**

.**Digital Transformation, DT**: "A fundamental change to a process utilising digital technologies that result in an improvement to all stakeholders so dramatic that demand for the new way of working or thinking, such asnew digital platforms, new methods, new cultures, new strategies, and new structures" (Gong, 2021). Digital technologies have evolved from stand-alone projects to networks of tools and programs that connect people and things across the world, and help address personal and global challenges (UNESCO[1], 2025)/.

See also (Jonathan, 1023),. (Verina, 2019), (Vogelsang, 2021), (Via, 2019), (Xie, 2025).

The OECD Council on November 8, 2023 adopted a new definition of AI, which will be included in the new European Union regulation on AI. It defines its very scope:

AI system: a machine system that, in order to achieve explicit or implicit goals, makes inferences based on the Inputs it receives about how to generate Outputs, such as predictions, content, recommendations, or decisions that [can] affect the physical or virtual environment. Different AI systems vary in their level of autonomy and adaptability after deployment" (Vuorikari, 2022, p. 1).

Best FIrst Search, BFS: an process or arrow strategy based on best practices in which various possible paths to a solution are evaluated in terms of the likelihood that they will prove successful and the path judged most promising is attempted first; a search algorithm that works according to a certain rule and uses a priority queue and heuristic search. It is ideally suited for computers to estimate the appropriate and shortest path through a maze of possibilities. BFS in constructs of arrow theory: a search algorithm on a graph whose edges are arrows. **Search**: the process or task by which the Doubles attempts to find the correct answer or best solution among a range of alternatives in a problematical, metaphorical and innovational spaces by arrow strategy the systematic evaluation of status quo or states. **Heuristic search**: a mental process of the search through a problematical, metaphorical and innovational spaces that is optimized by the use of arrow Strategies that reduce the number of possible paths to a solution that need to be attempted. Examples of approaches to the search: back track search, depth first search, breadth first search.

S: Management system user interface models are proposed for civil servants: project teams with Virtual labs for exchange exemplary solution. In the arrow theory at the highest level of abstraction, the axiomatic method of formalization is used to S and the rules of inference and logic are explicitly introduced. Viewing S as a certain type of mathematical category expands the possibilities of the modeling method, gives a unified view of the concept of a model. ***S***is an evolutionarily complex decision-making system, which is represented from the point of view and perspective of fundamental scientific disciplines in different natural or formal languages, cultural environments and spaces. The key subsystems are Virtual Laboratories, of the Research, master classes for Learning and Trainings using smart simulators of situations and contexts, the real time analytics for unique personal projects and project teams. The basic disciplines of representation S are mathematics, psychology, linguistics, learning, pedagogy, computer science, project management.

General Model S is written as:

<S>=<<Smat><↔ ↕><Sint>>, <Smat> i <Sint>: mathematized representation of S and its meaningful interpretations in the form of content aggregations; **<>** is the designation of the combination of what these brackets contain. A general example of a modeling construct <>: these are concepts, ideas; visualizations; arrow shapes: "→, or with the opposite direction ←"; a set <>, the brackets of which have the properties "existing, new, mixed. For example, not quite accurate or defined"; the arrow "person" has or may have a set of arrows, called an e-portfolio with the history and plans of the person's practices or experiences in time and space; **Arrow content**: structured

information about the existing or imagined properties of the arrows, which is presented as an "Information Model"; at a higher level of abstraction, **<S>** is defined using a mathematical theory of categories, often called "arrow theory" and "arrow sets", which are described in the RDF language for presenting information about resources on the web (resource: something that can be identified by a URL). RDF conceptual idea: using sets of simple statements (subject, predicate, or object) about (a resource, a resource property, or a property value) to describe things. **NotationX → Y**, where X, Y denote the ends of the arrow, expresses the relative presence of the properties of object X in the properties of object Y. In particular, that in the relations "form-content", "subject-object" from the old, progressive, successful has passed into the new or, conversely, during the life of the subject or from standards, etc. Examples of visual forms of the arrow object: straight, arc, dash-dotted, thick, colored, with sound. Examples of other interpretations of the arrow object: relation, reflection, Cartesian square., function, function, operator, procedure, algorithm, process, event, activity, arrows from traffic rules, on the streets or from a monograph.
<S> = << Metaphor>< Paradigm>>, where: <> — denotes a set of arrows. Metaphors of learning". One way people communicate with each other about their separate and different experiences in the world is by using figurative language to describe or understand one thing from the perspective of another thing. The three most common metaphorical systems that students use to describe their learning experiences are: "learning is construction", "learning is growth", and "learning is movement".

Model S is an evolutionary process of obtaining, evaluating and processing a large amount of information in order to predict the most likely scenarios of events, make informed decisions, and improve processes and results in general. The goal of this process is to determine the cause of events and provide recommendations for further measures and actions. P**aradigmatic model <S >**:
<**S** > = << Metaphor>< Paradigm>>, where: <> — denotes a set of arrows.
< Paradigms> = << P-Glushkova: (Kapitonova, 2011)>;
<P-psychology: www.simplypsychology.org/perspective.html><**GUI** Paradigm: (Veenstra, 2011)>>.
The set of arrows <Metaphor> has an information representation in the form of a matrix (table) with cells <<Information about><<Question><Answer>>>. The general model of metaphors:
<Metaphor> = <<Metaphor: Learning><Metaphor: AI>>
A general example of a modeling construct **<>:** a concept, idea; visualization in the arrows form: "→, or with the opposite direction ←"; a set <>, the brackets of which have the properties "existing, new, mixed (for example, not quite accurate or defined"; the arrow "person" has or may have a set of arrows, called an e-portfolio (e-ticket in Ukraine) with the history and plans of the person's practices or experiences in time and space; "arrow content": structured information about the existing or imaginary properties of the arrows, which is presented as an "Information Model"; at the highest level of abstraction **<S**> is defined using the mathematical theory of categories, often called "arrow theory" and "arrow sets", which are described in the RDF/XML language for presenting information about resources on the semantic web./
GUI Paradigm (Veenstra, 2011):

Windows: Rectangular areas on the screen for running applications, allowing multitasking.
Icons: Small pictures representing files, programs, or actions (e.g., a trash can).
Menus: Lists of commands or options, often appearing when you click something.
Pointer: The on-screen cursor, controlled by a mouse or trackpad, for selection and interaction.

Arrow content: structured information about the existing or imagined properties of the arrows, which is presented as an "Information model"; at a higher level of abstraction, <S > is defined using a mathematical theory of categories, often called "arrow theory". At the level of engineering implementations for presenting information about resources on the Internet it are described in the RDF/XML languages. **Resource**: something that can be identified. RDF conceptual idea: using sets of simple statements (subject, predicate, or object) about a resource, a resource property, or a property value to describe things. Y.
Context (adapted from https://dictionary.apa.org/context): 1. Generally, the conditions or circumstances in which a particular phenomenon occurs; 2. In studies of cognition, the environment in which a stimulus event occurs, especially as this influences memory, learning, judgment, or other cognitive processes; 3/ In laboratory tasks involving the recognition of stimuli, the setting in which a target stimulus is presented, including any distractors or maskers (see masking).
ED: Exemplary Double, *of sustainable development of unique human-centric projects is a personal decision-making system*, defined process:

►The S, *ED* are represented by a stack of fundamental arrow elements – projects Digital Transformation, Learning, AI in a problematical, metaphorical and innovational spaces.

►All Samples of *S, ED* are made as person-centered, metaphorical, known, practical as possible, and move in a timely manner with the best practices.

►The S system instance includes all ED system instances (and vice versa), each of which has all the information about the entire system based on real time analytics.

► The promotion of sustainable development of ED is carried out on the basis of arrow principles, criteria and a common arrow Strategy.

►The S, ED systems function in the form of adaptive virtual organizations.

►The metaphor of the S, ED is the arrow Exemplary companion, which is represented by aggregations (combinations) of commutative triangles, Cartesian squares in a problematical, metaphorical and innovational spaces.

Defined process, DP: a process that can be used step by step to achieve a defined aggregation of IGT content: <<IGT content>, <I-content>, <G-content><I-content><I-content>>; I-content: content in which one or more ideas are defined; G-content: content in which one or more goals are defined;; T-content: content in which one or more tasks are defined; Step: a structure of activities defined for the aggregation of IGT content objects.

Process, project area: a set of related practices that, when implemented together, satisfy a set of tasks (objectives) considered necessary to improve and optimize the process, project. **Practice:** an activity (functions, work, operations) that contributes to the achievement of the goals or results of the process, project or increases its capabilities; acquired experience, a set of skills, specific knowledge in a particular area of activity. Process, project area is also a means of grouping activities (inputs-outputs, work, actions, functions, operations, etc.) according to their contribution to the capability, potential, maturity of the process, project.

Project: unique process consisting of a set of coordinated and controlled activities with start and end dates, performed to achieve a goal that meets specific requirements and that has constraints on time, cost, and resources (ISO 10006, 2017), *(*Agile. 2025).

Reductionmethod,<↔ ↕>: rewriting an Abstraction (intention, design) or its implementation (expression) into a simpler form; (complexity), transforming one problem into another; simplifying data to facilitate analysis; a technique for reducing the size of the state space that a model checking algorithm needs to search; reduction strategy, the use of rewriting systems to eliminate condensed expressions. The arrow reduction procedures are performed as defined processes in the constructions of our theory.

The current understanding and explanation of the same concepts in our Glossary see also in (Manako4, 2025): arrow theory; artificial intelligence; assessment; best first search; consciousness, intelligence; best practice; concept; deep learning; digital transformation; Leadership; learning; literacy and competencies; mathematical object; metadata; metaphor modeling; project, program; project management structures; project-based learning; psychological object; real-time analytics; status quo; verification, validation. See also https://dictionary.apa.org/, https://leadschool.in/school owner/, https://leadschool.in/school owner/, https://edtech glossary/, https://glossary.sil.org/term/l, https://dictionary.cambridge.org/plus/, https://www.britannica.com/Science-Tech, https://uis.unesco.org/en/glossary).

Background and knowledge gap:-

In the review (Meixne, 2011) provides an overview of the past, present, and future of model-based UI development over the last 30 years. The Model-Based UI Development (MBUID) framework describes various important levels of abstraction, and their relationships to each other. The MBUIDs are described in terms of: Tasks and Concepts; Abstract Interaction Objects (AIOs). These AIOs are, first, independent of any platform or modality (e.g., graphical, voice, haptic). Second, AIOs can be logically grouped. Third, a specific user interface is described by specific interaction objects. They are modality-dependent, but formatted in such a way that they can be included and used in other tools and environments and different application domains.

Vogelsang et al. (Vogelsang, 2021)define barriers as "*things that can hinder or stop the successful implementation of DT*. According to the author, there is a gap in the research regarding a general framework that captures most barriers and draws a relationship between them. Some of the barriers to *DT* in nonprofit organizations (NPO) identified in the literature are also presented.

In the study by Radu et al. (Radu, 2024) described:thematic map with the barriers to DT in the Swedish NPO. "One thing that is hard while working with data is that you have to make sure you really use the same kind of definitions". In total, 15 new barriers were found: *rigid hierarchy, fragmented processes, lack of partnership misfit roles, siloed business structure, lack of diverse conceptual skills, lack of common language, lack of systematic knowledge sharing*

and organizational learning, fear of accountability, lack of integration, lack of benchmarking, mixed stakeholder's journey, digital literacy, and environmental complexity.

Knowledge gap: How can we best purposefully promote sustainable development of the ED user interface in the face of unprecedented change for everyone?

Metaphor of knowledge gap**:**

> "In order for a person to be able to grasp mentally; understand even a single word (=ED), the entire language as a whole (= all ED representations of <*S*>, <<EDmath><↔ ↕><EDint>>) all its relationships must already be embedded in him" (Wilhelm von Humboldt).

PROBLEMANDCONCEPTUAL IDEA:-

Problem: How to best practically implement a GUI <S>? Common Goal, problem: — How best to the promotion of sustainable development ED on base of our arrow theory?

Conceptual idea of <*S*>*:* Additional means of exemplary problem solving in context of increasingly rapid change. ED (twin) for project teams, is practically is implemented in the VDEDL1 project.. Metaphor of explanation of the conceptual idea of <*S*>naive definition analogy - The WORKROOM of the famous science fiction writer H. G. Wells (1940).

> A vast, ever-growing wealth of knowledge is scattered throughout the world today. This knowledge would probably be enough to solve all the enormous difficulties of our days but it is scattered and disorganized. We need a purification of thinking in a kind of WORKROOM where knowledge and ideas can be received, sorted, summarized, assimilated, clarified and compared"

Principles. Basic principle (formulation in natural language) — People should not "run" after samples but vice versa, samples should "run" after people. Its content is represented by the proposed arrow principles^

MiniMax principle.. This is the principle of unity of close and distant goals sustainable development of VLE, ED. It is practically implemented by the method of integrating the results of horizontal and vertical reduction method according to rules such as: Minimal options are implemented top-down, starting from the maximum; And vice versa, Maximum options are implemented bottom-up, starting from the minimum. Given the acceleration of DT and their impact on change, it is advisable to update projects in real time. **Personal-centricity principle**: The minimum unit of projects is a unique personal project of each participant in a joint project; AI is an additional reliable means of survival and sustainable development. The decision is made by a person. All arrow patterns are timely made as personally-centric, metaphorical, known, practical as possible and timely "run" after individuals with best practices, samples. **BFS based on best practices principle**. An example of a verbal definition of **Duality principle** . This is the famous mathematical principle of Duality (https://en.wikipedia.org/wiki/Duality_(mathematics): If there is an entity, then there is usually its double (and vice versa), which is represented in convenient forms. The construct **Double** is defined in a formalized dictionary with the meanings: Contextual. Digital, Mathematical, Metaphorical. Artificial, Psychological, etc. The principle of "Partial understanding". If something is not defined, then it refers to something more generalized.

BASIC MODELS:-

The general model for Samples Task Register S:

< Task Register of GUI, TRui> = <<< context><<S ><SI><PROC><PIO><CR>>>;

<S> = << metaphor >< paradigm: ui: gui>>l

<metaphor> = <<metaphor: ed><metaphor: learning><metaphor: ai>…>;

<SI> — a set of arrows "Information representation S";

<PIO> — a set of arrows "Statement about S";

<PROC> — a set of arrows "Find the value of PIO" using the <exemplary BFS>;

<CR> — a set of arrows "Evaluation criterion".

The set of arrows <S> has an information representation in the form of matrix (table) with cells <<Information about><<question><answer>>>with the following brackets: <? or <; ?> or >, where the sign ? means relations, connections, relationships between angle brackets, for example, input-output, stimulus, reaction, task-solution, form-content, known-unknown, old-new, observed or not, etc.

Examples. PROC — the procedure (operator, algorithm, process, etc.) that defines the value of PIO and can be performed by a person or automatically by a device; CR — the criterion associated with the task. Solving the task means determining the procedure PROC that defines PIO and satisfies the criterion CR. If a set of PROC procedures is created, it turns into a task of selecting a PROC or a set of procedures with <PROC> according to the criteria CR. Example CR: selection of an BFS for define the extremum of a certain objective function or quality function. The

definition and use of additional structures for S objects and their elements provides many opportunities to define and describe various classes of tasks in the S, as well as to interpret them in an appropriate way. Example.CR, Levels of assessment of sets of sections: experimental set; controlled set; exemplary set (proven, optimized, best practice); changes (innovations) of the process are managed; the process is optimized. Process improvement indicator (IND): a discrete measure (degree) of process improvement in a predefined set of process areas, in which all goals from the set are achieved. To determine the IND, it is necessary to establish the appropriate CR criteria and sets of areas. Let the following IND gradations and names be established: IND1 — experimental. IND2 — controlled, IND3 — typified, IND4 — predicted; IND5 — exemplary (proven, optimized

Model of functional structure and digital content <S > is proposed: <<<**context:** learning ><event><unit of TR: learning>>> Description of the model <event>: <<prerequisite><metadata><annotation><comment><explanation><attitude><communication (interaction)><search><download><view><learn><test><question><assessment: answers> …>. Example of the model <unit of learning>: <<prerequisite><metadata: keywords><task><fact><concept><idea><Question><principle>, <problem><procedure>, <process><role>, <example><non-example>, <correspondence> …>.

Model of <**context**>for TaskRegister S**:**
<<**context:** learning ><event ><area>>,
<event>: <<metadata><annotation><comment><search><view><question><load more><record > …>;
<area>: <<prerequisite><metadata><role><action plan><didactic method><concept>><illustration><not illustration><test> …>.

Model Task Register S as the input-output, decision-making system**:**
<< data supplier (generator)><Δ>< data receiver >> .
<<data generator>↔↕ < Δ> ↔↕ < data receiver >>
Sets of sections <data generator>: <<process><object><consumer><non-consumer>>. Types of data origin: <role: consumer>, <role: non-consumer>, <object>, <process>, <system>, <environment>; <data receiver>: the process of communication of the subject with interested subjects in order to report their results;
<Δ>: section of process cycles <<transformation>↔↕ <visualization> ↔↕ <evaluation>>
(commutative triangles); <transformation> - a set of work processes for organizing data for their storage in a consistent form that corresponds to the semantics of the data set and its storage method; narrowing of observational, monitoring sets data; creating new variables, functions from existing variables, or computing a set of summary statistics;
<visualization> – the process of providing answers (reactions) to questions or new questions about data. **Constructive widget**: Pyth programming language object containing many events that have a representation in the browser; <assessment> – the action or event of making a judgment about something: the act of evaluating something; assessment. threat assessment. assessment of achievements and progress. Explanation of the construct <visualization> is an analytical toolbar: "a user interface based on predefined flows of measured data and data exchange, to which the end user can apply filters and graphical display techniques to improve (understand, optimize) activities (functions, works, operations) to achieve set goals (results, outputs) and which is suitable for regular use with minimal training."

USER INTERFACE DEMO:-

> "In normal cases, it is very difficult to predict the future, for example, 10 years ahead. Today it is even more difficult, given how quickly AI is changing — changes occur even week after week. The only thing that can be said for sure is that huge changes are coming — and they are primarily in education … The key skill for the new generation will be the ability to "learn to learn", that is, not just to absorb information, but to be able to independently seek knowledge and adapt to changes".
> Demis Hassabis,Google DeepMind CEO (Hassabis, 2024).

Fragment from VLEDL1 Glossary.
A simple and thus comprehensive -definition(Nerdinge, 2019:
Leadership; the *conscious* and *purposefulinfluencingof people*.
▪ *conscious* - A leader consciously uses their position to achieve something.
▪ *purposeful* - A leader aligns their leadership actions with (entrepreneurial) goals.
▪ *influence* - A leader influences the actions of other persons/employees.

▪ *on people* - Interaction between the person leading and the people being led.
See also the role of situation, context in(Vroom, 2007).
Project management structures (ISO. 2023). The standard ISO 27026: 2023covers the composition and relationships of hierarchical breakdowns: *Types of breakdown structures; Hierarchical tree model:Relationships and flow-down:; Composition and tailoring; Contract and supplier context:Purpose and outcomes*:.It is applicable at the programme top level (level 0) and for individual projects, and can be used by independent developers or as the basis of supplier–customer agreements.See formalization sy our **Model Task Register** S as the input-output, decision-making system**.**
Project-based learning: A person-centered approach that promotes critical thinking, collaboration, and real-world problem-solving skills in the 21st century. It plays a significant role in the sustainable development of various learning skills. It offers a variety of ideas for practical application in online classrooms. Individuals direct their own learning through inquiry, as well as collaborative research work and the creation of projects that reflect their knowledge. They perform complex tasks based on complex questions orproblems, which promotes design, problem solving, decision-making, or research activities.
See examples in (Alexander. 2014); (Condliffe.2017), (Dawood, 2022). 022), (Endres, 2019), (Hart, 2019), (Howard, 2019), (ISO, 2017), (ISO, 2021). (ISO[1], 2023). (ISO[2], 2023). (ISO, 2025).(Pacala. 2025), (PBLWork, 2025).In particular; Table 1. The list of 18 required leadership competencies for the 21st century+ п.9 9 Research contribution and recommendation for further research; Table 2. Questions for further researc у пункті = 8 Questions; 9. Research contribution and recommendation for further resear; 10 юManagerial application(Fotso, 2024): (Digital) Leadership theory (DIGIGEN, 2025).
The figure shows a screenshot of DEMO on the smartphone screen.

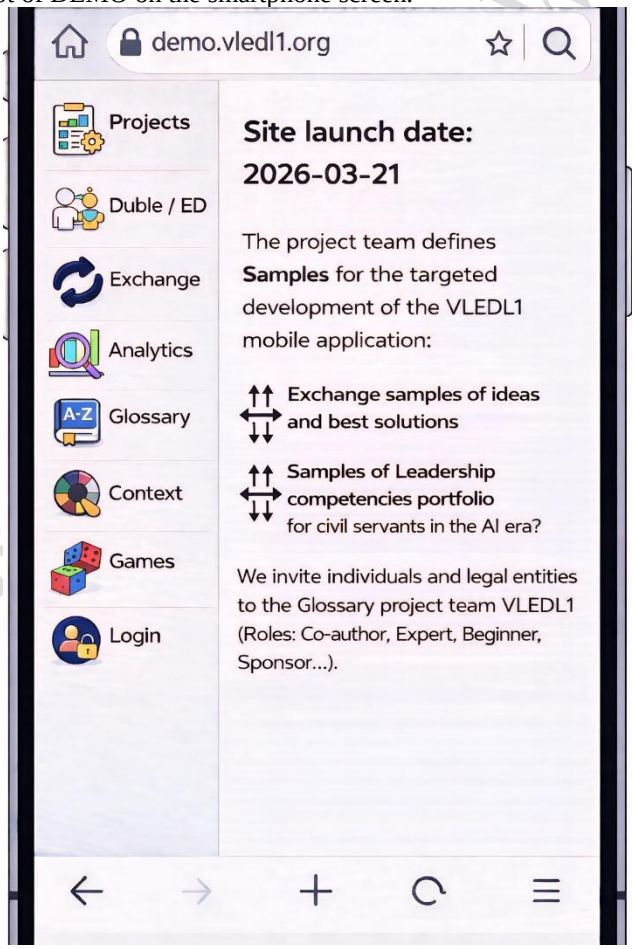

Figure. Screenshot DEMO (demo.vledl1.org)

Results -

Metaphor to improve understanding and explanation of our arrow theory, strategy of sustainable development of VLEDL1!: We can let the future happen or take the trouble to imagine it.
We can imagine it dark or light it depends on this what it will be like (David Gelertner, 2000).
"We all have a skills gap, all the time. When new knowledge is created at a rate faster than workers can learn it, a shortage results, no matter what the subject matter. This is not a problem that we need to fix. The skills gap is a ubiquitous characteristic of life in the future we envision, because everyone will have needs for new technology(and other) skills. Creating support for lifelong learning in a variety of forms is imperative to successfully addressing this fact". (Hodgins, 2000).

How purposefully to improve DT and lifelong learning for mass project teams in conditions of multilingualism, multidisciplinary, cultural diversity and impact of increasingly rapid changeatat all levels?
Common context: "shift in understanding" of today's unprecedented opportunities, problems, and challenges for everyone It will change in thinking, understanding and explanation of the best DT, literacy and competencies based on the adoption, aligment and integration of the achievements of various scientific disciplines, techn0logies in different areas of application and territories. One of the possible ways, solutions, is application of a new evolutionary object^ Exemplary double which will allow all interested parties to best personally manage the exchange of exemplary solutions.End result of will be people armed with the best competencies of the 21st century in a timely manner.Main result of this research is defined of evolutionary, science-based complex system and pilot project for Civil Servants teams/ Proposed basic arrow models starting from the highest level of Abstraction to level of engineering implementations. See detales: Conceptual framework: Examples of fragments from our learning-oriented Glossary$ Background and knowledge gap; Problem and conceptual idea; Basic models; User interface Demo. Results.,Conclusion.

CONCLUSION:-

"In normal cases, it is very difficult to predict the future, for example, 10 years ahead. Today it is even more difficult, given how quickly AI is changing — changes occur even week after week. The only thing that can be said for sure is that huge changes are coming — and they are primarily in education … The key skill for the new generation will be the ability to "learn to learn", that is, not just to absorb information, but to be able to independently seek knowledge and adapt to changes".
Demis Hassabis, Google DeepMind CEO (Hassabis, 2024).
"The future isn't just happening to us any more; We make decisions every day that determine what decisions we will be able to make tomorrow … None of us is as smart as all of us - That's good, because the problems we face are too complex to be solved by any one person or any one discipline". (Hodgins, 2000).

Evolutionary interactive object identified **E**xemplary **D**ouble of Digital transformationand LearningusingAI for project teams (**ED**).
S: Virtual Labs for Exchange exemplary solutions for **Di**gital transformation and **L**earning projects.
ED, of sustainable development of unique human-centric projects is a personal decision-making system, defined process:

►The S, ED are represented by a stack of fundamental arrow elements – projects Digital Transformation, Learning, AI in a problematical, metaphorical and innovational spaces.
►All Samples of S, ED are made as person-centered, metaphorical, known, practical as possible, and move in a timely manner with the best practices.
►The S system instance includes all ED system instances (and vice versa), each of which has all the information about the entire system based on real time analytics.
► The promotion of sustainable development of ED is carried out on the basis of arrow principles, criteria and a common arrow Strategy.
►The S, ED systems function in the form of adaptive virtual organizations.
►The metaphor of the S, ED is the arrow Exemplary companion, which is represented by aggregations (combinations) of commutative triangles, Cartesian squares in a problematical, metaphorical and innovational spaces.

Goal, problem: How best to the promotion of sustainable development ED on base of our arrow theory?

Now begin it practically realization in project "**V**irtual **L**abs for **E**xchange exemplary**D**T, **L**earning ideas, samples for projects teams, VLEDL1" (demo.vledl1.org).

Conceptual ideaS, ED: Additional means of exemplary problem solving in context of increasingly rapid change. It practically to implementin by VDEDL1 project.

Common context S, ED is shifting Understanding, Paradigms related of opportunities, problems, issues,challenges in AI era for everyone We represent conceptual framework sustansible development S, ED using VDEDL1 project means. It includes the mobile application and project site for exchange ideas and best solutions.

ED based on the identification, adoption, alignment and integration of the achievements of various scientific disciplines and DT in different areas of application and territories. Basic scientific disciplines of are mathematics, psychology, linguistics, learning, pedagogy, computer science, project management.

Basic principle (formulation in natural language) People should not "run" after samples but vice versa, samples should "run" after people. Its content is represented by the proposed arrow principles.

Basic metaphor for ED: Exemplary companion (fellow traveler, voyager) among Best FIrst Search trajectories in project groups.

Main evaluation criterion: degrees of Exchange of innovative ideas and samples for project groups. Exchange covers many defined processes, events patterns, templates such as identification, інтеграція, joint sensing, measurement, collection, cleaning, processing, storage, visualization of information, real time analytics, evaluation, providing forecasts, insights, recommendations. This will allow all stakeholders to best personally manage the exchange of exemplary solutions in a variety of contexts and effects.

Validation our conceptual frameworkwill implement with using xVerify means, an effective users answer verifier for evaluating reasoning models. See about Verify in (Chen, 2025).

Website launch date (demo.vledl1.org): 2026-02-22.

DISCUSSION.**QuestionsforExchange**ideasandbestsolutions.

WhatisProtectionReliabilityfromtheInfluenceofanAIDouble?

Whatisthe**Equivalence**ofObjectssuchas a Project, Project Team, Event, etc.? Context: GranularityandSemanticDensityofContent.

What is **Psychological** and**Competency**?

Psychological Literacy:the general capacity to adaptively and intentionally apply to meet personal, professional, and societal needs. (Newell, 2024), (https://en.wikipedia.org/wiki/Psychological_literac,y, (https://www.student.unsw.edu.au/psychological-literacy.

PsychologicalCompetency**:**the ability to take control of one's life, effectively cope with specific problems, and make changes to one's behavior and environment (as opposed to simply adapting to circumstances).The distinction between competence and effectiveness, which is the degree to which competence is realized in actual problem-solving.We still believe in the power of our arrow theory. (AdaptedfromAPAGlossary).

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