



## GAME-BASED LEARNING AND DIGITAL CREATIVITY AS FOUNDATIONS FOR STUDENT ENGAGEMENT

### EL APRENDIZAJE BASADO EN JUEGOS Y LA CREATIVIDAD DIGITAL COMO BASES DE LA PARTICIPACIÓN ESTUDIANTIL

Olesya Zmazneva<sup>1\*</sup>

E-mail: [ozmazneva@gmail.com](mailto:ozmazneva@gmail.com)

ORCID: <https://orcid.org/0009-0008-9643-7464>

Kirill Pitelinsky<sup>1,2</sup>

E-mail: [yekadath@gmail.com](mailto:yekadath@gmail.com)

ORCID: <https://orcid.org/0000-0001-6459-9364>

Sergey Makovey<sup>1</sup>

E-mail: [intele577tuver@gmail.com](mailto:intele577tuver@gmail.com)

ORCID: <https://orcid.org/0000-0002-6926-1079>

Daniil Panchenko<sup>1,2</sup>

E-mail: [p.daniild@gmail.com](mailto:p.daniild@gmail.com)

ORCID: <https://orcid.org/0009-0005-5300-443X>

<sup>1</sup> Moscow Polytechnic University, Russia.

<sup>2</sup> All-Russian Institute of Scientific and Technical Information of the Russian Academy of Sciences, Russia.

\*Corresponding autor

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#### ABSTRACT

This study explores how integrating gamified robotics into higher education can enhance learning engagement and develop interdisciplinary competencies. The research investigates the educational potential of combining creative design, branding, and communication tasks within a project-based environment. Using a mixed methodology that included literature analysis and an experimental workshop with students, the study assessed how participation in game-oriented technological projects influences motivation and collaboration. The results show that applying gamification principles to real educational challenges increases students' initiative, teamwork, and digital communication skills while fostering creative thinking. The findings highlight that embedding robotics and media design projects within university curricula strengthens experiential learning, encourages innovation, and helps form an educational ecosystem focused on practical skills and human-centered technological culture.

#### Keywords:

Gamification, higher education, experiential learning, digital competence, student engagement, interdisciplinary education.

#### RESUMEN

Este estudio explora cómo la integración de la robótica gamificada en la educación superior puede mejorar la participación en el aprendizaje y desarrollar competencias interdisciplinarias. La investigación indaga en el potencial educativo de combinar tareas creativas de diseño, branding y comunicación en un entorno basado en proyectos. Mediante una metodología mixta que incluyó análisis bibliográfico y un taller experimental con estudiantes, el estudio evaluó cómo la participación en proyectos tecnológicos basados en juegos influye en la motivación y la colaboración. Los resultados muestran que la aplicación de los principios de la gamificación a desafíos educativos reales aumenta la iniciativa, el trabajo en equipo y las habilidades de comunicación digital de los estudiantes, a la vez que fomenta el pensamiento creativo. Los hallazgos destacan que la integración de proyectos de robótica y diseño de medios en los currículos universitarios fortalece el aprendizaje experiencial, fomenta la innovación y contribuye a la creación de un ecosistema educativo centrado en las habilidades prácticas y una cultura tecnológica centrada en el ser humano.

#### Palabras clave:

Gamificación, educación superior, aprendizaje experiencial, competencia digital, participación estudiantil, educación interdisciplinaria.



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INTRODUCTION

The concept of the dynamic and uncertain VUCA world (Volatility, Uncertainty, Complexity, Ambiguity) has gained popularity due to increasingly complex technologies and evolving business processes, eventually leading to the emergence of the STEM concept (science, technology, engineering, and mathematics) as a targeted program for training qualified specialists and researchers in the field of education (Pitelinsky et al., 2022).

In the realities of the modern digital world—where the conditions of interaction with university applicants are rapidly evolving, and competition for prospective students is intensifying—the importance of effective communication with applicants, their parents, or representatives cannot be overstated. To optimize the document submission process and create a unique robot “staff member” of the admissions committee including within the media space.

In this context, the integration of mobile robotics into higher education not only serves administrative or promotional functions but also enriches the educational process itself. Students involved in the development, programming, and branding of such robots gain interdisciplinary competencies that combine engineering, communication, and design skills. This project-based approach aligns with modern educational paradigms emphasizing experiential learning and the development of transversal skills, collaboration, digital literacy, and creativity, which are central to preparing graduates for the future labor market.

The purpose of this study was to explore how gamification and creative design practices can be integrated into the educational environment of higher education institutions to enhance student engagement, develop digital competence, and foster interdisciplinary collaboration. It also aims to demonstrate how project-based learning that integrates technological, communicative, and cultural dimensions contributes to creating a new educational ecosystem focused on innovation, collaboration, and meaningful learning.

An egregore (thought-form, meme) is a field-based (energy-informational algorithmic) formation, that is, a soliton (wave packet or resonator). If a portion of a group—approximately 5%—are active supporters of a particular idea, their consciousnesses enter into resonance, thereby embedding the idea among their peers (i.e., for a revolution to occur, it is enough for a small but active part of society to adopt its ideas) (Eguchi, 2015; Solodovnikova, 2020). A historical example can be found in ancient philosophers, who deliberately—or by distorting holistic worldviews—linked faith with religion, imposing their own rules alongside unshakable commandments. Over time,

these rules came to dominate how individuals were classified as “believers/non-believers” or “worthy/unworthy of initiation”. The creation or transformation of deities and religious attributes led to the emergence of denominations and, consequently, their corresponding egregores. Various forms of human interaction (Sataalkina & Steiner, 2022) with egregores are presented in Table 1.

Table 1. Possible scenarios of human and egregore interaction.

Role	Scenario (Human Behavior)
Egregore Leaders	Positioned at the top of the egregore pyramid, receiving energy input from the egregore; due to the dynamic nature of egregores, leadership changes over time.
Meta-egregore Players	Protected from external egregores, they create their own egregore, controlled by the power of their own will (passions).
Egregore Wanderers	Continuously switch from one egregore to another, spending long periods studying each.
Person of the Egregore Mass	Influenced by multiple egregores simultaneously and absorbed in their trends; however, their thinking remains mostly unchanged due to mutual compensation of influences.
Egregore Puppets	Insecure individuals who rely on the egregore idea as a compensator (i.e., typical sectarian mindset).
Non-egregore Individuals	Possess strong mental defenses due to innate abilities or conscious mindset, which allows them to subconsciously block egregore influence

Source: Prepared by authors

Egregores have a powerful influence on human consciousness, making it difficult for an individual to resist. This often leads to a loss of self-control, causing excessive irritability or apathy. A person is most vulnerable to such influences during emotional states, which serves as “nourishment” for egregores. This vulnerability arises from violations of basic principles of information ecology and emotive linguoecology (a sub-system of it) (Solodovnikova, 2020).

The system of human rights and freedoms is also adjusted to meet the requirements of those in power, seeking to prevent individuals from maintaining independent opinions on specific situations. Today, such rights can be disregarded if needed, and individual viewpoints (often originating from activists) are declared illegitimate by the state if they contradict its interests—leaving almost no opportunity to defend them. As a result, the loss of individual identity among citizens devalues the concept of a highly developed society, as the imposed system unconsciously (or intentionally) presents a model of “proper” behavior. This leads to the replacement of personality with a cellular automaton surrounded by a technosphere (a collective “biomass” of unified opinion), thus ensuring rigid political control in a digital shell (Makovetsky et al., 2023).



One system that clearly illustrates the stigmatization of people—especially in light of the COVID-19 pandemic—is the mandatory requirement for vaccination as a condition for employment. Yet, no pharmaceutical companies or qualified doctors provide medical evidence confirming sufficient antibody levels, turning this campaign into a test of individuals' willingness to become programmable automatons. Interestingly, this situation has revealed independent perspectives (in some countries supported by constitutional rights to make vaccination decisions personally). People are now labeled for various reasons: in some countries, individuals with disabilities, severe illnesses, or certain ethnic backgrounds are already stigmatized and easily pushed to the margins of society. This immediately limits their employment prospects, social circles, and housing (in both physical and spiritual senses) (Kuzubov et al., 2020; Lapshina & Anokhina, 2020). Such treatment of the stigmatized reflects a regression to the Middle Ages, when outcasts were designated not out of personal hatred but as a defensive response to avoid risk of infection within a community.

**Corporate culture** is a part of a company's intellectual capital, shaping the internal climate and philosophy of interaction among employees. According to real-world international practices, the most effective organizations are those with a strong corporate culture supported by all members. In contrast, companies lacking a stable culture eventually lose competitiveness. Therefore, maintaining a strong organizational culture—a poorly formalized but vital strategic intangible resource is crucial for preserving competitive advantage (European Commission, 2006).

Organizational culture is understood as the result of collective activities of people united by shared ideas, goals, rules, corporate knowledge, experience, and values, in conditions of mutual agreement. This leads to the creation of new products and services, thereby maintaining competitiveness and, consequently, the value of the company. Corporate culture, as a key element in economic relationships, establishes sustainable competitive advantages.

An important component of any company is timely, concise (or better yet, accelerated) familiarization of new employees and partners with the rules of corporate culture, accounting for internal and external environmental factors. This goal can be achieved through knowledge management methods (resembling elements of gamification) in the form of legends, parables, proverbs, and anecdotes that describe key principles of corporate culture and influencing factors.

Such elements are often described by philosophers as elementary archetypes (according to C.G. Jung) of company

activity. A deeper interpretation of the concept suggests viewing the archetype as a fractal (recursive and multivalent) object. Just like a fractal, an archetype cannot be fully explained by listing its structural components. When decomposed, an archetype (possessing the qualities of an egregore or meme) yields parts that are just as complex and self-similar as the whole. It exists across different spatial and conceptual dimensions—making it impossible to fully perceive from the viewpoint of a single or even multiple observers. Based on this, it can be concluded that each specific organizational structure can build a fractal (dynamically changing) foundation for its evolution, constructed from elementary archetypes (European Commission, 2006).

In the educational sphere, corporate culture manifests as a shared academic ethos that unites students, teachers, and administrative staff in the pursuit of common goals. When universities cultivate such a culture, they not only transmit knowledge but also form value-based educational communities capable of sustaining innovation. Embedding game content and robotic avatars into this environment reinforces the institution's pedagogical identity, translating abstract educational values into tangible, interactive experiences.

#### Gamification in education

Modern students are “digital natives.” As representatives of new generations who have grown up surrounded by digital resources, their learning style requires adaptation to contemporary teaching conditions and content delivery. To encourage students to engage actively and remain highly motivated, the teaching staff faces the challenge of using diverse forms and strategies of instruction.

Gamification involves the integration of game mechanics (elements) into non-game contexts (in this case, educational), aimed at enhancing learning motivation, encouraging student activity, and fostering interest in knowledge acquisition. As a powerful educational tool, gamification is currently in a phase of tactical implementation (Educators Technology, 2018). Game mechanics, which naturally stimulate creative thinking, engage all participants in the process, gradually increasing the complexity of decisions that lead to the intended goal.

The idea of incorporating gamification into education has existed for some time. However, a 2020 study (Zainuddin et al., 2020) revealed that poor classroom conditions and outdated technology (Casimiro-Urcos et al., 2025; León-González & Pire-Rojas, 2025) hindered full implementation, and educators lacked sufficient arguments in favor of its potential to improve student engagement.

The advantages and potential of educational mobile robots have moved from theoretical experimentation to practical application. Under the banner of digitalization, these robots have already established their place as a new element in the educational process. Particularly appealing to younger audiences, educational robotics sparks student interest in academic content and can become a motivational link that promotes greater involvement in learning activities (Ou Yang et al., 2022).

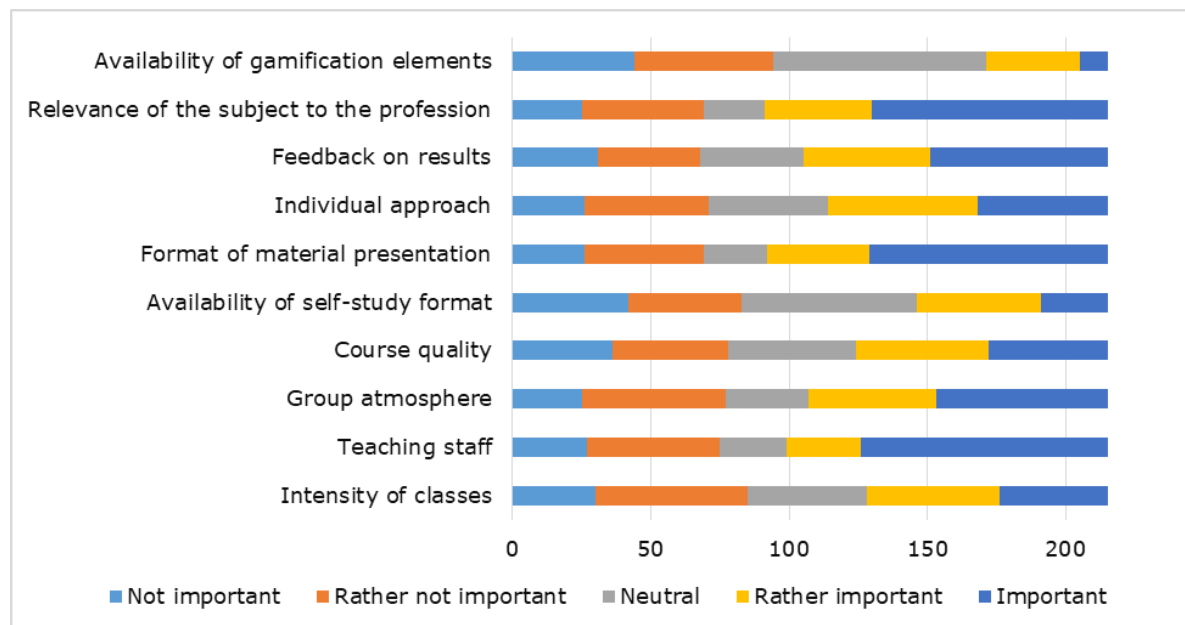
According to the authors, for mobile robots to be effectively integrated into society, they must possess the following characteristics:

- Sociability (social activity) – support for gamification elements and mechanics (e.g., integration with point-rating systems or online leaderboards to award points for correct answers or active participation);
- Safety – strict control over all active and permitted behavior algorithms (compliance with Isaac Asimov's three laws of robotics);
- Politeness – positive non-verbal behavior (Jiang et al., 2024) (for example, to avoid triggering the “uncanny valley” effect);
- Appearance – a stylish or friendly look can help overcome robophobia and facilitate faster user adaptation (reducing the “uncanny valley” effect).

In recent times, humanities instructors have shifted their perspective in favor of this concept, independently acquiring the necessary knowledge, skills, and competencies. The transition to implementing technological solutions is both urgent and a logical step in the ongoing educational revolution, which experienced renewed momentum in the post-COVID era (Linn et al., 2004).

In 2022, a study was conducted (Xaitova, 2023) on youth satisfaction with the implementation of gamification elements, involving more than 200 participants (specifically, 215) aged between 13 and 22. Figure 1 presents a statistical report evaluating the quality of the educational course, which, in addition to standard teaching methods, included gamified components.

Fig. 1: Factors in evaluating the quality of an educational course.

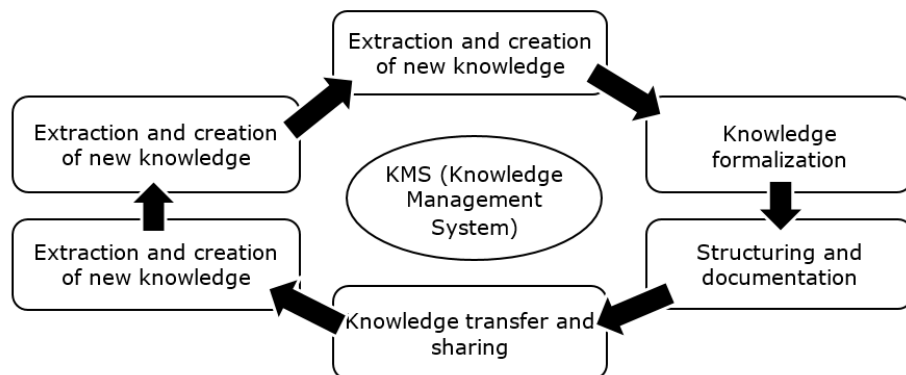


Source: Prepared by authors

The cyclical knowledge management system (hereinafter – KMS) implies a connection between electronic resources and a company's assets and is defined as a complex business process of collecting, storing, sharing, and managing

the company's collective knowledge, thereby increasing its efficiency and productivity. The concept of Big Data is becoming increasingly relevant in companies, as the volume of informational assets and incoming data continues to grow (Sacco et al., 2018). The cyclical KMS in the context of interaction with company assets is illustrated in Figure 2.

Fig. 2: Elements of the cyclical knowledge management system (KMS).



Source: Prepared by authors

The process begins with the creation of knowledge, which subsequently becomes part of the organization's assets. After being structured and incorporated into work programs, this knowledge is passed on to participants in the educational process (from instructors to learners). The next stages involve the reuse of knowledge for its updating or renewal and its retention as the company's informational assets—both tangible and intangible.

The cyclical KMS is aimed at managing socio-economic decisions while keeping up with current trends. A time may soon come when the development of such a system leads to the emergence of a new Middle Ages in the digital era (so-called "digital medievalism") (Makovetsky et al., 2023), where local groups that support legal voluntarism, social scoring systems (similar to "vaccinated/unvaccinated" classifications), and other mechanisms act as feudal lords or roaming bandits.

From a pedagogical standpoint, gamification introduces a paradigm shift from teacher-centered to learner-centered education. By transforming traditional assignments into interactive challenges, it supports differentiated instruction and allows students to learn at their own pace. Moreover, gamified environments provide continuous formative feedback, enabling both students and educators to monitor progress in real time. This contributes to the creation of adaptive educational ecosystems that respond to diverse learning styles.

In educational institutions, the effectiveness of administrative decisions impacts not only organizational structures but the entire educational process. This demands optimal strategies for institutional management to efficiently handle resources (including intellectual capital) and to ensure the graduation of highly demanded professionals whose knowledge will benefit their organizations and maintain their competitive edge.

## MATERIALS AND METHODS

The methods used in the article encompass both theoretical-analytical and applied levels of research. First, the authors employed a literature review of academic sources and publications on topics such as gamification, organizational culture, digital identity, educational robotics, and egegorial models. This allowed them to establish a conceptual framework for understanding the impact of gaming practices and naming on the educational context and the university's digital environment.

Secondly, a practical design method was used in the study: during in-person sessions under the guidance of an instructor, a naming master class was conducted. Within this framework, a group of 16 students participated in a brainstorming session. Based on a technical brief and defined criteria (simplicity, reliability, accuracy, and associativity), the participants proposed over 60 name options. These were then subjected to expert evaluation and discussion, with



special consideration given to the characteristics of the target audience: applicants, their parents, university staff, and technology enthusiasts.

The third key method involved the application of branding principles and communication strategies — particularly Castells (2020) concept of communication protocols. This enabled the authors to outline steps for promoting the robot's image in both educational and media environments. The development of visual identity, media content, surveys, analytical tools, and the assessment of engagement through social media were designed as part of an integrated methodology for implementing this technological innovation into university practice.

The naming session functioned not only as a design exercise but as an educational experiment in applied learning. It enabled students to experience authentic professional scenarios — teamwork, critical thinking, and creative problem-solving — within a pedagogically guided framework. This hands-on format demonstrated the effectiveness of experiential learning and underscored the potential of project-based activities in cultivating digital and communication competencies among future professionals.

RESULTS AND DISCUSSION

In today's digital and fractal world, "the construction of a new public sphere in a networked society occurs through the creation of communication protocols between various communication processes" (Castells, 2020, p. 178). According to renowned sociologist Castells (2020), communication protocols are understood as "practices and the organizational platforms that support them" (p. 179). Castells identifies the main communication protocols as advertising, the creation of a shared media language, branding, and the formation of a digital hypertext network.

Castells emphasizes that "in our society, communication protocols are based not on a shared culture, but on participation in its creation."

To promote the brand of the Robot Turtle, a series of activities is planned—first and foremost, focused on engaging participants in the process of getting to know the robot. One such activity was the development of the name, or naming process.

The name development for the Robot Turtle took place in several stages, presented in Table 2.

Table 2: Naming algorithm.

Stage	Description
1. Task Definition	The process took place in person under the guidance of an instructor. Before name development began, a master class on naming was held for the students. A group of 16 students was provided with materials previously published by the project developers (Pitelinsky et al., 2024). The technical assignment given to the participants also included a number of requirements from the project leader, such as: reflecting simplicity, reliability, and accuracy in data transmission. These materials formed the foundation for further idea generation.
2. Idea Generation	As part of the assignment, 16 first-year students from the Faculty of Information Technologies at Moscow Polytechnic University conducted a team brainstorming session and proposed more than 60 name options. These included: Mospab, Turtulia, Technosbeka, Technoturtle, Oogway, Mostik, Leonardo, Aunt Motya, BewPolly, Solidis, Shield of Knowledge, Gardeus, Laminate, Kappa, Knowfort, Mindguard, Aristocratus, Shebeshem, TrustPath, Infodino, Mosenok, Turtletta, MPCherepashka, MosPasha, Tortilla, MPU-TA, Moscode, Helpasha, Mostechbot, Tutltortl, Kappa, Secretary, Tortilla, Wise Turtle, Trust Turtle, Polyturtle Pro, Tartoltech, Abitturtle, University Shell, Polya, Aydored, Abituider, Politechka, Quantia, Tera, Torteck, Skoronya, Technora, Shell, Shellron, Shellion, Neuro-na, and others. This stage was crucial for gathering a wide range of ideas and diverse solutions
3. Name Selection	After generating ideas, a selection process was conducted to identify the most suitable names based on the specified characteristics and target audience. The target audience was preliminarily segmented into several groups: Applicants: the main segment the product is aimed at; Parents: decision-makers, interested in accurate document processing; University staff and admissions office representatives; Educational institutions: schools and kindergartens that might use a version of Polly Turtle in their educational processes; Tech enthusiasts: adults interested in new technologies and robotics. From the options listed above, a few were selected: Quantia, Helpasha, and Polya



4. Final Selection	After discussions and analysis, the name “Polya” proposed during brainstorming was further refined. Ultimately, it was transformed into “Polly Turtle” (Черепаха Полли). This name best reflects the robot’s purpose and characteristics, is easy to transliterate and translate, is understandable to both Russian and foreign audiences, and phonetically resonates with the university’s name. It also evokes positive associations. The name sounds affectionate, derived from the full name “Polina.” The name Polina has roots in Greek and Latin and is widely used in East Slavic cultures. It can also be a short form of Apollinaria, derived from the name of the Greek god Apollo—patron of the arts and prophet of the future. The cultural code of the turtle is quite rich. In Eastern tradition, for instance, the turtle symbolizes fair retribution (Headrick, 2022). The idea of combining connotations of future prediction (from Apollo) and justice becomes especially relevant in the context of the high stress experienced by applicants and their parents during the admissions campaign.
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Source: Prepared by authors

Beyond achieving branding objectives, the process revealed valuable educational outcomes. Participants reported increased confidence in public speaking, enhanced teamwork, and improved understanding of naming as part of communication strategy. The instructor’s feedback indicated that integrating creative assignments with practical technological tasks stimulated engagement and deep learning, demonstrating the value of applied creativity within technical education.

Analysis of some proposed names

Despite the variety of proposed names, many did not meet the criteria of reliability and precision and may cause misunderstanding among the target audience. Below is a brief analysis of several suggested names that were not selected:

Helpasha – The name sounds highly informal, based on colloquial language, and does not evoke associations with reliability.

- 1. Gardeus – A complex and unclear word that doesn’t evoke any associations with turtles or their functions.
- 2. Captcha – Associated with internet technologies and lacks a direct connection to the robot; it may lead to confusion.
- 3. Tortilla – While somewhat associated with turtles, it carries culinary connotations and does not reflect the robot’s functionality.
- 4. Secretary Aunt Motya – A long and overly informal name, unsuitable for a serious educational context.
- 5. Wise Turtle and Trust Turtle – While these names have generally positive connotations, they sound too abstract and unoriginal, and do not function well as proper names.
- 6. Technora, Neurona, Quantification, Quantia – These names lack a connection to turtles and their intended functions.
- 7. CherePasha, Mosenok, MPUA – These names may be perceived as humorous or overly informal, reducing trust in the robot and its reliability.

Justification for the final name choice “Polly Turtle”

The name “Черепаха Полли” / “Polly Turtle” was selected as the most appropriate for the reasons outlined in Table 3.

Table 3: Justification for the name choice.

Reason	Explanation
Association with a turtle	The word “Turtle” is the English equivalent of “черепаха,” making the name easily recognizable and understandable for the target audience.
Ease of pronunciation and declension	The name sounds light and pleasant, making it memorable. It is easy to inflect and modify, allowing for affectionate diminutives like “our Polechka.”
Personification	The name “Polly” adds a friendly and personalized touch, which can increase trust from applicants and their parents.
Reliability and precision	The name conveys positive associations linked to cultural traditions, reliability, and precision—qualities aligned with the robot’s mission.
Cultural associations	The name “Polly” may evoke associations not only with Polina, Apollinaria, and Apollo but also with famous characters from literature and film, enhancing its appeal.
Homonymy	“Polly” is phonetically similar to the first part of “Polytech,” reinforcing its connection to the university’s brand

Source: Prepared by authors



Results of name development

As a result of the naming process, several key objectives were achieved:

- A unique and memorable name was created for the Robot Turtle.
- The name reflects the robot's main characteristics and intended function.
- A positive connection is anticipated with target audiences—applicants, their parents, Moscow Polytechnic students, and university staff—which may contribute to the robot's successful integration into the educational process.

The development of the Robot Turtle's name at Moscow Polytechnic University demonstrated the importance of a creative approach in media communications and public relations. The choice of the name “Polly Turtle” was the result of thorough analysis and comprehensive discussion, underscoring the significance of collaborative efforts between students, instructors, and project leaders. The chosen name not only reflects the robot's features but also has the potential to strengthen the positive media image of Moscow Polytechnic University.

Going forward, a series of measures is planned to assess brand awareness (pre- and post-campaign surveys) to evaluate engagement on social media—likes, comments, shares mentioning the robot's name—and to analyze changes in the number of community members, directly linked to the new robot admissions assistant.

Brand promotion of the robot turtle

Promoting the Polly Turtle brand requires a comprehensive approach, including market research, creation of a unique image, active content production, and PR campaigns. It is crucial not only to attract attention to the product but also to build a loyal user community, ensuring long-term brand adoption.

When outlining the brand promotion strategy, it is important to note that the positioning of Polly Turtle will primarily emphasize its uniqueness—especially within educational institutions—as a product that combines technology, entertainment, gamified learning, and user interaction. For successful brand advancement, a strategy must be developed that considers the target audience, product features, and current trends in the media industry.

Goals and objectives of brand promotion

At the initial stages of promoting the Robot Turtle brand, we set the following objectives:

1. Increase brand awareness: make Polly Turtle recognizable among target audiences.
2. Create a positive image: establish Polly Turtle as a symbol of innovative approaches to document submission, education, and entertainment.
3. Boost “sales”: achieve a certain level of document submissions through the robot during its first year of operation.
4. Build a community: form an active user community that shares photos and posts about this unusual member of the admissions committee at Moscow Polytechnic University.

The stages of brand promotion work are reflected in Table 4.

Table 4: Stages of brand promotion work.

No.	Stage	Description
1	Market Research and Competitor Analysis	It is planned to analyze the target audience after interacting with the robot or simulate possible interaction without the robot's direct involvement, and conduct surveys and focus groups to understand participants' needs and interests. To study competitors, it is necessary to analyze existing indirect analogs—similar products on the market—to identify their strengths and weaknesses. Based on the analysis, the unique selling proposition (USP) and key advantages of Polly Turtle over competitors should be defined





2	Branding Development	A final version of the visual identity must be created: logo, color palette, and fonts associated with Polly Turtle. For the turtle's design, it is proposed to use <i>Geochelone radiata</i> (the radiated tortoise) as inspiration. The pattern on its shell can easily be stylized into the logos of Moscow Polytechnic. Notably, the shell's design appears modern, technological, and visually similar to a neural network. A modern slogan should also be created that reflects the essence of the product, for example: «Apply by playing! Yours, Polly Turtle.» The slogan should speak directly to the applicant and help reduce the stress experienced during the admissions process. For brand promotion, a souvenir line may also be developed—such as a modern collection of miniature turtles with university branding that stands out among typical promotional products.
3	Content Strategy Creation	To promote the brand in media, create video content targeted at the audience: a series of short clips showing Polly Turtle's features (e.g., submitting documents as a game, «applicant–parent–robot» interaction); launch a blog and publish articles on robotics, education, child development, and modern technologies using Polly Turtle as an example; actively use social media and manage official pages on university channels and groups.
4	PR Campaign	Prepare press releases announcing the product for various media outlets; organize interviews with developers, the project lead, educators, and tech experts to explain the benefits of Polly Turtle; present the product at technology and toy exhibitions
5	Advertising Campaign Launch	Priority should be given to targeted advertising: launch social media ad campaigns aimed at applicants, parents, and educational institutions. A viral effect is expected from user-generated content and posts about interacting with the robot. As Castells (2020) noted, one of the key shifts in modern culture is “the transition from mass communication based on mass media to mass self-communication based on the Internet” (p. 79).  To broaden media reach, partnerships with bloggers and influencers may be established to test Polly Turtle and share their impressions on social platforms. Promotions and contests can also be used to attract attention.
6	Feedback and Product Improvement	The first year after launch is especially important for collecting user feedback—actively gather reviews via social media, conduct special surveys, and analyze the information to identify strengths and weaknesses and improve the robot's functionality.
7	Community Creation	Given the “global shifts in culture and social behavior: individualization and networking” (Castells, 2020, p. 206), building a user community will be a key stage of brand promotion. This could include launching a channel on behalf of Polly Turtle, where users can share experiences and ideas for improvement, organize slogan contests, forums, and social media groups, host webinars and workshops on how to use Polly Turtle during the admissions campaign, and develop a loyalty program for applicants who have younger relatives planning to enroll at Moscow Polytechnic in the future (“Pre-register with Polly Turtle for next year”). Part of the revenue from souvenir sales may also be allocated to support wild turtle conservation initiatives

Source: Prepared by authors

After each stage of brand promotion, a number of activities must be carried out to evaluate the effectiveness of the strategy, as shown in Table 5:

Table 5: Monitoring activities.

Activity	Indicators
Key Performance Indicators (KPIs)	Brand awareness level (surveys among applicants before and after the admissions campaign)
	Number of documents submitted via the Robot Turtle during the admissions period
	Social media engagement (likes, comments, shares)
	Number of community members
Monitoring and Reporting	Annual KPI analysis using analytical tools
	Preparation of strategy implementation reports each year after the admissions campaign

Source: Prepared by authors

## CONCLUSIONS

The impact of informational content has a profound effect on human consciousness, sometimes leading to unforeseen consequences, as reflected in theories about sociopathic individuals who go against systemic norms often hailed as rebellious opinion leaders by mass media, influencing the public (a living mass under the control of a shadow network system). Wisdom and freedom, when aligned with human rights, enable the potential of future generations to be realized. However, the human pursuit of freedom and truth will always resemble the futile efforts of authorities trying to block a turtle's access to water or food.

The principles and mechanics of gamification play an important role in the existence of modern digital society. They help nurture essential qualities in the younger generation, such as respectful interaction with others and educational structures making the learning process more meaningful. At the same time, delivering content effectively and concisely has become a more complex and demanding task. Robotics, as a tool for enhancing motivation and interest in learning (and even upbringing), has already transitioned into a stage of active implementation with positive feedback from all participants in the educational process.

Promoting the Polly Turtle Robot brand requires a comprehensive, multi-step approach that includes market research, creating a unique university image, and actively utilizing original content and professional PR strategies. It is important not only to draw the attention of applicants to the educational products and services offered by a particular university to a well-defined target audience, but also to build a loyal and enthusiastic consumer community of supporters, including applicants, students, their families, professors, and others, who show commitment to the university's traditions, innovations, team, and values.

The educational value of the Polly Turtle project extends beyond institutional branding. It represents an example of how universities can merge robotics, gamification, and media communication into holistic educational ecosystems that foster interdisciplinary learning. Such initiatives strengthen students' professional identity and readiness for the digital economy, where creativity, collaboration, and technological literacy are essential competencies.

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## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest for the publication of this scientific article.