Votes and comments in recommender systems: The case of Digg

Introduction

Digg.com is a social media site that exhibits the typical characteristics of recommender systems and attempts to combine them. On Digg, users can submit links to news stories, and vote (digg) and comment on other users' links. Like other social media sites, Digg also allows users to designate others as friends and track their activities.

The argument that the "wisdom of the crowd" can provide better recommendations seems very convincing to the internet user, while the increasing need to overcome overload and bias justifies tapping into this "pool of wisdom" even further.

Objectives

We aim to investigate the use of votes and comments in recommender systems. We examine how votes and comments are distributed on Digg.com and we statistically analyze diggs and comments for different content categories.
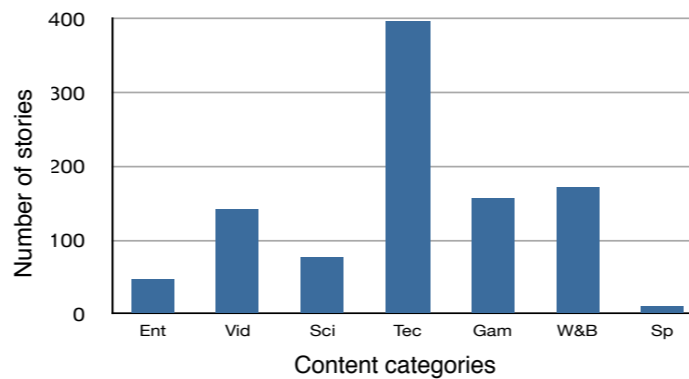
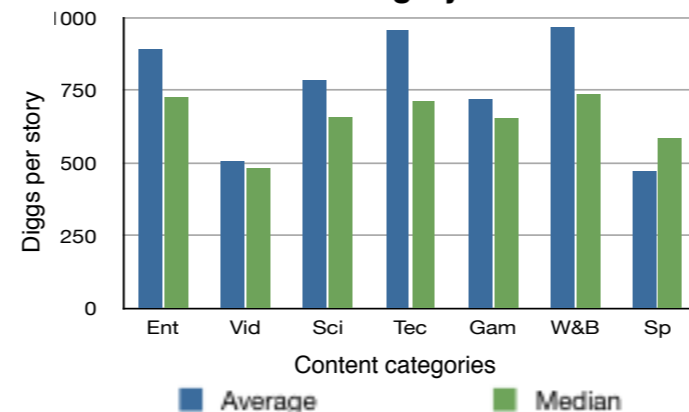## The Digg Dataset

Most recent 1000 popular Digg stories:
- diggs
- comments
- category (entertainment, videos, science, technology, gaming, world and business, sports)
- subcategory
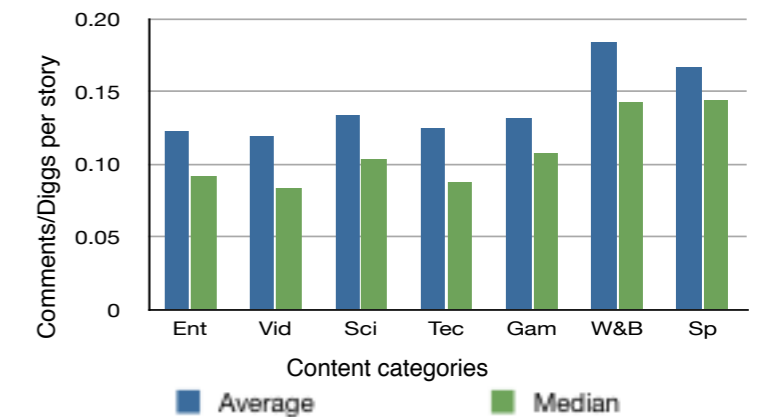- title

Results

Number of popular stories per category

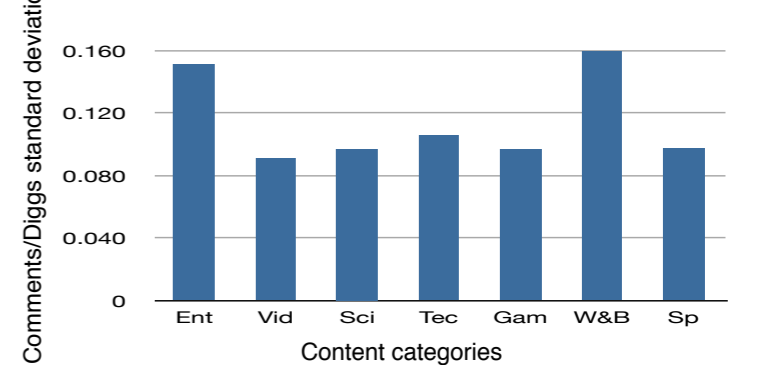### Average and median no of diggs per story per category

Results

Ratio of comments/diggs per story per category

Ratio of comments/diggs - standard deviation

Conclusions

The high standard deviation of the comments/diggs ratio implies that votes and comments are qualitatively different mechanisms for providing recommendations.

Different content categories exhibit different recommendation patterns; more controversial topics (e.g. politics) present a higher comments/diggs ratio.

Tasos Spiliotopoulos, University of Madeira
tasos@m-iti.org