Gamification of Wikipedians' contribution(s?)

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Abstract

We propose to study the efficacy of gamification strategies and tools employed to increase the motivation, engagement, retention and persistence of wikipedians, and to improving the quality of their contributions.

We focus on specific groups: gifted high-school students, challenged youth, self-selected college-level classes, and retirees. The Wikimedia Israel chapter runs training courses for Hebrew and Arabic writers in these groups.

The study will examine contributors (Wikipedians') behavior and gamification outcomes through both historic and self-report, as well as field experiment lenses.

Introduction

The vitality and relevance of Wikipedia largely depend on expanding public participation in the activities of creating and maintaining content. Recruiting, training and rewarding collaborative system participants is a challenge. In some Wikimedia communities, this goal is complicated further for relatively smaller audiences. Thus, for Hebrew and Arabic Wikipedia, issues of motivation, engagement, retention and persistence loom even larger.

How does one motivate continued quality in crowdsourced content? Gamifying the contribution of Wikipedians is one possible answer. Over the years, Wikipedians evolved a variety of gamification tools, including the collection and display of scoring and access measures, edits, hierarchical rankings, "Barnstars", badges and more.

The Israeli chapter of Wikimedia Foundation supports writing by Hebrew and Arabic speakers. In the case of both these subcommunities, the critical mass of writers is harder to reach. Wikimedia Israel actively recruits potential new writers, known as "Wikipedians", offering packages of training and continued support. The more promising outreach programs focus on gifted high school students, college-level classes, and recent retirees. Recently, cohorts of young individuals on the high end of the autism spectrum have been addressed too.

Unfortunately, for a variety of historical, cultural and demographic reasons, not all participants in onboarding programs stay involved. Editing Wikipedia is a demanding "hobby". The bar is high as writing on a subject requires often rare expertise, careful fact checking, attention to detail and often frustratingly difficult interactions with a critical audience of senior or veteran writers. The result is very high turnover and dropout rates among new Wikipedians.

We propose to study the efficacy of gamification tools in alleviating some of the problems and bolstering motivation.

With the cooperation of Wikimedia Israel, the study will be conducted among past and present participants in courses and public outreach programs that are intended to recruit more Wikipedians.

Specifically, we aim to classify, identify and describe successful gamification strategies in order to understand what are the real payoffs of which kind of gamification tool, and for which audiences are the tools most efficacious.

Date: This study will contain two phases. The first will begin June 1, 2024. Both phases will conclude by June 30, 2025.

Related work

The PIs on this study have been involved in studying the issues of creativity and markets, with a special attention to motivation, value of information and barter, exchange, prestige and social capital. We have published over the years several widely cited works on gamification approaches and evaluations, and have overseen a few of these in the field. In addition, Prof. Rafaeli has a long standing involvement in studying motivations of Wikipedians, and in building and implementing field interventions.

Methods

The study will employ two phases: a retrospective and a field experiment approach. In each of the phases, both self-report (interviews and surveys) and unobtrusive (machine-recorded) data will be collected. In Phase 1we will map the persistence and contributions to Wikipedia of graduates of recent Wikipedia editing courses. We will note and classify active use and presence of gamifying artifacts on user pages, as well as collect measures of the intensity of commitment to continue contribution This phase will also classify the type of gamification techniques already in use, and assess the relative recognition, familiarity and attraction.

The second phase will be a series of contained field studies. We will intervene in some of the new classes of potential Wikipedians to be held during the year.
Different classes or individuals will be introduced to selected gamification stimuli, with regards to their contribution to Wikipedia. Current courses on the matter hardly mention the presence of gamification tools.

Expected output

We expect this project to yield several deliverables, including:
Insights about gamification tools that carry most promise;
Inform decision making about future courses and community outreach; Scientific publications; Presentations.

Risks

We do not expect any risks and will receive standard human-subjects overview.

Community impact plan

This project has an applied meaning and potential for Wikimedia activities. It has longer range, scientific ambitions in understanding information provision behaviors, and it specifically helps the goal of addressing underrepresented communities in Wikipedia expression. Focusing on means to involve Hebrew and Arabic speakers, attract retirees and retain their involvement, and successfully motivate challenged youth are all community impacts beyond basic contribution to Wikipedia.

Evaluation

The deliverables of each of the two phases will have both empirical quantitative forms and policy-oriented take-aways. The classification of gamification approaches and tools produced in phase 1 of the project (roughly the first five months) can be compared against experience gained in the past, and practices in other locations. The field experiment slated for phase 2 will have classical before and after measures with controls. reported and assessed using accepted scientific criteria.

Budget

The total requested budget is $43,000.
Budget items include research assistants, Wikimedia Israel costs, travel, PI and incidentals.

Prior contributions

Dr. Yogev has extensive experience in studying art markets and creative industries.
She has examined the social mechanisms behind quality evaluation in the Israeli art market and has taught courses on creativity and innovation.
Tamar has published in journals such as *Academy of Management Journal*, *Socio-Economic Review* and *Social Networks*.
Professor Sheizaf Rafaeli has been involved in studying value of information, online systems, gamification and CMC for over three decades. He has published widely on the subject. He has also been involved Wikipedia since its inception, serves on Wikimedia Israel's board, and was involved in putting together the 2010 Wikimania conference in Haifa, as well as presenting at several other Wikimania meetings.

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