

The willingness to pay for copyrighted files over P2P networks: An empirical investigation on French survey data

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You should manage your intellectual property to maximize its value, not to maximize its protection. (...) Growing the market is usually more important than extracting the last dime from your existing business model. Shapiro & Varian, 1998.

By contrast to this assertion, record producers try to enforce at all costs their copyrights over the Internet. To achieve this goal, they use various methods to fight against unauthorized sharing: trials against individuals, lobbying for the reinforcement of copyright rules, DRM, access restriction... In so doing, they are singled-minded about preserving the CD market and duplicating their traditional business methods for the electronic delivery of contents. However, by adopting such enclosure strategies, they not only threaten the existence of P2P networks –which prove to be a much wider innovation than the sole files-swapping technologies aimed at sharing copyrighted contents– but also neglect a major way to increase their profits.

This paper is the continuation of two previous studies we made on P2P unauthorized sharing. The first one identifies and compares several scenarios about the regulation of unauthorized sharing and in particular, P2P networks (Rochelandet, 2004). The second one assesses on an empirical basis this alleged « digital pollution » borne by copyright industries. It investigates the determinants of file-sharing behaviour (Rochelandet & Le Guel, 2005).

The current paper estimates the willingness to pay for copyrighted files (music and movies) when they are shared over P2P networks. In doing so, we analyse its determinants and therefore we highlight the premises for a new market based on P2P swapping.

Among those determinants are demographics (age, gender, income...), ethical concern, levels of computer skill and equipment, communication and entertainment expenditure, localization (size of the cities, distance to cultural goods retailers), and social interactions variables. A particular focus of this section is on the respective role of individual preferences and social interactions to explain the individual WTP. Our key idea is grounded on models of social interactions according to which individual choices and behaviours not only depend on the individual incentives but also on those of other individuals. An individual is more likely to make a given decision if his 'neighbours' take the same decision than if they do not. These models permit to explain a variety of social phenomenon, in particular the existence of increasing returns of adoption. Accordingly, the main purpose of the paper is to assess the willingness to pay of individuals who share copyrighted content.

We use three Tobit models to forecast the determinants of the willingness to pay for freely downloadable cultural goods (i.e. (1) 'music', (2) 'films' and (3) 'music plus films'). These models seem to be suitable when the dependent variable contains monetary values and thus there is a significant proportion of zero responses.

We base our analysis on data gathered through Web-based survey in January and February 2005. We use survey responses of about 3400 individuals. Multiple imputations method is used (Monte Carlo Markov Chains) to correct missing data problems. Statistics are proposed with and without post-stratification weights (Calmar procedure – INSEE). Econometric results take into account missing data corrections.

Based on these estimations, we find that the willingness to pay depends positively and significantly of the number of neighborhoods who copy music, films and music plus films. By contrast, demographics variables are not significant. Social interactions seem to be a key determinant of copying behavior.