# <u>The Indifference of the Crowds?</u> User Generated Content, Crowdsourcing, and Risk-Shifting

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#### Introduction

The Internet undeniably creates new, vibrant markets and social trends. The revolutionary integration of computers with high storage, communications, and processing capacities into interconnected global networks has given rise to innovative forms of social interaction, economic production, and cultural expressions. "Billions of connected individuals can now actively participate in innovation, wealth creation, and social development in ways we once only dreamed of."

Within the "Web 2.0" framework of possibilities, websites and services that host "user generated content" (UGC) have multiplied. Some of them employ what has become known as "crowdsourcing": "turn[ing] over tasks traditionally performed by employees to the Internet multitude." Companies and nonprofits thus manage to assimilate the Internet's potential for scale and efficient use of human brainpower, attracting and binding together contributions from online crowds.

Among the many and varied business models adopted by crowdsourcing initiatives, there is a worrying inclination for entrepreneurs to compete with traditional content providers through UGC platforms that shift quality risks from contractors to the (anonymous) content providers. This new risk allocation tendency is magnified by other problems associated with crowdsourcing, such as the disconnection between the crowd's individuals and the final product of their work, and the information asymmetry between contractors and the "crowd workforce".

This paper explores the supply, through crowdsourcing enterprises, of content that traditionally used to be produced by identified "authors", and provided to contractors to whom quality risks were allocated. Part I describes the advent of crowdsourcing websites and services fueled by UGC. The effects of certain crowdsourcing businesses that shift content production risks to the Internet crowds are then discussed in Part II. Part III concludes with a brief assessment of the legal and economic aspects of crowdsourcing UGC companies' risk-shifting measures.

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<sup>&</sup>lt;sup>1</sup> See Yochai Benkler, The Wealth of Networks: How Social Production Transforms Markets and Freedom (2006) ["The Wealth of Networks"].

<sup>&</sup>lt;sup>2</sup> DAN TAPSCOTT AND ANTHONY D. WILLIAMS, WIKINOMICS: HOW MASS COLLABORATION CHANGES EVERYTHING, 3 (2006) ["WIKINOMICS"].

<sup>&</sup>lt;sup>3</sup> BARRY LIBERT, JON SPECTOR, WE ARE SMARTER THAN ME, 3 (2008). See also Crowdsourcing in a Nutshell, WTTW 11 – interview with Kris Hammond, available at http://www.clickadvisor.com/?p=345 (stating that "outsourcing is sourcing from someone, crowdsourcing is sourcing from anyone").

## I. Web 2.0, Crowds, and Content Production

Nowadays, businesses, governments and NGOs seek to deploy "Web 2.0" strategies – those that benefit from network effects, collecting dispersed user contributions and blending them into valuable products and services. Although these strategies are not restricted to content production, the online generation of creative content from many individuals is impressive, in terms of both quantity and quality. It spans a surprisingly wide array of interest areas: encyclopedia entries, "posts" and "tweets" in social networks, news, content related to political activism and humanitarian efforts, bits of general knowledge, unbundled contributions to artistic collages, among others, exemplify user generated content, tied together by pioneering websites and services.

UGC, some authors claim, can be more precise and efficient than content produced by traditional companies – and, as a consequence, it can be much more lucrative. "The new promise of collaboration is that with peer production we will harness human skill, ingenuity, and intelligence more efficiently and effectively than anything we have witnessed previously. [...] Whether designing an airplane, assembling a motorcycle, or analyzing the human genome, the ability to integrate the talents of dispersed individuals and organizations is becoming *the* defining competency for managers and firms." <sup>12</sup>

"Finding the right person for the right task", in the Internet age, can become a different type of search, one that involves simply offering a task to anonymous crowds. A multitude of Internet users can finish tasks almost instantly, as long as the tasks are well organized and the

<sup>&</sup>lt;sup>4</sup> See Tim O' Reilly, What is Web 2.0? Design Patterns and Business Models for the Next Generation of Software, O'Reilly, Sep. 30, 2005, available at http://oreilly.com/web2/archive/what-is-web-20.html

<sup>&</sup>lt;sup>5</sup> See James Surowiecki, The Wisdom of Crowds: Why the Many Are Smarter than the Few and How Collective Wisdom Shapes Business, Economies, Societies, and Nations (2004) ["The Wisdom of Crowds"] (arguing that large groups can muster an astounding collective intelligence, whose economic, social, and political potential is only beginning to be explored).

<sup>&</sup>lt;sup>6</sup> See e.g. Wikipedia, available at http://www.wikipedia.org/ See also Eric Goldman, *The Future of Internet Content and Services: Wikipedia's Labor Squeeze and its Consequences*, 8 J. on Telecomm. & High Tech. L. 157 (2010) (discussing the tradeoffs Wikipedia faces with respect to user contributions and credibility).

<sup>&</sup>lt;sup>7</sup> See e.g. Spot.Us, available at http://spot.us/

<sup>&</sup>lt;sup>8</sup> See e.g. Avaaz, available at http://www.avaaz.org/ (promoting coordination of international politics activists); Ushahidi, available at http://www.ushahidi.com/ (promoting disaster reporting and relief efforts). See also Molly B. Land, *Peer Producing Human Rights*, 46 Alberta L. Rev. 1115 (2009) (discussing the potential benefits of employing new technologies to promote community-based human rights reporting); Molly B. Land, *Networked Activism*, 22 Harv. Hum. Rts. J. 205 (2009) (explaining the "online networked activism" phenomenon and debating its potential contributions for traditional mobilization activities).

<sup>&</sup>lt;sup>9</sup> See e.g. Aardvark, available at http://vark.com/

<sup>&</sup>lt;sup>10</sup> See e.g. The Sheep Market, available at http://www.thesheepmarket.com/ (merging 10,000 sheep drawings created by online "workers" into a single artwork).

<sup>&</sup>lt;sup>11</sup> See THE WEALTH OF NETWORKS, supra note 1, at 63-75 (discussing how UGC brings value to open source software projects, massive multiplayer online games, etc.). See also Herdict, available at http://www.herdict.org/web/ (aggregating reports of inaccessible websites to spot and denounce Internet censorship); patientslikeme, available at http://www.patientslikeme.com/ (gathering medical information from patients).

<sup>&</sup>lt;sup>12</sup> WIKINOMICS, supra note 2, at 18 (emphasis in the original).

<sup>&</sup>lt;sup>13</sup> See JEFF HOWE, CROWDSOURCING: WHY THE POWER OF THE CROWD IS DRIVING THE FUTURE OF BUSINESS, 14 (2008) ["CROWDSOURCING"] (noting that "crowdsourcing uses technology to foster unprecedented levels of collaboration and meaningful exchanges between people from every imaginable background in every imaginable geographical location.")

proper incentives are offered.<sup>14</sup> To channel these exchanges in efficient ways, "contractors" venture into platform-building, designing websites to lure Internet users into playing a game, <sup>15</sup> contributing to a cause, <sup>16</sup> or just earning money. <sup>17</sup> As a result, crowdsourcing projects with very diverse structures and goals proliferate, ranging from charity initiatives <sup>18</sup> to immoral opportunities to make money. <sup>19</sup>

Different business models have been used by for-profit crowdsourcing companies. Some of them act as traditional marketplaces, providing users with online stands in which their products or services can be offered; examples include online crowd-markets for books, <sup>20</sup> shirts, <sup>21</sup> 2D<sup>22</sup> or 3D designs, <sup>23</sup> songs, <sup>24</sup> pictures, <sup>25</sup> etc.. These marketplaces are increasingly incorporating features such as prizes and rankings, introducing objective criteria for judgments and prioritization of the offers. Other crowdsourcing companies structure actual labor markets: online workers are asked to solve tasks, which can vary according to the workers' skills <sup>26</sup> – for example as software application testers <sup>27</sup> – or correspond simply to tasks human beings are capable of solving, but computers cannot yet handle. <sup>28</sup> Finally, many crowdsourcing initiatives are based on giving prizes to the best "answers", which correspond to questions related to scientific conundrums, <sup>29</sup> marketing campaigns, <sup>30</sup> or content demand, for contractors in the private, <sup>31</sup> nonprofit, and public sectors. <sup>32</sup>

<sup>&</sup>lt;sup>4</sup> Although this paper is concern

<sup>&</sup>lt;sup>14</sup> Although this paper is concerned with online UGC crowdsourcing, crowdsourcing is not restricted to the Internet. See e.g. Ankit Sharma, Crowdsourcing Critical Success Factor Model: Strategies to harness the collective intelligence of the crowd, Working Paper 1 (2010), available at http://irevolution.files.wordpress.com/2010/05/working-paper1.pdf (describing mobile-based crowdsourcing initiatives).

<sup>&</sup>lt;sup>15</sup> See e.g. Gwap, available at http://www.gwap.com/gwap/about/ (providing "games with a purpose", i.e. games that create meta-data related to pictures, movies, etc.).

<sup>&</sup>lt;sup>16</sup> See CLAY SHIRKY, HERE COMES EVERYBODY: THE POWER OF ORGANIZING WITHOUT ORGANIZATIONS, 109-42 (2008) (describing the diverse motivations that may instill people to contribute to collaborative production enterprises). Id. at 142: "When people care enough, they can come together and accomplish things of a scope and longevity that were previously impossible; they can do big things for love."

<sup>&</sup>lt;sup>17</sup> See John J. Horton and Lydia B. Chilton, *The Labor Economics of Paid Crowdsourcing*, arXiv:1001.0627v1 [cs.HC] 5 Jan 2010, available at http://arxiv.org/PS\_cache/arxiv/pdf/1001/1001.0627v1.pdf (comparing monetary and non-monetary crowdsourcing incentives).

<sup>&</sup>lt;sup>18</sup> See e.g. Free Rice, available at http://www.freerice.com/ (sponsoring rice donations to fight hunger, through a question & answer exercise coupled with advertisements);

<sup>&</sup>lt;sup>19</sup> See e.g. Subvert and Profit, available at http://subvertandprofit.com/ (selling votes on social media websites).

<sup>&</sup>lt;sup>20</sup> See e.g. blurb, available at http://www.blurb.com/

<sup>&</sup>lt;sup>21</sup> See e.g. Threadless, available at http://www.threadless.com/

<sup>&</sup>lt;sup>22</sup> See e.g. JuJups, available at http://www.jujups.com/show/about\_us

<sup>&</sup>lt;sup>23</sup> See e.g. Shapeways, available at http://www.shapeways.com/

<sup>&</sup>lt;sup>24</sup> See e.g. cdbaby, available at http://www.cdbaby.com/

See e.g. iStockphoto, available at http://www.istockphoto.com/ ; Worth1000, available at http://www.worth1000.com/

<sup>&</sup>lt;sup>26</sup> See e.g. oDesk, available at http://www.odesk.com/w/about ; Elance, available at http://www.elance.com/

<sup>&</sup>lt;sup>27</sup> See e.g. UTest, available at http://www.utest.com

<sup>&</sup>lt;sup>28</sup> See e.g. CrowdFlower, available at http://crowdflower.com/ ; Amazon Mechanical Turk, available at https://www.mturk.com/

<sup>&</sup>lt;sup>29</sup> See e.g. XPrize, available at http://www.xprize.org/; InnoCentive, available at http://www.innocentive.com/

<sup>&</sup>lt;sup>30</sup> See e.g. Battle of Concepts, available at http://www.battleofconcepts.com.br/ / http://www.battleofconcepts.nl/

See Jeff Howe, Look Who's Crowdsourcing, WIRED, Jun. 14, 2006, available a http://www.wired.com/wired/archive/14.06/look.html

<sup>&</sup>lt;sup>32</sup> See Eliot Van Buskirk, U.S. Challenges Citizens to Solve Its (Our) Problems, WIRED, May 27, 2010, available at http://www.wired.com/epicenter/2010/05/u-s-challenges-citizens-to-solve-its-and-our-problems/

The union of UGC websites and crowdsourcing has spawned a number of companies whose businesses are structured along these lines. Many of them are supported by Internet advertising, requesting free UGC and distributing it free of charge – that is the case, for instance, of nearly all ratings<sup>33</sup> and video-sharing websites.<sup>34</sup> However, other companies are thriving on business models that explore risk-shifting.

Risk can be allocated on the crowds by UGC platforms, basically, through prize mechanisms. A contest is launched with specifications for the desired content and a price flag; in response, anonymous creators dedicate time and effort to provide it, but only a small portion of the content samples is chosen by the contractor. The following crowdsourcing initiatives are all examples of this risk-shifting practice:<sup>35</sup>

Company	<b>Business Sector</b>	Community	Risk Spread
		Size	
99designs <sup>36</sup>	Web and Logo Design	70,329	"50+ designs to choose from"
CreatMyTattoo <sup>37</sup>	Tattoo Designs	500+	"20+ Custom Tattoo Designs"
crowdSPRING <sup>38</sup>	Logo Design, Web	62,628 (70+	"at least 25 entries" <sup>39</sup>
	Design and Copywriting	countries)	
OpenAd <sup>40</sup>	Advertising, Marketing	11,500 (125	"We guarantee a minimum of
	and Design	countries)	20 submissions per pitch"

### II. Beyond the Bright Side: UGC by Anonymous Users

Crowdsourcing, as seen above, can be utilized to scale UGC websites and services. The revolutions brought about by this new form of economic organization include major efficiency gains, which derive from a stringent reduction in transaction costs, as well as from time savings and diminished opportunity costs. Nonetheless, allowing contractors to demand content from the crowds, but compensate only the "winner" one, results in risk-shifting. Wage certainty and distributional concerns arise from this technology-enabled development in decentralization, along with ancillary problems related to ordering content from anonymous amateurs, such as undesirable phase-outs of professional ethics, and disconnection between the crowd's individuals and the final product of their work.<sup>41</sup>

<sup>&</sup>lt;sup>33</sup> See e.g. Digg, available at http://about.digg.com/; Yelp, available at http://www.yelp.com/; TripAdvisor, available at http://www.tripadvisor.com/

<sup>&</sup>lt;sup>34</sup> See e.g. YouTube, available at http://www.youtube.com/; Spike, available at http://www.spike.com/

<sup>35</sup> The chart is by no means exhaustive. See e.g. eYeka, http://fr.eyeka.com/

<sup>&</sup>lt;sup>36</sup> 99designs, All Design Contests, available at http://99designs.com/contests

<sup>&</sup>lt;sup>37</sup> CreatMyTattoo, Start a Tatttoo Design Contest, available at http://www.createmytattoo.com/contests/create/a

crowdSPRING, crowdSPRING is the world's best creative department, available at http://www.crowdspring.com/how-it-works/

<sup>&</sup>lt;sup>39</sup> crowdSPRING, How many designs will I choose from?, available at http://www.crowdspring.com/help/faq/how-many-designs-will-i-choose-from/

<sup>&</sup>lt;sup>40</sup> OpenAd, Who we are and what we do, available at http://www.openad.net/

<sup>&</sup>lt;sup>41</sup> See Jonathan Zittrain, *Ubiquitous Human Computing*, Oxford Legal Studies Research Paper No. 32/2008, available at SSRN: http://ssrn.com/abstract=1140445 ["*Ubiquitous Human Computing*"].

"Crowdsourcing represents a radical shift in how many industries – especially those trafficking in information – do their work". But while this reorganization has positive sides, it can also lead to turbulences on the workplace, because "on spec work" – content production in contests where the prize is uncertain  $-^{43}$  raises the risks faced by individual workers. As a consequence of companies spreading their risks onto workers, professionals may be put out of business, and clients may be subject to a market in which amateurs are the rule.  $^{44}$ 

A less professional market can result in lower prices, evidently, but can also cause information problems: content clients are not always certain about what they want, and have a hard time pricing guidance from experienced professionals. Crowdsourcing companies thus face a great challenge in communicating well the skills and experience of the crowds, especially where more complex tasks are demanded.

Another effect of UGC crowdsourcing is that tasks tend to be broken down into small slices, to facilitate granular responses and quicker, more precise outputs. Workers, then, have much less information than the respective contractors about the object and purpose of their actions. They can feel disconnected from the outcome of their labor, as workers in physical assembly lines. But they can also fail to grasp even the basics about the what they are contributing to: if the crowdsourcing process allows for opacity, the information asymmetry can be so high that the "crowd workforce" is not able to evaluate the moral valence of its work.

In sum, risk-shifting by UGC crowdsourcing companies can distort current content markets, possibly affecting the quality of the content supplies, and the satisfaction of the crowds with the work done. It can also breed moral apathy, if ignorance and indifference regarding the purposes and outcomes of the crowdsourcing contests predominate.

## III. Risk-Taking and Risk-Avoidance by Online Crowds

Crowdsourcing can amplify economic issues associated with outsourcing, such as dislocation of labor and potential races-to-the-bottom, given that it disregards the origin of work output. Asymmetries in the labor markets can thus be easily explored. Moreover, labor rights

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<sup>&</sup>lt;sup>42</sup> CROWDSOURCING, supra note 13, at 16. See also THOMAS W. MALONE, THE FUTURE OF WORK: HOW THE NEW ORDER OF BUSINESS WILL SHAPE YOUR ORGANIZATION, YOUR MANAGEMENT STYLE AND YOUR LIFE (2004) (describing the more general phenomenon of decentralized management, and arguing that it will continue to expand into new markets as communications and decision-making technologies are enhanced).

<sup>&</sup>lt;sup>43</sup> See Jeff Howe, Is Crowdsourcing Evil? The Design Community Weighs In, WIRED Epicenter, Mar. 10, 2009, available at http://www.wired.com/epicenter/2009/03/is-crowdsourcin/ (explaining a typical task performed through a crowdsourcing UGC platform, where "[t]he winner receives a nominal fee (as little as \$200), and the client receives a logo or website design at a fraction of what a professional agency might charge. The losers get zip, which goes a long way to explaining why working on spec ("on speculation," or without guarantee of payment) has always been considered the work of last resort for writers, designers and other creative professionals.")

<sup>&</sup>lt;sup>44</sup> See CROWDSOURCING, supra note 13, at 23-46 (arguing that traditional photographers now face a diminished demand for stock images because this market is being supplied by crowdsourcing to amateurs).

<sup>&</sup>lt;sup>45</sup> See THE WEALTH OF NETWORKS, supra note 1, at 99-106 (describing "granularity" and "modularity" as key characteristics for the social production of information).

<sup>&</sup>lt;sup>46</sup> See *Ubiquitous Human Computing*, supra note 41 (arguing that "an absence of disclosure deprives people of the freedom to choose the goals that their intelligences will advance.")

and workplace regulation in general are difficult to enforce in cyberspace, and it might be hard to adapt existing protections which are intrinsically linked to a physical workplace.<sup>47</sup>

These potential "digital sweatshops" problems are aggravated by the fact that crowdsourcing can monetize human relations.<sup>48</sup> In the specific case of UGC, non-monetary motivations for content creation may begin to compete with monetary ones – ubiquitously. If other institutions, such as governments and non-profits, neglect to intervene, there might be insufficient incentives for genuine cultural expressions.

This perspective is even more worrying with risk-shifting crowdsourcing: because irresponsible contractors can cheaply demand more content than they intend on acquiring, in order to have a larger pool of samples or to tap resources based on slightly different instructions, they create grave moral hazard.<sup>49</sup> Unless that moral hazard is addressed, the level of risk faced by content providers can become unsustainable,<sup>50</sup> leading to exacerbated quality losses and to an utter scarcity of qualified professionals.

So far, industry self-regulation has targeted UGC companies only with respect to copyright protection, and only from the narrow perspective of copyright owners who would have claims against UGC.<sup>51</sup> Crowds' rights related to either risk-taking or to their works have not been addressed. The explanation may lie on collective action problems:<sup>52</sup> dispersed content providers constituting a crowd are by default anonymous, non-represented, and disorganized.<sup>53</sup> Amateur contributors to UGC websites and services often have no past experience with labor unions or class actions.<sup>54</sup>

In spite of these legal and organizational difficulties, social dynamics seem to favor the crowds. Community-based "Web 2.0" initiatives such as Wikipedia<sup>55</sup> and Mozilla's Firefox<sup>56</sup> are lauded as superior to their impersonal counterparts, which has led many crowdsourcing companies to emulate them and install features which aspire to build true online communities.<sup>57</sup> In a quest to motivate crowd-workers, contractors might develop more sensible approaches,

<sup>&</sup>lt;sup>47</sup> See Joan Gabel and Nancy R. Mansfield, *The Information Revolution and its Impact on the Employment Relationship: An Analysis of the Cyberspace Workplace*, 40 Am. Bus. L.J. 301 (2003)

<sup>&</sup>lt;sup>48</sup> See Jonathan Zittrain, Work the New Digital Sweatshops, Newsweek, Dec. 08, 2009, available at http://www.newsweek.com/2009/12/07/work-the-new-digital-sweatshops.html

<sup>&</sup>lt;sup>49</sup> See DAVID D. FRIEDMAN, LAW'S ORDER: WHAT ECONOMICS HAS TO DO WITH LAW AND WHY IT MATTERS, 63-69 (2000) ["Law's Order"] (explaining how "[l]egal rules allocate risk", and discussing the economics of insurance and the possibility of moral hazards).

<sup>&</sup>lt;sup>50</sup> See id. at 197-201 (interpreting liability rules as rules designed to achieve the efficient level of risk).

<sup>&</sup>lt;sup>51</sup> See Principles for User Generated Content Services, available at http://www.ugcprinciples.com/ See also Alan N. Braverman and Terri Southwick, *The User-Generated Content Principles: The Motivation, Process, Results and Lessons Learned*, 32 Colum. J.L. & Arts 471 (2009). But see Electronic Frontier Foundation, Fair Use Principles for User Generated Video Content, http://www.eff.org/issues/ip-and-free-speech/fair-use-principles-usergen

<sup>&</sup>lt;sup>52</sup> See MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS (1965) (developing a theory on organizational costs, and describing how large, poorly-organized groups suffer from the lack of coordination ability to influence policy).

<sup>&</sup>lt;sup>53</sup> See Anonymous, *Note, The Principles for User Generated Content Services: A Middle-Ground Approach to Cyber-Governance*, 121 Harv. L. Rev. 1387, 1408 (2008) (noting that "[b]ecause users and individual artists holding copyrights may be too dispersed to effectively organize and jointly participate in the bargaining process, part of the government's role, especially in a representative democracy, is to mitigate those transaction costs by encouraging fairer, more inclusive bargaining systems.")

<sup>&</sup>lt;sup>54</sup> It is unlikely that they would participate in initiatives to shut down crowdsourcing marketplaces, such as NO!SPEC, available at http://www.no-spec.com/

<sup>&</sup>lt;sup>55</sup> See note 6 supra.

<sup>&</sup>lt;sup>56</sup> See Mozilla, Meet the World's Best Browser, available at http://www.mozilla.com/en-US/firefox/firefox.html

<sup>&</sup>lt;sup>57</sup> See e.g. Elance, Water Cooler, available at http://www.elance.com/p/community/talk/index.html

enveloping tasks in narratives and fine-tuning contests to the expected content's objective. Finally, technology can shatter unjust crowdsourcing structures. Independent, anonymous members of the crowds can always craft innovative tools, either to denounce abuses, or to foster and to organize collective approaches to the common problems shared with the crowd.<sup>58</sup>

Deficient laws and ill-oriented incentive schemes may be easy to spot in today's UGC crowdsourcing environment. However, there are plenty of reasons for optimism. Faceless, indifferent crowds cannot account for the progresses that have shaped the Internet, nor live up to them. The crowds of the past cannot survive the "Web 2.0" future bestiary. As technology unfolds, their individuals' traits will resurface, and crowds will burst with content, as diverse, good and bad, as humanly possible.

Keywords: Copyrights - Crowdsourcing - User Generated Content - Internet Law

 $<sup>^{58}</sup>$  See e.g. Turker Nation, General Turking: mTurk Scripts & Programs, available at http://turkers.proboards.com/index.cgi?board=kscripts