Developing human resources and building a talent pool for the region through the construction, measurement, and validation of soft competency profiles for current and future professionals (the ComPass System)

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Abstract. Contemporary professionals' education worldwide is based on Bloom's taxonomy (Anderson/Krathwohl's revision). This process is implemented as the "packaging" of individuals into rigid professional standards by transmitting accepted dogmas as value orientations. The training quality is measured through practice duration and education documentary evidence (formal records). However, individuals' personalities extend beyond standards and include soft competencies determining the hard skills application in specific situations. They make professionals adaptable to the ever-changing reality, including the AI presence. Finally, every person aims at self-realization. Self-realization serves as the key internal motivator for effective and successful action (including in one's profession) with no need for external motivators. Relying on soft competencies in profiling, management, and HR development in the medium and long term leads to significant savings in financial and other resources during the launch and professional activities' implementation when they are an act of selfrealization. Consequently, existing rigid standards already require complementing them with soft competency profiles (competency profiling). A soft profile is always broader than standards and contributes not only to forming a talent pool from students in secondary specialized educational institutions and universities, technical schools, and vocational schools but also to unleashing the potential of professionals already in the field.

1 Introduction

In the 21st century, the focus is on interdisciplinary specialists and innovators capable of generating optimal and aesthetic solutions. This requires a reorientation of the educational system, moving away from linear models of education towards methods that foster self-

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organization and critical thinking [1]. Under the influence of technological progress and information overload, unprepared linear executors find themselves at a disadvantage as it can [2]. Today, it is important not only to transmit knowledge but also to teach proactivity, the ability to analyze and adapt information and construct new knowledge based on experience.

Approaches by Dale [3], Dilts [4], and Boyd [5] partly address this task but require refinement: while they aim to develop individuality, they are still oriented towards the system, somewhat ignoring the individual's independent choice. In modern conditions of accelerated technological progress and the development of Artificial Intelligence (AI), hard skills become outdated very quickly, while the demand for interdisciplinary thinking grows. We should move away from linearity and strict clustering in favor of nonlinear self-organization, an idea proposed by post-classical science in the 1970s by Stepin [6]. This is also supported by the advancement of NBICS technologies (nanotechnology, blockchain, biotechnology, information technology, and cognitive science), which require individuals to possess critical and interdisciplinary thinking.

1.1 Weak vs Strong Artificial Intelligence

What kind of personnel are needed in the era of Artificial Intelligence (AI), and why does our current education system fail to provide them [7]? One of the biggest differences between humans and AI lies in the stage of problem formulation and focus (problematizing). Humans perceive information (visually, audibly, tactilely, through multiple channels simultaneously) and compare it, more or less consciously, with the representations they have in their mental model (thought-images). Based on the match or mismatch between the perceived object or situation and the thought-image, individuals problematize either the thought-image itself or the object/situation [8]. They then take more or less conscious steps to transform the thoughtimage (more challenging and difficult) or the situation/object (easier, as they are external to the person and can be modified based on their will and desire). Throughout this process, problematization and the variability of its conscious implementation by the individual (who has independently identified the challenge and defined it as a task to complete in the surrounding reality) are mobile (meaning the actor can solve tasks differently on the go, in real-time).

AI, on the other hand, operates differently. For AI, externally given context and problematization are primary (ideally, all aspects of the case are provided upfront: the situation, the role, the content to be explored, and the direction of investigation—a complete case). The content for solving the problem is also taken "from the outside"—it is already collected as global experience and generalized knowledge in the world network (AI only compiles, it doesn't create anything from scratch and cannot create anything that has never existed in any form before, as it relies on what already exists). The situation, role, and problematization are offered to AI by the client (prompt engineer, data scientist, or an ordinary person). In other words, AI approaches the problem from the opposite direction compared to the conscious individual (a proactive leader of reality)—it receives a task and starts searching for content that corresponds to it.

Even if AI can combine visual, auditory, and textual formats of information output and input by complementing them based on certain features (as seen in Bjorn Karmann's lensless camera, which collects location data—address, weather, time of day, nearby places—through open APIs and visualizes the obtained text using AI [9], it is not equivalent to human abilities to "see" or "hear" (just as it is not equivalent to human "looking" or "listening"). This is because a conscious individual perceives the world as a flow (as processual "text") and problematizes its elements (perceived as "challenges") by solving tasks differently on the go. On the other hand, AI first requires a task and then begins to solve it (problematization occurs outside of AI, it is given to AI as an executor). Why are we discussing this issue in such detail? Because it directly relates to the training and retraining of personnel to solve regional problems in the era of AI [10].

In workplaces, conscious leaders are needed (by leaders, we mean active individuals with initiative, not passive executors of an external process), who have experience in extended interdisciplinary functional perception, independent focus (problematization), autonomy (e.g., their own worldview with an understanding of their place in it and options for realization and modernization), etc. [11].

Meanwhile, the executors that the education system has been shaping since the 1950s, following Bloom's taxonomy in its 1956 and 2001 versions, lose competitiveness in the rapidly changing realities of the AI era, as they can be effectively replaced by AI [12]

1.2 Humans have something to offer!



Fig.1 Human advantages AI does not have.

If we consider the Self-Actualization Pyramid model, the advantages of humans that AI cannot currently replicate (the foundation of a proactive leadership position) lie in the lower

part of the pyramid (from "I see" to "I know"). Today, the number one task in the region is to develop the ability for functional non-judgemental, yet critical vision in employees. On the other hand, AI starts with "I know" and moves towards "I do," but the knowledge is not individual, like that of a conscious human (problematization of the known considering causeand-effect relationships and anticipated future connections, combining logical and prospective (preventive) thinking). Instead, it is a product of compiling generalized network content (resembling "pseudo-knowledge," which is actually informedness without a practical basis, similar to children memorizing the same things in school without understanding the relevance to their reality).

If a linear executor, who can be replaced by AI as an employee, only knows what they are shown and told, because the "linear executor" becomes socialized by the culture and knowledge base of the organization they work for, absorbing generalized knowledge as per company standards, they are incapable of functionally seeing for themselves and critically looking autonomously. As a result, significant organizational resources (time, personnel, and finances) are spent on constantly supporting and training such unconscious employee-executors during task execution, providing continuous external control and motivation (unlike a leader who possesses self-control, self-validation, and self-motivation).

1.3 Competent individual



Fig. 2 Action track from the perspective of internal motivation and external supporting motivators for both the executor and the leader.

Replacing internal motivations with external motivators initially accelerates the start-up of the process (reducing the executor's time for understanding the internal motive and finding a way to implement it through action) [13]. However, this action is not related to the subjectivity of the executor (for them, it is an externally ordered and incomprehensible process). As a result, the executor acts unconsciously, realizing someone else's motives (transmitted to them as motivators) and pursuing a goal that is foreign to them (not relevant and often incomprehensible). Therefore, despite the accelerated initiation of the action process, the action itself becomes more costly because it requires constant active (or background) presence of the "client" (the author of motivators and the bearer of the true motive and goal) and their correction (providing new motivating stimuli). And even when the goal is achieved, it may not meet the client's expectations and certainly won't fulfill the needs of the executor. Over time, the client and the executor will find themselves in a system of simulations: motives (substituted with motivators), actions and results replaced with goals,

which leads to burnout of both managerial and performing staff. Interacting with such a linear executor also requires more emotional investment compared to interacting with AI.

As a result, a replacement of linear executors with AI is already taking place or will take place in the near future. AI offers advantages in terms of track completion speed, lack of need for additional motivators, and cost savings. However, the need for proactive employeeleaders who understand their surrounding reality (interpreting it in a way that makes sense to them), including pre-emptively identifying its gaps and managing the situation using AI requests as tools, is growing every day.

In the meanwhile, linear executors stagnate, and AI can only work with the past and the present, this situation is unlikely to change in the near future. This is because developing "strong" AI requires strict criteria and requirements, such as:

- Decision-making and action in conditions of uncertainty.
- Planning, development, and use of various strategies.
- Imaginative representation of knowledge, including a general understanding of reality.
- Critical thinking.
- Natural language communication, including its metaphorical component.
- Willpower in achieving optimal results, including goals shared by multiple participants.

Other human intelligence aspects at the base of the "strong" AI:

- Consciousness. Being receptive to the surrounding environment.
- Self-consciousness. Being conscious of oneself as a separate individual, specifically understanding one's own thoughts and needs.
- Empathy. The ability to "feel".
- Self-motivation. Drive to independently discover and eliminate challenges, develop.

These same parameters can be seen as requirements for the new generation of proactive employee-leaders who manage their own reality. In the first place, their formation should be based on an education system that lasts a lifetime and follows a systemic competency-based anthropocentric approach, as presented in the Pyramid of Self-Actualization of an individual.

In educational systems, including vocational training in most countries, there is a common practice of focusing on the development of hard skills. This is manifested in knowledgeoriented education or, more specifically, narrow discipline-related (natural sciences, humanities, etc.) solutions that are not contextually determined by life situations. This model emerged in response to the "social" demand for such skills, which influenced the formation of linear-oriented models in educational systems. The main example here is Bloom's taxonomy. Even after its revision by Anderson and Krathwohl in 2001 [14], it still views students not as active participants of a cognition process, but as passive recipients of information who memorize and apply what is provided to them. This "information" often passes as "common knowledge", although – in reality – it may include distorted societal stereotypes and established clichés.



Fig. 3 Bloom's taxonomy revised by Anderson and Krathwohl

By soft competencies, we mean the supra-subject personal (character-like) abilities of an individual (such as the ability to engage in successful intercultural communication or work in a multicultural interdisciplinary team, among others) that enable effective adaptation and action in atypical situations requiring interdisciplinary and intercultural creative (suitable for the momentum) solutions, e.g. context-specific short (and not long-term) decisions, thus addressing the challenges of a constantly changing reality [15]. We emphasize that competencies can only be soft, implemented at an interdisciplinary level, but not beyond the professional level (as each profession and position have its own competency profile with specific key competencies). On the other hand, skills are inherently "hard" (hard skills) as they belong to the system of knowledge, skills, and abilities acquired through the assimilation of information and can be applied in typical work conditions. The development of supraprofessional soft competencies, which may be hardened within specific (optimal and atypical) professional situations, should be pursued through immersive learner-oriented education, including the use of case studies in AR/VR/MR immersive technologies (or other gamification tools for professions or education) where participants can acquire and reflect on the required specialized experience in a safe sandbox environment. This approach, similar to that implemented at Harvard University where it is applicable only at the master's and doctoral levels, involves micro-cases similar to those employed in our product "ComPass," which is based on the Pyramid of Self-Actualization of an individual. Our micro-cases are suitable for a range of ages starting from elementary school.

Moreover, if the development of soft competencies occurs through working with case studies, the compilation of competency profiles and the assessment of individual, team, organizational, and regional competencies should also be conducted using this methodology, employing mini and micro case studies of a controlling-forming type.

2 System of Formative Case Studies

2.1 Can someone else's experience be internalized?

Experience can be obtained through two means – directly through personal involvement in an event or indirectly, by being an observer where someone else is the actual participant, and the individual perceives the situation through their eyes and relates/identifies or does not relate to it. For a linear executor, such a reading of reality is difficult to access due to superficial observation without active engagement or immersion. However, a conscious

employee-leader will engage with the situation, actively observing details relevant to their zone of proximal development as these details would trigger the individual. For example, while reading a book, watching a movie, or observing someone's behavior and witnessing the end result (and optimality of performed actions), they ask themselves and others effective questions and reconstruct cause-and-effect relationships and the context of the situation. This process helps them form their own path and approach to achieving similar results (there are no "correct" answers in life, but there can be different paths to solving the same problem, depending on personal motives and available internal and external resources [16]). This decoding of case studies represents the difference between those who are ready for life-long self-development, collecting necessary puzzle pieces from the external environment and "completing" themselves, and those who constantly need to be developed by instilling knowledge (essentially information) as a "standard" solution for a "standard" situation [17]. Cases are micro- or macro-narratives in which a protagonist faces a challenge (overcomes an obstacle) and achieves victory (a successfully resolved case) or experiences defeat (a suboptimal solution that can be improved in subsequent iterations), thereby developing their skills of observing the external environment, analyzing their own feelings, sensations, and knowledge (emerging from the reflection on personal experience rather than externally acquired information), and synthesizing specific solutions or tools that can be applied proportionately to the situation, influencing its development. The granularity of a case that an individual can comprehend (perceive, formulate, shape, package) depends on their exposure to the subject matter and the proximity of their prior experiences to it. Hence, a novice in a profession will notice coarse and significant details, while a more experienced individual (a master) will recognize micro-events.

Often, companies conduct tests to assess hard skills or review resumes that describe hard skills (or hard skills presented as soft competencies), but they overlook soft competencies (i.e., how well a person can practically apply what is written in their resume in changed conditions, such as changing companies or shifting roles within a company, which significantly alter the circumstances). Recruitment managers are surprised when a person cannot solve problems despite their impressive interview presentation and resume. This happens because, in all likelihood, during the interview, the focus was on discussing specific tools (hard skills) rather than how the person can apply them to solve the company's challenges (case studies). Currently, the market offers a wide range of professional development courses available in various fields, where a potential employment opportunity often follows successful completion. However, these courses frequently focus on teaching individuals about tools (their types and the correct keywords to mention during interviews) rather than their practical application and assimilation through practice. This approach is time-consuming, expensive, and requires the learner to assume the very leadership position described in this article. Such leadership cannot be conveyed through words (informationally) and then "repeated" like a mantra; it can only be internalized by personally living through the event and reflecting on either one's own experiences or actively observing someone else's (case study) experiences. Employees who possess this ability to observe and lead experience far fewer difficulties in employment (in contrast to a linear executor who has diligently memorized the names of tools and how to use them), as they can propose potential solutions to the employer's challenges "on the spot" during interviews, speaking the language of case studies. Individuals have a difficult time functioning out of context - they need a complete image and a behavioral model within it, correlated with accepted norms and ethics.

2.2 Competence-oriented (formative) cases

A case is a way of packaging one's experience for personal use and for passing it onto others for their comprehension and subsequent assimilation. A case represents a completed event: a

protagonist (individual) encountered something, took some action, achieved certain results, and reflected on the extent to which the obtained outcome aligned with expectations [18]. Each person has a unique experience and a distinct system of competencies. Consequently, each individual approaches case problem-solving differently, based on their perspective, understanding, behavioral strategies, and available resources. A case consists of two parts:

- 1. Behavior models (the core of the case)
- 2. Context or events (shell)

Events and perspectives on them can be unique, but the number of core elements is limited (someone + somehow + did something + arrived at something). Therefore, by learning to identify core elements from events, it is possible to transfer them to other events (experience transfer) and connect them with cores from other events, thus solving everyday problems in an interdisciplinary manner.

The formation of the case core can be described as a process: an individual's personal experience extracted from an event (internalized through reflective action, like slowcooking), packaged into a tool/principle (externalized) for future use. For example, reshaping a mental image: an individual actively observes an event, forming it in their mind as a unified system composed of elements and their interactions (the "I see" level of the self-actualization pyramid). They immerse themselves in the present moment, in the here and now (meaning it can be correlated with the "I feel," "I understand," "I want" levels) and can consciously evaluate what is happening, knowing what the next step might be (or how to formulate hypotheses about the next step if they have never encountered a similar situation before but have reflected upon case cores - knowing how to act optimally in conditions of uncertainty or how to formulate an effective question that can help progress to the next step for a search engine or an expert). They know how to take that step (relying on their effective cases from the past) and therefore feel empowered to do so (the "I can" level of the pyramid). They take action ("I do") and reflect on the resulting effect, initiating a new cycle of events. As a result, progress, development, or changes in events (situations) or behavior can start with a small and comprehensible step (micro-action), during which micro-insights are born (the individual learns something new that they didn't know before). Subsequent iterations expand the perspective, leading to new understanding (i.e., assimilating the case), introducing deeper insights (such as profound contemplation beyond mere common sense), increasing selfconfidence/self-esteem (the "I can" level that provides the impulse for another cycle of pyramid progression), and forming new options (and/or hypotheses) for actions.

When forming the core of a case, it is important for the case to be "closed" or "completed" (meaning that a resolution or outcome has been achieved), so that the individual can draw conclusions about how the path taken relates to their life situation or field of activity. These conclusions should be articulated in the individual's own words, rather than simply repeating memorized information or summarizing someone else's opinion. Incomplete cases give rise to "personal debts" that individuals owe to themselves, which increases feelings of guilt and contributes to the development of the "Impostor Syndrome," causing individuals to shift from an active leadership position to a passive position as linear executors [19].

In addition to forming the core of a case, it is also important to relate it to the context, event, or situation (the environment). In other words, for a model to be relevant, it must align with other pieces of the system (and determine where and within what context/event boundaries the core of the case can be effectively applied, where the admissible limits of its application are). Reflecting on this aspect helps to make implicit knowledge explicit and reduces the risk of hasty suboptimal actions. Having an orderly environment is crucial because there is a primacy of function over the organ, or to rephrase it in the words of Eliyahu M. Goldratt: "Tell me how you will assess me, and I will tell you how I will behave." [20]. To integrate successfully into the environment and effectively use their tools (functions), their selection must be optimal and address the challenges set by the environment.

The perspective (strategic) thinking in the ComPass system is responsible for the accurate alignment (integration/adaptation) of the case core with the event (situation). It is responsible for the ability to predict and anticipate various outcomes of events and actions in the present, with reference to the past, while being oriented towards the future and considering different contexts, both individual and collective.

Returning to the topic of interviews, potential employees, and recruitment managers: empirically, one of the key questions is how well an employee, when transitioning to a new company (a new situation/context), can form a complete case. This means extracting the core from a previous situation (previous workplace) and appropriately (ecologically) integrating it with other elements of the system in the new situation (new workplace). In a sense, it's similar to a children's game with three openings (circle, square, triangle) where the corresponding blocks need to be inserted without confusion!

But that's not all. A leader-individual has a well-developed self-competence (the name of the foundational competence in the ComPass system) and is not afraid to express themselves (to manifest themselves). Without self-expression, it is impossible to realize one's potential and self-actualize. Hence, the second empirically significant question arises: to what extent has this individual received recognition from others (the environment) for the results of their activities? By "their activities," we mean actions in which the individual invested their own meanings, where they acted on their own initiative and will (doing what they felt, understood, and desired), rather than following orders from a superior, a teacher at school, or authoritarian parents.

We confidently assume that every person has a competency potential (to be a leader or an agent of change) that they can unlock in partnership with the environment, and creating personal and educational formative cases helps to develop and harness this potential.

2.3 Formative cases in the ComPass system. Our experience

We can create a competency profile for any future or current specialist based on any document describing the requirements for the specialist, whether it's a job specification, departmental policy, or a simple job vacancy description.

The collected profile is then validated by three parties: the recruitment manager (direct supervisor) as a subject matter expert, the HR specialist as the primary client, and employees/candidates (the labor market) who undergo competency testing based on the cases and self-statements derived from the newly created profile.

We analyze the test results and finalize the profile. To validate the profile, a sample of 30 (Student's t-distribution) to 100+ people is used, depending on the task at hand.

Based on the profile and test results, we can develop educational programs that enhance the soft competencies of both current employees (or specialists from the talent pool) and interns or students in group settings (up to 5-7 people per group) or on an individual basis directly in the workplace while performing daily tasks.

For example, a competency profile for an employee in the innovation department responsible for launching new business directions would include the following competencies in the ComPass system:

- 1. Reflexivity
- 2. Systemic thinking
- 3. Mobility
- 4. Socio-emotional intelligence
- 5. Lifelong learning
- 6. Openness to new ideas
- 7. Interactivity
- 8. Logical thinking

- 9. Critical thinking
- 10. Future-oriented thinking
- 11. Information validation
- 12. Attention management
- 13. Meanings management
- 14. Motivational competence
- 15. Interdisciplinarity
- 16. Readiness for distributed leadership

The test results revealed that several employees in Company X lacked the competencies of "Systemic thinking" and "Socio-emotional intelligence." This was confirmed by the low demand for their products from the target audience, despite promising results from preliminary qualitative research. A more in-depth analysis of the employees' decision-making showed that the research was conducted formally, and those responsible for launching innovative products in the company couldn't empathize with their clients. They didn't understand their life situations, tasks, personal characteristics, selection criteria, and consumption context of the launched product, and therefore couldn't create a useful, ergonomically convenient, and potentially demanded product (they created something that no potential or existing customers needed or found inconvenient to use). At the same time, parallel testing of hard skills showed that people were well-informed in the subject area, had a high level of knowledge of the required specialization tools, and could name the tool and its applications. However, they couldn't apply them appropriately to conduct and formulate conclusions (how can I apply this for X) based on the results of qualitative research on their clients.

Subsequently, a six-month program was developed and proposed to enhance socioemotional intelligence for all interested specialists in the test group. The program consisted of two three-month stages.

Stage 1: Become a client and interact with clients. During this stage, participants performed two actions:

- A. Transition to using only their employer's products whenever possible. They needed to record their impressions and emotions experienced during product use. Important tasks were to recognize any inconveniences related to product usage, call the hotline, and try to resolve them.
- B. Spend time on the company's hotline, taking calls from customers regarding the products they used. Here, participants needed to understand the specific dissatisfaction of the customer, describe clients' emotional state (the experience with the product), and the desired state (the state the customer should have been in after product use). Important tasks were not to give feedback on feedback, not to try to justify the company, and not to act according to formal procedures (even if resolving the issue required deviating from them). Important tasks were to use the available resources at that moment to empathize with the customer and solve their problem. During the first three months, participants were not supposed to work, generate ideas, or discuss any optimizations/improvements related to enhancing the experience of interacting with the product.

Stage 2: Design an innovative solution, test it, and launch it on the market During this stage, participants were encouraged to reflect on the entire experience they gained during the first stage, related to emotional experiences and sensations of convenience collected during their hotline service dealing with the clients. They were then asked to formulate initiatives that could effectively improve the products. Test the viability of the most reasonable initiatives (according to the participants) in the simplest and most cost-effective way. Measure the results. Prepare a justification for the management, explaining why and how they see the need for full-scale implementation of the initiative. This had to include conclusions from the conducted experiments and their vision of how this solution would

affect the effectiveness (systemic thinking) of the company and customer satisfaction (socioemotional intelligence).

In the framework of the program, participants had complete freedom of action and support from the management regarding the initiatives they launched. Participants were allocated 20% of their working time plus personal (non-working) time at their discretion.

During the first week of the program, each participant formulated an average of about 40 business initiatives (hypotheses) - things they could improve in existing products to increase the company's revenue and customer loyalty. By comparison, before the program was launched, there were only about 5 business initiatives per month at best. Throughout the three months, weekly meetings were held where participants, together with managers, reflected on the gained experience, aiming to achieve a systemic effect for all participants and improve the customer experience through analyzing their own experiences with the product. As a result, at the end of the program, 12 business initiatives were proposed, 4 of which received additional funding, and subsequently 2 of them became part of the company's main product line.

Seven months after completing the program, the participants who went through it became key experts in the company in terms of customer experience and mentors for other departments involved in interactions with external or internal clients. One of the most important lessons learned by the participant group was the ability to observe and formulate cases by reflecting on their own experiences or indirectly packaging any events from the observed surrounding world into a case. Thus, they gained experience both as direct participants in an event and indirectly through a mediator (e.g., reading a book, watching a movie or theatrical performance, working with a coach, image design techniques, and listening to teachers or consultants). If a person is functionally engaged in the context of what is happening, they can reflect on the incoming flow of information, compare it with their feelings/sensations/knowledge acquired in the past, and make conclusions about the usefulness or harm of the situation, allowing them to react optimally. By "case," we mean identifying the core (hero's behavioral model) and a certain completed (mandatory) event (event model/plot model) within a situation that is observed indirectly and/or personally experienced. It is completed because there is a result (resolution), a certain fact (positive or negative) that the hero of the event came to. Based on this, it is possible to establish (rebuild, complete, expand) a cause-and-effect relationship "event -> action -> probable result," expanding the repertoire (variability) of one's own actions and increasing the number of degrees of freedom for flexible adaptation within a situational and changing world.

To form and comprehend a case, several key questions can be posed about the event:

- 1. Why? (What problem is being solved)
- 2. Who? (What roles are the participants in the event)
- 3. What? (What does each role do)
- 4. How? (How does each role act)
- 5. Why? (What caused the event to occur)
- 6. When? (What was the chronology of actions within the event or events within the situation)
- 7. Where? (Where did the event take place)
- 8. Where to? (According to which scenario did the event develop and will continue to develop)

Answers to these questions allow for a comprehensive description of the context, key actors, their behavior, the problem being solved, and the resulting outcome, based on which a model can be formed. Within subsequent reflection (self-reflection), it is possible to prepare a list of alternative options for each question and envision: what and how exactly will change in the system of relationships, and what will happen then? For people who have insufficient practice in self-reflection, it is best to start performing this exercise on paper (in the form of

diagrams or drawings), verbally expressing the events happening or through internal speech. More experienced individuals can mentally simulate the introduced changes. Additionally, it is beneficial to conduct this exercise in pairs, where one participant describes their case while the other asks guiding questions.

This exercise helps to reframe the situation, look at it from different perspectives, and develop an optimal solution that benefits all actors involved, utilizing both explicit and implicit resources.

Through the process of working with cases, the learner gradually forms their own story and becomes an independent agent, transitioning from a linear executor to a leader and initiator of change.

Within the framework of case formulation, it is important to adhere to the AAA rule (Triple A):

- 1. Anti-imperativity: Each actor in the situation is subjective and has the right to their independent point of view and free will. Therefore, they are pursuing their own tasks and expecting to gain some direct or indirect benefit, which they also have a right to. No one owes anything to anyone, and no one should coerce others (except in cases where a literal "duty" is present within the situation).
- 2. Anti-manipulativity: When working through the situation, it is important to refrain from manipulating the case in one's own favor, even when there is a risk of losing something, even if only "virtually" within the case. It is helpful to describe the case not from one's own perspective but from a third-person point of view. This allows for emotionally charged situations to be externalized, and the learner becomes an indirect participant.
- 3. Anti-corruption: In the context of case formulation, this principle is about "being honest with oneself." It means consciously avoiding trying to "cut corners" (giving oneself a "bribe" to avoid overcoming obstacles along the way but rather finding ways to bypass them) and not justifying actions based on circumstances. Instead, one should approach their own obstacles as "tasks" and come up with solutions for them. If a solution cannot be found, it is advisable to formulate specific questions for experts who have previously faced similar challenges or seek guidance through short educational programs where one can ask the facilitator or instructor practically oriented questions.

For successful case building, an individual is desirable to possess the following competencies within the ComPass system:

- 1. Reflectiveness: The ability to critically evaluate one's thinking abilities and the results of their actions, analyze the causes and consequences of their behavior. This helps individuals extract experience from the past and avoid similar mistakes in the future.
- 2. Systemic thinking: The ability to perceive and process information holistically, integrating scattered data and facts into a system to see the bigger picture, draw conclusions, and develop action plans or processes based on them.
- 3. Digital thinking: The ability to understand the functions of various digital tools, how they work, and their practical applications. "Digital" refers not only to "numbers" but also to "signs," "symbols," and parts of code. Developed digital thinking helps identify patterns (recurring events) and interpret them in the context of case formulation.
- 4. Critical thinking: The ability to form independent judgments based on facts and openness to different points of view. Individuals understand that doubt is also a tool for understanding and, therefore, strive to pose new questions that help identify logical inconsistencies in any situation.

- 5. Anti-imperativity: The preference to avoid an imperative and demanding attitude toward oneself and the surrounding world. This involves using a conscious approach to self-management and managing people, processes, and products, by asking open-ended questions that help find the best solutions.
- 6. Integrativity: The ability to "engage" in different ethno-linguistic and socio-cultural contexts and utilize this ability for effective cross-cultural interactions.
- 7. Future thinking: The ability to predict and anticipate the possible outcomes of events and actions in the present, taking into account the past and considering different contexts, both individual and collective.
- 8. Socio-emotional intelligence: The ability to understand one's own and others' emotional states, considering their possible causes and consequences in communication. It involves responsible management of emotions to foster productive collaboration.
- 9. Attention management: The ability to direct, switch, and sustain one's and others' attention when necessary for the optimal achievement of goals.
- 10. Meanings management: The ability to create an internal "dictionary" of meanings, understand how they work, and use them responsibly in communication. This involves avoiding toxic and harmful interpretations, and creating a zone of trust and mutual understanding.
- 11. Information presentation: The ability to purposefully disseminate and convey information, taking into account its specificity, channels of transmission, legal and ethno-linguistic norms, as well as preferences of the target audience.
- 12. Anti-manipulativity: The ability to critically analyze information, actively seek alternative sources to verify facts, evaluate information from different contexts, and form an objective understanding of events. This understanding can be shared with others and applied in one's own activities.
- 13. Socio-competence: The ability to purposefully interact with other people, including in virtual spaces. It involves understanding and considering the characteristics of communication channels, personal, social, ethno-cultural, and other aspects of individuals, their readiness for interaction, and our equal rights in interacting with each other.
- 14. Anti-corruption competence: The ability to resist any actions aimed at dishonest enrichment, including the use of individual characteristics (status, gender, age, etc.).

Packaging such a formative case for oneself or others systematizes the process of reflection and re-evaluation of experience extracted from events happening around and one's own actions within them. Ultimately, through a series of iterations, it helps to develop more effective solutions by observing one's actions, analysing them over time, and making adjustments based on circumstances.

3 Conclusion

In light of the pursuit of self-realization, our approach suggests that the new generation of professionals should be flexible, multidirectional, and possess an interdisciplinary ability that reflects the diversity of life. The emphasis here is on the development of universal competencies such as reflexivity, systemic thinking, modularity, autonomy, and adaptability (switchability). These competencies ensure the resilience of specialists and their effective response to the challenges of the global world in the era of Artificial Intelligence.

Instead of linear executors who receive tasks and tools for their performance from management, we aim to foster proactive leaders. Such specialists are capable of independently identifying challenges from the surrounding world, rephrasing them into tasks, determining the most effective and environmentally friendly steps to solve them, and then implementing these solutions using only the necessary resources. This approach implies significant efficiency gains from the moment a challenge is recognized as an opportunity for self-realization to the point of implementing the solution in practice.

This approach fosters the development of soft competencies, which act as catalysts for further self-directed learning and professional growth. As needed, specialists will independently acquire hard skills by taking specific courses or interacting with experts, as they recognize any knowledge gaps and are motivated to fill them. As a result, they adapt more effectively to the rapidly changing demands of modern society.

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