WIkipedia and AI: Imagine a smarter world...

Nebojša Ratković
Wikimedia Serbia

Nevena Rudinac
Wikimedia Serbia

Abstract

In this research, we propose to evaluate the opinion of Wikipedia editors' communities in English, Spanish, and BCSS (Bosnian, Croatian, Serbian and Serbo-Croatian) languages about the use of artificial intelligence, and draft strategic directions for the improvement of Wikipedia based on the community opinion.

Background:

- Wikimedia's strategic commitment to the movement for development and innovation, expressed in the Movement Strategy 2030 as the strategic recommendation *Innovate in free knowledge*
- Advances in technology and the necessity to adapt Wiki projects to them.

Objective: Drafting proposals for the improvement of Wikipedia in accordance with the community's needs.

Material and methods: The data will be collected through focus groups and analyzed using thematic analysis.

Expected findings: Suggestions on how AI tools can be implemented on Wikipedia following the needs of the community.

Introduction

Our proposal addresses the need for clear ideas about what the community thinks about how Wikipedia should change with artificial intelligence. Exploring this topic can solve two main issues:

- Identify community needs for future technology development.
- Guide the development of Wikipedia in line with those needs. - malo je neprirodno; čak ni meni nije jasno.

Benefits from the research:

- Wikimedia Foundation: will benefit from designing initiatives aimed at integrating AI into Wikipedia by having insights into what editors think how these changes can be useful for them.
- Wikimedia Community: will benefit by gaining insights on how to support and strategically adapt its programs in the future.
- Wikipedia Community: see Community impact section.

The main research question will be *in what ways can Wikipedia benefit from the implementation of AI tools?* Specific questions are:

- What specific Wikipedia needs can AI tools address?
- Which AI tools will be most beneficial?
- What is the best way to implement AI tools on Wikipedia?
- Resources (in terms of specific education, technical innovations, etc.) are needed in this process?

- How do underrepresented groups benefit from the use of AI tools, like minorities and people with disabilities?

This study will be carried from June 1st, 2024, until June 30th 2025.

Related work

Several studies have focused on testing AI-based tools for education and skill learning (Shorey et al., 2019; Ruiz-Rojas et al., 2023) or identifying crucial competencies for AI application in specific fields (Russell, 2023). However, limited research has explored the opinions of potential users regarding the AI tools they would benefit from, particularly in the context of Wikipedia. Our explanatory study aims to fill this knowledge gap and contribute to understanding AI implementation.

Methods

The data in this study will be collected by focus groups with editors from English, Spanish Wikipedia, and Balkan Wikipedia communities (Serbian, Croatian, Serbo-Croatian, Bosia)[1]. The plan is to organize six to seven focus groups with 5 to 6 participants. Additionally, one more focus group will be organized with underrepresented editors. Participants will be recruited by spreading information about the research on Village Pump, through communication channels, through personal contacts with editors, and strong connections with other affiliates, communities and user groups in the Balkan region and globally. The data will be analyzed using thematic analysis through which the most important themes will be identified.

[1] English Wikipedia was chosen because it is the first and dominant language version of Wikipedia, Spanish was chosen because it is one of the biggest language versions, and the Balkans were chosen as small community. In this way different types of communities are covered.

Expected output

- Insights to inform: Wikipedia and Wikimedia communities about the directions for supporting each other, on strategic directions and expectations in terms of technological development.
- Decision making: Wikimedia Foundation for undertaking initiatives and planning in accordance with the needs of the communities.
- Presenting research findings at global Wikimedia conferences and local gatherings of Wikimedia communities
- Sharing the results with academic communities to advance our knowledge of possible ways to apply artificial intelligence and knowledge management.

Risks

The only risk that can jeopardize the success of the research is a lack of respondents for the focus groups; given the relatively small number of interviews, finding editors interested in participating shouldn't pose a problem. We can influence this challenge with various campaigns, as well as by contacting the network of Wikipedia collaborators and editors, with whom we have had many years of cooperation so far. In addition, the strong ties we cultivate with chapters around the world can be of benefit to us.

Community impact plan

The target group of this study is Wikipedia Community, the plan for this study is to explore their point of view on the implementation of AI

tools on Wikipedia. This study provides a space for their thoughts and needs to be heard. The results of this study will provide concrete suggestions on how AI tools can be applied to Wikipedia to improve the experience and provide support for editors on Wikipedia.

Evaluation

The success of this research project can and should be evaluated based on:

- Data collection: a successful collection of high-quality and complete data.
- Timeliness: adherence to the project timeline.
- Impact: providing the basis for adapting Wikipedia, so that through new technologies it would continue to remain relevant and provide a channel for contributing to knowledge.

Budget

Salaries 22,237.72 USD
Equipment 918.47 USD
Software 594.30 USD
Services 3,727.90 USD
Institutional overhead 1,620.82 USD
Unforeseen expenses 216.11 USD

Total: 29,315.32 USD[2]

Prior contributions

Nebojša Ratković and Nevena Rudinac earned the Research Fund Grant in 2023. for the study A Whole New World - Integration of New Editors into the Serbian Wikipedia Community
Prior publications:

- "Promoting Equity in Access to Open Knowledge: An Example of the Wikipedia Educational Program", Nebojša Ratković and Nevena Rudinac
- "Women's Participation in Wikipedia: Cross-Border Balkan Perspective", Nebojša Ratković
- "Wikipedia and Its Sisters Projects as Important Elements of the Teaching and Learning Process – a Review of the Global Situation", Nebojša Ratković
- "Desenvolvimento Profissional de professores – o exemplo do curso credenciado da Wikimedia Sérvia", Nebojša Ratković

References

Ruiz-Rojas, L. I., Acosta-Vargas, P., De-Moreta-Llovet, J., & Gonzalez-Rodriguez, M. (2023). Empowering Education with Generative Artificial Intelligence Tools: Approach with an Instructional Design Matrix. *Sustainability*, *15*(15), 11524.

Russell, R. G., Novak, L. L., Patel, M., Garvey, K. V., Craig, K. J. T., Jackson, G. P., ... & Miller, B. M. (2023). Competencies for the use of artificial intelligence–based tools by health care professionals. Academic Medicine, 98(3), 348-356.

Shorey, S., Ang, E., Yap, J., Ng, E. D., Lau, S. T., & Chui, C. K. (2019). A virtual counseling application using artificial intelligence for communication skills training in nursing education: development study. *Journal of medical Internet research*, *21*(10), e14658.

[2] Oanda (14/12/2023): 1 EUR = 1.08055 USD