

# CULTURAL DIMENSIONS AS VARIABLES SHAPING THE ACTIVITY OF MEMBERS OF VIRTUAL COMMUNITIES OF PRACTICE: A CASE STUDY OF WIKIMEDIA PROJECTS

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## 1 INTRODUCTION

Presently, one of the most up-to-date challenges in online activities, professional as well as voluntary ones, is the coordination of asynchronous activities. Although the dominant language in the biggest internet endeavours is English, lately, there has been a constant development of other language projects. Hence, the creation of communities that are homogenous linguistically and culturally may lead to closing these communities in separate internet spaces. Moreover, in some endeavours, at first created globally, forking may occur, similarly, as it happens in different versions of software [1]. Thus great cultural variety emerges. Homogenous versions of projects are under a bigger influence of national cultures than global organizational culture, like in language versions of Wikipedia. This is why investigating cultural dimensions of virtual communities of practice like Wikipedia language versions is so significant to understanding the complexity of their functioning. The aim of this paper is to present the summary and critical analysis of the research results of the authors of this paper on the meaning of cultural dimensions in the activities of Wikipedia participants.

## 2 MATERIAL AND METHODS

The analyzed research results are based on the articles published by the authors. Structural and behavioral data were collected, eg. a number of participants' activities in different areas of cooperation, the visual content of user homepages in Wikipedia, forms of communication, statistics of operation on Wikipedia content pages, internal measures of articles quality.[2–4]. Up to 30 language versions of Wikipedia were studied. Chosen cultural dimensions of Hofstede were used, according to the issues significant in wikipedia operation like: the gender gap, problems stemming from user rights (power), and level of individualism influencing cooperation. Methods used in conducted studies were as follows: qualitative and quantitative content analysis, including Wikiproject pages, userpages, and activity logs. The tools allowing the collection of different kinds of data involved analytical tools: xTools and Who is active. Some of these data were collected from a special page Wikimedia Statistics. Statistica software was used for statistical analysis of collected data.

### 3 RESULTS

The adaptation of newcomers is strongly linked to Hofstede's cultural dimensions [5]: more collective, insecure, and "feminist" societies use more supportive tools. MAS also influences preferences related to rewards and symbols, moreover, in cultures with lower MAS (more feminine) relationships and gratitude are more important, which manifests itself in more thanks between users. Culture influences leadership style and decision-making: in societies with low power distance, administrators are more likely to cooperate than control. In Orthodox and Islamic cultures, with higher PDIs (power distance), fewer users maintain administrator rights (more frequent changes in the power structure), and in Western and East Asian cultures, with lower PDIs, more administrators maintain their functions for a longer period. The results of the research indicated that IDV (individualism) correlates positively with editing activity per user – individualistic cultures are characterized by greater courage in editing other people's content and fewer rules. Recognizing these dependencies can be crucial in improving the functioning of projects. Increased rotation among administrators in cultures with high PDI can allow them to become familiar with the tools used to protect the project and better internalize the rules. Supporting and engaging new users can be a more effective strategy in cultures with low MAS. In contrast, in cultures with high IDV, communities may spend more time motivating each other for higher performance by identifying new challenges.

### 4 CONCLUSIONS

Language versions of global projects are usually created by users recruited from other cultures. For this reason, it would be more beneficial to design initiatives and interfaces taking into account cultural conditions. This may translate into greater involvement of virtual communities of activities, such as communities of individual language versions of Wikipedia. The research carried out was limited in scope. The analyses were limited to data on only some language versions and specific categories of users. Further research could include data obtained from Database Backup Dumps or use a public querying interface (Quarry) to get answers to SQL queries quickly.

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