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ABSTRACT Abstract

Categories and Subject Descriptors H.4 [Information Systems Applications]: Miscellaneous; D.2.8 [Software Engineering]: Metrics—complexity measures, performance measures

General Terms to be completed

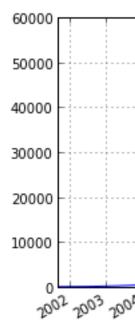
Keywords to be completed, if necessary

1. INTRODUCTION

METHOD

- 1. The current investigation involved collecting historical data of edition and quality metrics, from 10 categories of articles in Wikipedia, with focus on fine-grained edits by contributors to articles.
- 2. The chosen categories contain between 50 and 4000 articles, and between 50 and 5000 contributors have edited at least 100'000 times all the articles over their history. (c.f. table 1 for summary statistics on the categories).
- 3. For each category, we constructed 10 accumulative snapshots each starting from the first edit in the category until 10% more of the categories total edits have occurred.

Total edi Snapsho



??snapshot points for Feminist Writers.png

. For each snapshot, we constructed the matrix \mathbf{M} of contributors versus edited articles. For each snapshot, the values in \mathbf{M} are defined as the number of edits made by contributors to each article in the category until the snapshot timestamp. The matrix $\mathbf M$ constitutes the basic input for implementing the \mathbf{FQ} algorithm. It has a typical triangular structure as shown on Figure ??. We also collected standard metrics of contributor expertise [] and of article quality [?], to test the quality of the FQ algorithm in the context of group collaboration.

Table 1: Summary statistics for each category

Non-English or Math	Frequency	Comments
Ø	1 in 1,000	For Swedish names
π	1 in 5	Common in math
\$	4 in 5	Used in business
Ψ_1^2	1 in 40,000	Unexplained usage

Figure 1: Matrix M ordered by decreasing order of edits on both contributors and articles dimensions.

- 4. We then applied the most general implementation of the \mathbf{FQ} algorithm as developed for modeling the economy and competitiveness of countries [].
- 5. While the implementation presented here is strictly similar to ??, the interpretation is slightly different in the context of group collaboration. Indeed, while countries competes for selling products, the hypothesis here is that Wikipedia contributors cooperate, at least in a very informal way, for improving the quality of articles.
- 6. Refer to problems here, if any.
- 3. CONCLUSIONS