Chapter 2
Recruiting Individuals to a Crowdsourcing Community: Applying Motivational Categories to an Ad Copy Test

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Abstract This study operationalizes different motivational categories to participate in crowdsourcing and tests them with a series of advertisements in different countries. We found that internalized extrinsic motivations were more appealing to individuals overall and that results differed across countries, which is novel in research about crowdsourcing.

Keywords Crowdsourcing · Online advertising · Click-through rate · Cultural differences

2.1 Introduction

As crowdsourcing becomes an increasingly common way to gather input from an online community for problem solving and product design, businesses have become concerned with how to build and sustain these online communities in the first place. Research into the motivations for participation in crowdsourcing applications has identified a range of extrinsic and intrinsic motivators, but there is, to our knowledge, a lack of empirical evidence that points to which of these many motivators are more effective for recruiting individuals to online communities to participate in crowdsourcing activities. This study aimed to identify which kinds of motivators

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F.J. Garrigos-Simon et al. (eds.), *Advances in Crowdsourcing*,
DOI 10.1007/978-3-319-18341-1_2

are most effective for recruiting individuals to crowdsourcing applications. In this study, we crafted a series of Google AdWords advertisements for the crowdsourcing community eYeka, with each ad operationalizing a proven motivational category for participation in crowdsourcing. These 20 different ads ran on Google in late 2011 and gathered a total of 496 click-throughs. We analyzed the click-through rate (CTR) for each ad in order to determine which ads, and, by extension, which kinds of motivators, were most effective for recruiting individuals to a crowdsourcing community. Interestingly, participants from different countries were motivated by different motivational categories. This study contributes to our understanding of motivations in crowdsourcing applications by being among the first to rank motivational categories to join a crowdsourcing community from most effective to least effective. It also contributes to the discussion about the global nature of crowdsourcing ventures and raises additional questions about how best to tailor crowdsourcing experiences for different cultures.

2.2 Literature Review

Crowdsourcing is an online, distributed problem solving and production model that leverages the collective intelligence of online communities for specific purposes (Brabham 2008a). In crowdsourcing applications, an organization broadcasts a challenge to an online community, and the online community supplies ideas and solutions to the organization to address the challenge (Brabham 2008a; Howe 2006, 2008). Crowdsourcing blends the efficiency and control of traditional, top-down managed process with the benefits of bottom-up open innovation and creativity. Furthermore, crowdsourcing takes advantage of the network structure of the Internet by harnessing individual far-flung talent for targeted efforts (Afuah and Tucci 2012; Lévy 1995; Terranova 2004; Wexler 2011). Crowdsourcing has been well documented in such cases as Threadless.com, InnoCentive.com, Amazon's MechanicalTurk.com, TopCoder.com, and TaskCN.com (Barr and Cabrera 2006; Boudreau et al. 2011; Jeppesen and Lakhani 2010; O'Mahony and Lakhani 2011; Zheng et al. 2011). Even though crowdsourcing is a very recent term, we can see that the process has been used in a variety of contexts. Companies can launch crowdsourcing initiatives on their own branded platforms, such as Dell did with IdeaStorm, but they can also commission permanent crowdsourcing platforms which host contests on their Web sites for a fee (Bayus 2013).

One way to engage in crowdsourcing initiatives for a company is indeed to start a private online platform. This is typically suited to traditional companies that want to leverage the power of the crowd but whose core competencies do not lie in setting up, managing, and sustaining a community (Bayus 2013; Feller et al. 2012; Lakhani and Panetta 2007; Penin and Burger-Helmchen 2011). In order to benefit from the creativity of the crowd, they create branded platforms, such as Dell's IdeaStorm, Starbucks' myStarbucksIdea, or Nokia's IdeasProject. These are the examples of participatory Web sites that are being initiated directly by companies.

These companies build Internet platforms on which individuals can contribute ideas and suggestions, allowing them to benefit from the sheer diversity of the crowd to gather innovative and consumer-rooted ideas (Sawhney et al. 2003). The crowd may or may not be asked to select the best ideas, and contributions are open and visible to everyone (Alexy et al. 2012). Here, the initiating company has no experience in crowdsourcing, but it takes the risk to start a platform from scratch, hoping that people will be attracted by the brand's reputation or the topic of the challenge (Fournier and Lee 2009).

Another operative mode to initiate crowdsourcing is to externalize the whole process to a platform whose job is to organize crowdsourcing, often in the form of a contest, on behalf of companies (Penin and Burger-Helmchen 2011; Schenk and Guittard 2011). These platforms are specific in that they leverage a private community of contributors who participate in contests sponsored by client organizations (Lakhani and Panetta 2007; Williams et al. 2011; Zwass 2010). When applied to innovation, these platforms are usually called innomediaries (Sawhney et al. 2003) or idea marketplaces (Morgan and Wang 2010). These platforms count on crowd contributions for the supply and/or selection of ideas and designs (Brabham 2013; Lakhani and Panetta 2007). Typical examples of such crowdsourcing applications can be found in clothing with Web sites such as Threadless.com, Zazzle.com, or LaFraise.com; in multimedia content with platforms such as iStockphoto.com, Fotolia.com, or Jamendo.com; and in industrial design with communities such as Shapeways.com, GrabCAD.com, or Sculpteo.com. Crowdsourcing is not only being used in innovation-related topics; companies also use crowdsourcing to tap external talent in marketing-related tasks. Platforms can also organize crowdsourcing for the creation of print advertising or the production of user-generated video content (Roth and Kimani 2014; Teixeira 2013; Whitla 2009).

Whether platforms use crowdsourcing to generate ideas, designs, or videos, all of these examples describe companies whose business model is based on a crowd of voluntary contributors who regularly add content to the site and participate in contests sponsored by client companies (Zwass 2010). By doing this, participants allow these platforms to receive a constant flow of ideas, which allows the platform to have fresh content from diverse sources while still having a large amount of control over contributors and buyers (Boudreau and Lakhani 2009). These platforms could be described as "pure players" of crowdsourcing since they totally rely on contributions from their own crowds to be sustainable (Feller et al. 2012). They are not producing nor buying the output that they generate, such as creative ideas or videos; they are just acting as intermediaries between client companies and the dispersed problem-solving capability of the crowd (Prpić and Shukla 2013). This is different from traditional companies which use crowdsourcing only on a sporadic basis to get new ideas and content, but have other principal revenue sources (the sale of their products, the fees of their services, etc.) like the ones described above. Because the online community—the crowd—is at the heart of any crowdsourcing application, how to recruit individuals to a crowdsourcing community and sustain their participation are the pressing questions for crowdsourcing practitioners.

Attracting a critical mass of members is the very first milestone to be reached by virtual communities (Hagel and Armstrong 1997). After setting up a functional Web site, companies can attract members with interesting content or useful tools, but also by actively marketing their Web site with online advertisements. In that case, Hagel and Armstrong (1997) highlight that "operating costs in a virtual community have little to do with technology and much more to do with acquisition of members" (p. 63). After the creation of the online environment, there is an initial step of traffic generation, which allows Web site owners to increase awareness and to attract members whose participation will eventually be part of the Web site's value proposition. The advertising budget of community Web sites can be substantial, especially in a phase where organic growth reaches a tipping point. We posit that this is equally true in crowdsourcing communities, which have to rely on active member acquisition to grow the crowd of potential contributors, but also to compensate for churn effects and lurking effects that are present in every virtual community (Fuster Morell 2010; Huberman et al. 2009; Porter et al. 2011).

An emerging body of research has explored motivations for participation in crowdsourcing applications specifically, and these studies have catalogued a wide variety of motivators common across some crowdsourcing cases, but not across all cases. For example, at crowdsourced scientific research company, InnoCentive, Lakhani, Jeppesen, Lohse, and Panetta (Lakhani et al. 2007) found that intrinsic motivators such as "enjoying problem solving," as well as financial reward, were related to success on the site. At crowdsourced stock photography company, iStockphoto, the extrinsic financial motivator was found to be strong, both in a survey of the community (Brabham 2008b) and in anecdotal evidence (Mack 2006). On the other hand, participants in the crowdsourced science fiction film *Star Wreck: In the Pirkinning* were motivated by the sheer enjoyment of creating the film and other altruistic reasons, but not by financial gain (Lietsala and Joutsen 2007). At crowdsourced clothing company Threadless, the love of the community itself—and even addiction to it—was one of the five strong motivators for participation, according to a series of interviews with individuals in the community (Brabham 2010). Also, important for Threadless members, as well as for participants in the crowdsourced bus stop design contest Next Stop Design or the idea contest SAPiens Ideas Competition, is the opportunity to build a portfolio of creative work for future employment (Brabham 2010, 2012b; Leimeister et al. 2009), a concept Kuehn and Corrigan (Kuehn and Corrigan 2013) appropriately term "hope labor." Anecdotally, portfolio-building hope labor is also a driver for some user-generated advertising contest participants (Brabham 2007; Horovitz 2009). In a study conducted among Chinese participants on the crowdsourcing platform, TaskCN.com, Zheng et al. (2011) found that the desire to earn money and to gain recognition were significantly linked to participation intention, even though pure enjoyment of creating was a stronger predictor of participation intention.

Perhaps unsurprisingly, the motivational categories for participation in crowdsourcing activities resonate with motivators for participation in similar online activities, such as open source software production (Bonaccorsi and Rossi 2004; Ge et al. 2006; Hars and Ou 2002; Hertel et al. 2003; Lakhani and Wolf 2005; Oreg

and Nov 2008; Shah 2006), editing Wikipedia (Nov 2007; Rafaeli and Ariel 2008; Schroer and Hertel 2009), uploading and tagging photographs on Flickr (Morgan and Wang 2010; Nov et al. 2008), social voting (Smadja 2009), and blogging (Huang et al. 2007; Liu et al. 2007; Nardi et al. 2004). These phenomena have been collectively called "participatory culture" or "Web 2.0," but we find Füller's (2010) label "virtual co-creation" to be more precise and useful for this study. Füller (2010) uses the umbrella term "virtual co-creation" to include "crowdsourcing, co-creation, user innovation, virtual customer integration, and open innovation" which are different forms of the "promising, active role consumers may play in the previously firm-dominated world of product development and production" (p. 98). His work is particularly relevant to the study of motivations in online projects because his work focuses precisely on the link between motivations and online activity.

Summarizing the work of other scholars who have studied motivation for many years, Füller (2010) uses self-determination theory to better understand peoples' participation in online activities. According to Edward L. Deci and Richard M. Ryan, who have been developing this theory since the 1970s, human motivations can be grouped into two broad categories: intrinsic motivations, by which individuals act in a particular way because they enjoy the act in itself, and extrinsic motivations, by which people act in order to receive something else than the mere satisfaction of performing the act (Deci and Ryan 1980; Deci 1972). These two broad motivation categories have recently been refined (Ryan and Deci 2000) to include a third, intermediate category: internalized extrinsic motivations. Internalized extrinsic motivations are extrinsic motivations, meaning that individuals still perform certain behaviors for a specific outcome, but individuals have internalized the reasons to act and assimilated them to the self. In other words, internalized extrinsically motivated individuals force themselves to act, because they have understood the benefit of their actions. "The more one internalizes the reasons for an action and assimilates them to the self, the more one's extrinsically motivated actions become self-determined" (Ryan and Deci 2000). The three aforementioned types of motivations have been used by Füller (2010) in his research about participation about virtual co-creation, but also by Lebraty and Lobre-Lebraty (2013) in their studies of crowdsourcing participation. Building on this solid framework, our study therefore uses the following categories to study individuals' reactions to different ad copy in the context of crowdsourcing:

- *Intrinsic Motivators*, which include tasks that are intrinsically playful;
- *Internalized Extrinsic Motivators*, which include motivators such as self-efficacy, status development and the desire for recognition or visibility, the opportunity to make friends, self-efficacy, information seeking, and skill development; and
- *Extrinsic Motivators*, which include personal need and dissatisfaction as well as the opportunity for monetary compensation.

Many studies mentioned above rely on self-reports through surveys and interviews and are highly valuable in developing our understanding of the variety of motivators for participation in existing crowdsourcing communities. However, it is

worth noting that these studies reveal the motivations of the most active and engaged segment of participants, and that these studies' findings are of little use to those who have not yet built an active community of participants. Yet, as explained above, building an active and vibrant community is also one of the most challenging and costly steps to undertake before even thinking about crowdsourcing, and many companies have failed because they could not attract and sustain their crowds of participants (Bishop 2007; Chanal and Caron-Fasan 2010; Feller et al. 2012; Oberoi 2013). To our knowledge, research has not addressed the crucial step of attracting participants to crowdsourcing applications, and the little evidence that suggests what the most important motivators are for individuals in the crowd is not sufficient to help practitioners built a crowdsourcing community ("An Inside Look at Lufthansa's Air Cargo Innovation Challenge," n.d.; Mergel and Desouza 2013). Moving beyond descriptive categories of motivators and into more advanced theory-building is a necessary evolution in motivations and uses and gratifications research (Ruggiero 2000). The several motivational categories for participation listed above are useful, but the question still remains as to what is the most important motivational category for driving initial participation. Given this discussion, then, this exploratory study seeks to answer one broad question:

RQ: What kinds of motivators are most effective for recruiting individuals to a crowdsourcing community?

In light of the discussion of different consumer types, too, it is anticipated that, when operationalized, each of these motivational categories will succeed at least somewhat in getting participants to join a crowdsourcing site. Understanding exactly which motivational categories outperform others in a particular crowdsourcing context may help future crowdsourcing practitioners craft recruitment tactics for growing successful online communities. This is thus the focus of this exploratory study. This study aimed to sort this question out by testing individuals' actual behaviors clicking through online ads that operationalize these motivational categories.

2.3 Method

To field test which motivational categories were most effective at recruiting individuals to a crowdsourcing community, Füller's (2010) three motivational categories for virtual co-creation activities were operationalized in a series of online advertisements using Google AdWords. With AdWords, marketers purchase certain keywords with which they want simple text-only ads to appear alongside in a Google search results page (Kim et al. 2012). For the purposes of this study, for example, the keyword "video contest" was the target keyword for which the test ads would appear. "Video contest" was chosen because the study site, eYeka, is a creative crowdsourcing company that facilitates, among other things, crowdsourced video contests. Presumably, individuals searching for open video contests would have an interest in a site like eYeka and would click on an accompanying ad.

eYeka is a global company based in France which operates a Web site on which brands and organizations can host creative contests (King and Lakhani 2013). These contests are visible to anyone on the Internet, and participation is open to registered members of the platform. In mid-2013, the eYeka community consisted of about 250,000 members from more than 150 countries. In late 2011, when the data for this study were collected, eYeka had about 200,000 members, with a growth rate between 200 and 300 members per day. Discussions with eYeka executives revealed that an estimated 50 % of this growth was fueled by online advertising such as Google AdWords. These members all share a common interest for creative tasks, such as photography, design, or video production. In one of its reports about creative crowdsourcing, Forrester Research claims that "co-creation contest vendors provide a specialized form of crowdsourcing [as they] typically cultivate their own communities" (Williams et al. 2011, para. 9). As one of these vendors, eYeka "develops, manages, and nourishes this community" with incentives such as "cash awards for the top ideas to 'fame'—such as using a winning video in a co-created marketing campaign" (Williams et al. 2011, para. 9). While this description falls in line with previous research about motivations to participate in crowdsourcing, it does not say why people initially chose to enter a crowdsourcing community.

Survey research conducted internally by eYeka shows that 35 % of active users of the site found out about eYeka by clicking on a banner ad or on a link, the most common response. The second most cited answer was that people found out about eYeka through a specific contest, which led them to join and participate (see Table 2.1).

This survey was conducted in March 2011 by eYeka and does not claim to be representative of the whole community, because only active members were surveyed, which may not be representative of the whole community. These results show that external links directing to the eYeka Web site are a major source of traffic, but they do not tell what motivational triggers are most effective in attracting potential members and contributors. This is the objective of this study.

To operationalize the three motivational categories, simple ads were developed to speak to each category. To test the internalized extrinsic motivational category, for instance, this ad appeared in search results for the keyword "video contest":

Table 2.1 How active members of the eYeka community found out about the site

How did you find out about eYeka?	Count	Percentage (%)
A friend/acquaintance of mine	97	21
An article in the press, on the Web or a TV spot	48	11
A specific call for entries that interested me	136	30
A banner on a Web site or a link on a search engine	157	35
Other	15	3
Total	453	100

source internal eYeka community survey, March 2011

"Participate in Video Contests for Free & Improve your Skills!" In this ad, the wording "improve your skills" taps into the "skill development" aspect of the internalized extrinsic motivational category. Examples of wording used in the ad copy to operationalize the motivational categories can be seen in Table 2.2.

Because the Internet is a global medium and participants at eYeka come from all over the world, a diverse selection of countries was chosen for the AdWords campaign. The countries were India, Malaysia, Singapore, the United Kingdom, and the USA. These countries were chosen in collaboration with eYeka because they constituted a strategic priority for the crowdsourcing company at the time of the study and reflected a diversity of countries in terms of user behavior (Chau et al. 2002; Singh and Baack 2004; Singh et al. 2005). The AdWords campaign ran for 14 days in 2011, and all ad copy was tested in English, as represented in Table 2.2.

Ad copy testing is a long-standing method for refining tactics and messaging before or during a campaign and for measuring a campaign's effectiveness. Ad copy testing has been used across several media to determine precisely which words, images, and themes arouse certain feelings in audiences, often with the goal of triggering a specific behavior, such as intent to purchase an advertised product (Cook and Dunn 1996; Dunn 1994; Jones 1998). Early works about virtual communities highlight the importance of online advertising for community member acquisition (Hagel and Armstrong 1997). In her book about community building on the Web, for example, Kim (2000) describes how two different versions of a banner ad were used to attract people to fill out a survey. One version offered monetary compensation, and the other just highlighted the opportunity to contribute; results showed no significant differences between both approaches.

For this study, click-through rate (CTR), defined by the American Marketing Association (American Marketing Association, n.d.) as "the number of click-throughs [the number of users who clicked on a specific Internet advertisement or link] per ad impression, expressed as a percentage," was used to assess the effectiveness of the various motivators as operationalized through the slate of ad copy options.

Table 2.2 Examples of advertising wording used to operationalize motivational categories

Motivational category	Advertisement wording example
Intrinsic	Enjoy yourself by participating in awesome video contests!
	Participate in contests and express your ideas in creative ways!
Internalized extrinsic	Curious to discover and create? Participate in video contests!
	Participate in video contests and challenge yourself on cool briefs!
	Participate in video contests and find new inspiration!
	Participate in video contests for free and improve your skills!
	Participate in video contests on eYeka and be recognized!
Extrinsic	Participate in video contests—show and share your own approach!
	Participate in video contests and win amazing prizes!

2.4 Results

During the campaign, a total of 29,435 impressions resulted in a total of 496 clicks, for an overall CTR of 1.69 % (see Table 2.3). Ads which operationalized the internalized extrinsic motivational category resulted in the highest CTR overall, at 1.76 %, with the lowest CTR, at 1.50 %, tied to the intrinsic motivational category. Parsing the results across the five countries included in the study—India, Malaysia, Singapore, the UK, and the USA—provided more complex picture of overall click-through behavior in the ad campaign (see Table 2.4). The internalized extrinsic motivational category resulted in the highest CTRs for all countries except for Malaysia. The extrinsic motivational category resulted in the highest CTR for Malaysia, with the internalized extrinsic category resulting in the lowest CTR.

There were no consistent patterns among the countries for which motivational categories ranked second or last in terms of CTR, so the researchers recombined the data in various ways to make sense of these results. There are some fault lines between these five countries, as they represent different geographic regions, cultural traditions, and levels of economic development. One comparison was made between countries in Asia (India, Malaysia, and Singapore) and countries in "the West" (UK and the USA). In this comparison of the average CTRs for Asian and Western countries, the extrinsic motivational category resulted in the highest CTR for the Asian countries, while the internalized extrinsic category resulted in the highest CTR for the Western countries (see Table 2.5).

Another comparison was made based on economic development in each country, an especially important analysis given the fact that eYeka functions as a vehicle for participants to potentially earn money for themselves. The International Monetary Fund (IMF) categorizes countries in a three-level hierarchy according to economic development. The least economically developed countries are "developing countries," the most developed are "advanced economies," and countries in between these extremes are "countries in transition." India and Malaysia are considered by the IMF to be developing countries, and Singapore, the UK, and the USA are classified as advanced economies. Comparing these average CTRs for these two groupings shows that the developing countries had a higher CTR for the extrinsic motivational category, while the advanced economy countries had a higher CTR for the internalized extrinsic motivational category (see Table 2.6).

Table 2.3 Total CTRs for the entire campaign, by motivational category

Motivational category	Impressions	Clicks	CTR (%)
Intrinsic	5,943	89	1.50
Internalized extrinsic	15,101	266	1.76
Extrinsic	8,391	141	1.68
TOTAL	29,435	496	1.69

Table 2.4 CTRs for each motivational category, by country

Motivational category	India		Malaysia		Singapore		UK		USA	
	Impress.	CTR (%)	Impress.	CTR (%)	Impress.	CTR (%)	Impress.	CTR (%)	Impress.	CTR (%)
	Clicks		Clicks		Clicks		Clicks		Clicks	
Intrinsic	909	2.86	819	2.56	343	1.46	2,717	0.92	1,155	1.04
	26		21		5		25		12	
Internalized extrinsic	3,287	**3.29**	1,356	2.14	1,267	**1.58**	6,203	**1.05**	2,988	**1.47**
	108		29		20		65		44	
Extrinsic	1,750	3.03	964	**2.90**	641	1.40	3,432	1.02	1,604	1.00
	53		28		9		35		16	
TOTAL	5,946	3.14	3,139	2.48	2,251	1.51	12,352	1.01	5,747	1.25
	187		78		34		125		72	

Top motivational category indicated in bold type

Table 2.5 CTRs for each motivational category, comparing the average of the CTRs of Asian countries (India, Malaysia, and Singapore) and Western countries (UK and the USA)

Motivational category	Asian countries (%)	Western countries (%)
Intrinsic	2.29	0.98
Internalized extrinsic	2.33	**1.26**
Extrinsic	**2.38**	1.13

Top motivational category indicated in bold type

Table 2.6 CTRs for each motivational category, comparing the average of the CTRs of countries considered by the International Monetary Fund to be "developing countries" (India and Malaysia) and "advanced economies" (Singapore, UK, and the USA)

Motivational category	Developing countries (%)	Advanced economy countries (%)
Intrinsic	2.71	1.14
Internalized extrinsic	2.71	**1.37**
Extrinsic	**2.81**	1.26

Top motivational category indicated in bold type

2.5 Discussion

The internalized extrinsic motivational category resulted in the highest CTR overall and for all countries except for Malaysia, for which this category was the worst performing in terms of CTR. These findings suggest that an advertising campaign that tapped into internalized extrinsic motivators—such as self-efficacy, status development and the desire for recognition or visibility, the opportunity to make friends, self-efficacy, information seeking, or skill development—would attract more participants to a crowdsourcing site than an ad campaign driven by wording that connected to intrinsic or extrinsic motivators. In simple terms, then, a crowdsourcing practitioner would do better to build an online community by advertising the opportunity to learn a new skill through participation (internalized extrinsic) than to emphasize the simple enjoyment of playing on the site (intrinsic) or the opportunity to make money (extrinsic). The generally higher CTRs from Indian, Malaysian, and Singaporean participants are perhaps not surprising. In a report from DoubleClick (2010), these countries also had higher CTRs overall for display Internet ads (0.18, 0.30, and 0.19 %, respectively) compared to the USA (0.10 %) and the United Kingdom (0.07 %) (p. 16).

Malaysia's divergent performance in this study, as well as the differing top motivational categories comparing Asian and Western countries and comparing developing countries and advanced economies, raise new and interesting questions about cultural differences and the motivations to participate in crowdsourcing ventures. Because crowdsourcing ventures take place on the global platform of the Internet, even sites targeted to specific national audiences may attract unexpected, international participants, and different management techniques for these communities are required (Brabham 2012a). This means that crowdsourcing sites would be

wise to advertise with different ads targeted to different cultures, targeting participants in Asian and developing countries with ads operationalizing extrinsic motivators and targeting participants in Western countries and advanced economies with ads operationalizing internalized extrinsic motivators. This finding is in line with anecdotal findings from research about motivations to participate in Amazon's Mechanical Turk, where a survey found that more Indian workers treat Mechanical Turk as a significant source of income compared to American workers, who see it as a supplementary source of income (Ipeirotis 2010). However, and interestingly, our findings contradict the assumption made by Zheng et al. (2011), who argued that Eastern crowdsourcing participants might be more intrinsically driven to participate than Western participants. Clearly, more rigorous research is needed to explore cultural influences on crowdsourcing participation motivations, which is a surprisingly scant area of interest in academia.

It is unclear, however, how to target participants in countries such as Singapore, which is both an Asian country and an advanced economy. Further still, none of these countries have monolithic cultures. Each country in the study has large numbers of first-generation immigrants and vibrant minority communities that may be driven by different motivators than the majority population. Also, each country has a complex cultural history—and some have colonial pasts with other countries in the study—and is home to at least one large transnational metropolis. Making broad claims about how to target the whole of a country's people in an ad campaign for a crowdsourcing site should be done with caution. Additional research is needed to more fully address this question of culture and motivation in regard to joining crowdsourcing communities (Hsieh 2011; Zheng et al. 2011). The work of Geert Hofstede (De Mooij and Hofstede 2010; Hofstede 1984a, b), Appadurai (1996), Hall (1976), Gelfand et al. (2006, 2011), and other perspectives from a range of disciplines that have examined cultural difference would be useful to further deepen our understanding of crowdsourcing participation across borders.

2.6 Limitations and Conclusions

This study illustrated which motivational category performed best at getting participants to visit a crowdsourcing site by using the CTR as a measure of motivation to participate. While the CTR indeed demonstrates that participants were interested in the advertisement to the point where they chose to click on the link, it does not necessarily indicate that these participants eventually signed up at eYeka and became full participating members of that crowdsourcing community. Surely, many did not. What it does demonstrate, though, is that some ads worked better than others to get participants' attention and get them to explore the eYeka site, and that some motivational categories generated more of these exploratory visits than others. This advances what is known about how crowdsourcing systems work. To date, studies on motivations for participation in crowdsourcing have either simply catalogued which motivators were present among a community or have examined the

connection between types of motivation and quality of participation in open innovation contests (Frey et al. 2011), but scant research has been done to sort these motivators by their effectiveness at getting individuals to join a crowdsourcing community.

Another limitation in this study is that broad motivational categories were measured rather than more nuanced levels of analysis. That is, future research could build on this study by tracking the performance of individual motivators even within broad motivational categories, comparing, for instance, whether an ad that taps into the motivator of curiosity performs better than an ad that taps into the motivator of skill development, both of which fall under the umbrella category of internalized extrinsic motivations.

It would be helpful to test an ad campaign in more countries and in different languages as well. The five countries could be clustered into a few groupings—Asian and Western, developing and advanced economies—but the addition of many more countries to a future study could make these groupings more robust and, assuming the inclusion of South American, Middle Eastern, and African countries, could include entirely new groupings for comparison. For crowdsourcing companies who seek global participation, understanding the effect of culture on motivation to participate is an important pursuit.

Acknowledgments The first author acknowledges funding (CIFRE N° 2011/3106) from the Association Nationale Recherche Technologie (ANRT). All three authors sincerely thank Edouard Breine, Traffic and Community Manager at eYeka, for helping in the process of data collection.

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