

RESEARCH PROPOSAL
**MEASURING THE VALUE OF USER-GENERATED
CONTENT AND COPYRIGHT:
THE CASE OF YOUTUBE**

Submitted for consideration:

NBER Economics of Digitization Post-Doctoral Fellowship

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EXECUTIVE SUMMARY

One important aspect of copyright is to promote greater investment in innovative efforts, allowing a creator of original work to profit by reducing supply for a period of time. Inevitably, this raises the question of how much of an increase in creative expression is stimulated by copyright. In particular, research on intellectual property (Gilbert and Shapiro 1990; Hall and Ziedonis 2001; Lerner 2009; Waldfogel 2011) addresses this question of whether the patent system or copyright has accelerated the pace of innovative discovery or creative expression.

The theory also predicts that in some cases, the restriction of access to original creative works will leave consumers worse off. In addition, by increasing the cost of new discoveries of expression, copyright can lower the rate of subsequent creative expression (Gilbert 2011). The latest novel, film or music album builds on a culture of creative expression. Innovators often build on the innovations and creations of others. Even if copyright stimulates some creative works, the cost to subsequent creators may exceed these benefits.

In this project, I propose to empirically assess the costs of copyright from limiting the access to the original work and preventing the subsequent creative works as well as the value at one of the popular user-generated content (UGC) sites, YouTube. User generated content (UGC) is exploding online, highlighting some of the emerging issues for copyright. UGC mega-sites, such as YouTube, Facebook, and Wikipedia, have given UGC a new level of significance, due to their ability to bring together large number of users to interact in creative ways. Measuring the value of a wide range of UGC with significant volume, and a clear relationship to copyright provides a metric to gauge consumers' interests on creative expression.

Many studies examined the possible influence of file-sharing networking sites like Napster and Grokster on copyrighted content (Oberholzergee and Strumpf 2007; Rob and Woldfogel 2006; Zentner 2006). Unlike the strong criticism on file-sharing sites due to its infringing capability, the new breed of UGC mega-sites offers more complex, mixed-up questions on the copyright. An important characteristic of UGC sites is the increased functionality apart from their ability to serve as mere venue for pirated works. Most of the UGC sites offer a genuinely large variety of content, much of which is original, at least in significant part. Additionally, much UGC dissemination occurs at online, where, copyright has a more encompassing grant of jurisdiction given the fixation of works unlike offline expressions. Thus, the

emergence of the set of technologies that facilitate UGC incentivize the production of creative content by lowering its cost.

The research questions can be summarized as follows:

- How can we quantify the value of “subsequent” creative expressions that a copyrighted content brings about? Does copyright increases subsequent creative expression?
- What is the value of the supply of original copyrighted work at YouTube? How can we measure the value of “absence” of supply restriction in copyrighted work at YouTube?
- Who benefits more from copyright comparing the benefits and the costs between new artists vs. established artists?

Our focus is to uncover the value of UGC in the nature of copyright and recover the value of characteristics of copyright. To do so, we first quantify the amount of UGC and copyrighted contents at YouTube, and empirically investigate the value of contents with respect to the degree of originality or creativity. The value of UGC can be different based on whether an original creation, pure replication of others, or a so-called mashups, built on other original work. We will also examine the life-cycle of a UGC and examine the time value of contents.

EXPECTED OUTCOMES

There are following expected output that will be provided during, and at the conclusion of this phase of the project:

- We expect to quantify the amount of copyrighted contents and user-generated content (UGC).
- We will explore a variety of measure of the types of user-generated content and the nature of copyright for each type.
- We develop a model of valuing user-generated content based on originality and time duration, related to the copyright. We will deliver a comparison between the value of copyrighted content and user-generated contents.
- Finally, will analyze the direct and subsequent costs of copyright from constraining the supply of original content.

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