

3. Global Food Security Index 2022 [Electronic resource]. – Mode of access: <https://impact.economist.com/sustainability/project/food-security-index/>. – Date of access: 12.04.2024.

## **The Collective Intelligence Impact on the Success of Business Teams**

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The dialectical nature of communication implies an internal connection between the whole and the part, forming the universality of the collective mind phenomenon. It is based on the assumption that everything is connected to everything and that everything is unique. This idea was formulated by M. Bakhtin, who emphasized that “meaning reveals its depth only when it meets and comes into contact with another, alien meaning; they enter into a kind of dialogue that overcomes the isolation and alienation of these special meanings, these cultures” [1]. This is extremely significant to look at the way how in communication, in particular in business communication, the individual and the collective come into contact and coexist and how this can influence the success of the team.

Why do some groups perform better than others? One important factor is the skills of the group members. However, even groups with comparable skill members can have different levels of performance. Considerable work in fields such as social psychology, organizational behavior and industrial psychology has focused on various predictors of group performance [2]. On the other hand, in almost all cases, these studies have focused on a specific task and attempted to characterize what makes most groups perform well on tasks of that kind.

Another aspect associated with collective intelligence is the level of diversity within the group. In general, groups performing creative or innovative tasks often benefit from diversity, while groups performing tasks where efficiency is important often suffer from diversity [3]. Cognitive diversity, including cognitive styles and perspectives, is of particular importance to collective intelligence because it is directly related to the ability of group members to communicate with each other. It has been found that there is a curvilinear inverted U-shaped relationship between cognitive style diversity and collective intelligence [4]. In other words, groups that were moderately diverse in cognitive styles performed better than those that were very similar in cognitive styles, as well as those that were very different. This suggests that groups whose members are too similar to each other lack the diversity of perspectives and skills needed to successfully perform different tasks. However, at the same time, groups whose members are too diverse have difficulty communicating and coordinating effectively.

Some studies measured collective intelligence in groups of students in a management course and then tracked their performance on a series of group tests over the next two months [4]. Teams with high collective intelligence scored significantly higher on group tasks, even though their members underperformed on individual tasks. Moreover, teams with high levels of collective intelligence showed sustained improvements in performance across a series of tests, suggesting that teams became better at retaining collective information and applying it to their tasks over time. Overall, the research described here demonstrates the existence of measurable collective intelligence in groups that is similar to general intelligence in individuals. This collective intelligence arises from a combination of bottom-up and top-down processes within groups and predicts future performance and effective learning in business environments.

To conclude, the concept of individual intelligence gives us tools to better understand education, job performance, and many other aspects of life. Similarly, we believe that the concept of collective intelligence can be useful for understanding many aspects of group activity, in particular in teaching a professionally oriented foreign language, business communication, business building, providing more effective ways of controlling differences between business teams.

### **Literature**

1. Bakhtin, M. *Speech Genres and Other Late Essays* / M. Bakhtin // Austin : University of Texas Press, 1968. – 170 p.
2. Teams in organizations: From Input-Process-Output models to IMOI models / D. R. Ilgen [et al.] // *Annual Review of Psychology*. – 2005. – Vol. 56. – P. 517–543.
3. Williams, K. Y. Demography and diversity in organizations: A review of 40 years of research / K. Y. Williams, C. A. O'Reilly // In: L. L. Cummings (Ed.). *Research in organizational behavior*. – 1998. – Vol. 20. – Greenwich, CT : JAI Press. – P. 77–140.
4. Cognitive diversity, collective intelligence, and learning in teams / I. Aggarwal [et al.] // *Collective Intelligence Conference*, Santa Clara, CA. – 2015. – P. 74–112.

## **Анализ влияния изменения климата на экономическое неравенство стран**

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В современных условиях фактор изменения климата оказывает существенное влияние на уровень и качество жизни населения как развитых, так и развивающихся стран. В развитых странах изменения климата отражаются на увеличении содержания парниковых газов в атмосфере, снижении урожайности, прочих последствиях. Развивающиеся страны в большей степени