

Crowdsourcing and Outsourcing: Friends or Foes?

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Abstract

Crowdsourcing and outsourcing are alternative ways for performing business activities by companies. The purpose of this paper is to explore what type of marketing activities are nowadays outsourced and crowdsourced by enterprises and which is the best way to do it. We used an Internet mediated research approach and analyzed the content of 40 websites – 20 crowdsourcing platforms and 20 outsourcing companies' websites - to understand what activities are crowdsourced and outsourced and how success is defined in both cases. Our results indicate that while crowdsourcing is used to perform specific and more tactical activities, outsourcing is used for more complex and strategic processes. In addition, crowdsourcing is focusing on quality and finding the best solutions while outsourcing is emphasizing optimization, lower costs and relationships. From a managerial perspective, this does not mean that one excludes the other, but that it can complement each other.

Keywords: Crowdsourcing, outsourcing, Internet-mediated research.

JEL classification: M31, M19, L24.

1. Introduction

To generate value, companies need resources and skills to carry out those business activities necessary to survive and thrive in a competitive environment (Wernerfelt, 1984, Teece et al., 1997). Given that their acquisition is often difficult and expensive, companies have developed alternative solutions: making alliances with partner companies in the value chain, assigning activities to third parties through outsourcing and even involving the customers in performing some of them. This process – transferring activities outside to people who are not necessarily company's clients – has expanded with the emergence of Web 2.0 technologies. Thus, activities such as generating new product ideas, finding solutions to problems or even performing chunks of business processes, that previously were performed within the borders of the organization, today are transferred to a crowd of unknown individuals, hence the name crowdsourcing. Unfortunately, the impact of crowdsourcing on marketing activities and solutions has been little investigated so far, even more, we do not really understand why and how open business models that incorporate crowd's participation work (Djelassi and Decoopman, 2013). Crowdsourcing is a relatively young concept, insufficiently researched by academics but extensively explored by companies due to its promising potential. Unlike crowdsourcing, outsourcing has a relatively long history and the factors that influence its success are relatively well known.

Outsourcing is about transferring portions of work to outside suppliers rather than completing it internally. Last year, the value of outsourced services was nearly \$90 billion, while the historical peak was reached in 2014 when it reached \$105 billion. Outsourcing's history is relatively long, because it appeared as a solution to inefficiency problems faced by large corporations in the late 1970s (Lonsdale and Cox, 2000). During postwar period, the general development strategy was to conglomerate and to integrate horizontally and vertically, in order

to achieve economies of scale and to exercise greater market power. By the end of 1970 and more pronounced at the beginning of 1980, these large and diverse corporations were underperforming. Forced also by a global recession, the strategy has changed in the reverse direction, considering that companies should focus on fewer activities, namely those critical. Support activities, which were considered less important, were initially outsourced, followed later by primary supply chain activities. The main reasons that led to outsourcing remained the same as 20 years ago: reduced costs, improved quality, service and delivery, improved organizational focus, increased flexibility, enabler of change (Fan, 2000, Deloitte Consulting, 2016). However, outsourcing means also risks such as loss of core activities, being leveraged by suppliers, loss of strategic flexibility, suffering interruptions to supply, receiving poor quality of supply, fall in employees' morale, loss of internal coherence, confidentiality leaks and loss of intellectual property rights (Lonsdale and Cox, 2000). To reduce them it is necessary to know how to manage the outsourcing relationship (Kaipia and Turkulainen, 2016). Trust is the key element of this relationship and rely on process integration, flexibility and cultural understanding (Schoenherr et al., 2015).

The purpose of this paper is to understand – by making a comparative analysis of marketing activities that are nowadays outsourced and crowdsourced by companies - which of these activities can be successfully transferred outside and which is the best way to do it.

This paper has the following structure: in the beginning there will be a brief review of the existing literature about crowdsourcing to understand what it is, its benefits and challenges, what is crowd's motivation to participate in this process and which are the main issues involved. In the next sections, we will describe the research methodology followed by results and findings. Finally, conclusions are drawn from the results and managerial implications are discussed.

2. Literature review

The term crowdsourcing was for the first time used ten years ago and defined as “the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call” (Howe, 2006). Although the term is relatively young, this activity has a long history, being mentioned for the first time in 1714, when the British government has organized “The Longitude Prize” offering 20,000 pounds to one who will find a rigorous way to calculate longitude (Nesta, 1714). In business, crowdsourcing is used since 1930s when Volkswagen and Toyota organized competitions to design their own logos, both internally and externally (DesignCrowd, 2016). Often the term crowdsourcing overlaps with others such as outsourcing, open innovation or problem sourcing, although these concepts are distinct. For example, unlike *outsourcing*, crowdsourcing does not require the existence of a formalized tender process with third parties nor negotiating or signing a contract (Brabham, 2012). Moreover, the initiating company cannot control the quality of solutions required nor can it control the crowd (Bonabeau, 2009). The relationship between the company and the crowd is temporary and ends when the solution is presented.

Unlike *open innovation*, crowdsourcing aims to find solutions to a problem whose parameters are well defined. Besides, open innovation is used rather in software development (Brabham, 2008). This means that key elements of the product such as the source code, is freely available to contributors to collaborate and jointly develop the product. However, developing software-based products does not involve significant fixed costs, which is not valid for all products. Therefore, for other types of products the firm cannot provide - when developing a new product - all the information available to contributors because it wants to protect its intellectual property rights and gain a commercial advantage. Consequently, crowdsourcing seems more convenient

because it separates the crowd's contribution from company's own contribution and specifies in advance how it is rewarded.

Problem-sourcing is rather the reverse of crowdsourcing: the firm has the ability to solve a certain type of problems and the crowd offers ideas of problems that once solved would generate considerable value for the company (Cummings et al., 2013).

Essentially, the crowdsourcing process requires the existence of three elements: a) a problem, assigned to a wide and random audience; b) a crowd which generates shared content/solution on a voluntary basis and c) a platform which facilitates the interactions between the parties involved (Emerald Group Publishing Limited, 2016). Although crowdsourcing is a collective value co-creation process it can take many forms: contest (when a sponsor states the problem and gives an award to the best solution), crowd collaborative communities (external brainstorming-type activities, where participants contribute for free to find solutions) and crowd labor market (match demand and request of specific activities similar to a labor market) (Strategic Direction, 2013).

Regardless of the form it takes, the main applications of crowdsourcing are - beside business field - the academic, research and development, governmental and non-governmental areas (Gupta and Sharma, 2013). Except business applications of crowdsourcing the main uses of crowdsourcing are citizen science (collect and process data for scientific enquiry), public participation (engage citizens in public planning projects, geoweb), citizen journalism (raise the voice against various social evils) (Hossain and Kauranen, 2015, Fritz et al., 2009, Clark and Aide, 2011).

However, the business applications of crowdsourcing are more numerous and range from idea generation, micro tasking (Hossain and Kauranen, 2015), conducting content analysis (Conley and Tosti-Kharas, 2014), product and service development (Hossain and Islam, 2015), scenario planning (Raford, 2015), decision making (Chiu et al., 2014), monitoring and evaluating (Bauer and Gegenhuber, 2015).

The main advantages of using crowdsourcing at the micro level are related to understanding user needs and opportunities (Gupta and Sharma, 2013) timely access to a large and relatively cheap workforce (Hirth et al., 2013), providing superior solutions in terms of quality and quantity compared with traditional approaches (Gupta and Sharma, 2013), improved intelligence and image (Mortara et al., 2013) while at macro level crowdsourcing allows utilization of excess work capacities and rationalize society's resources (Bauer and Gegenhuber, 2015). Nevertheless, the extent to which crowdsourcing practices contribute to value generation is still unclear; for instance merely gathering ideas on new products is not sufficient to generate business value (Dong and Wu, 2015).

But what is the crowd's motivation to engage in such activities? It seems that contributors engagement depends on a mix of intrinsic (the task itself) and extrinsic motivational factors (that bring something in return). Extrinsic motivational factors that stimulate crowd's participation can be grouped into two categories: financial factors (benefits, cash, job opportunities, revenue) and social factors (collaboration, ego, experience, knowledge gathering, networking, peer recognition, power, reputation, status, social bonds) (Clark and Aide, 2011).

Intrinsic motivation is prevalent in open source programming, citizen journalism, citizen science and public participation while extrinsic motivation for example, financial motivation is important in micro tasking labor (Hossain and Kauranen, 2015) and challenge projects and contests (Lee et al., 2015). However, even for participants led by intrinsic motivation, how the task/problem is designed has a significant influence on the cognitive, emotional and physical commitment of participants. Thus, autonomy, task variety, feedback and problem solving features are highly correlated with all three dimensions of commitment (Martinez, 2015).

Although crowdsourcing seems to be an easy and largely available solution to every company, it raises many problems. It has been shown for example that there is a lack of understanding of how the crowd works and the value that it can bring. But more difficult is the process by which the crowd is built – because it rarely pre-exists - the process by which the crowd can be engaged and how it can be capitalized (Prpić et al., 2015). Then there is an imbalance between input and output, crowd's effort (e.g. the number of ideas submitted) and the value generated by it (the number of ideas acquired) (Mortara et al., 2013, Hossain and Islam, 2015). Crowd's payment is a sensitive subject because it is either poorly paid, as is the case in micro tasking or more often is unpaid (Gabriel et al., 2015). In addition, a more sensitive issue in product development is related to intellectual property rights, which is still an important problem (Hossain and Kauranen, 2015).

But beyond these challenges, crowdsourcing is a way to attract and involve additional resources to generate value both for the benefit of the company and the individual and also the community. Therefore, it deserves explored and understood.

3. Research methodology

The *purpose* of this research is to examine trends and patterns regarding crowdsourcing and outsourcing marketing activities. To be more specific, the *research questions* are (1) what type of marketing activities are performed using each approach and (2) what is the value generated by them.

Considering the fact that our research is exploratory, we decided to perform an Internet mediated research and to collect and analyze Internet data. All sorts of online documents exist that could be explored to as raw data: webpages, blogs, news articles, online repositories of photos and videos and social networks which often blur the boundary between “documents” and “interactions” (Hewson, 2014). For our research we decided to use, as *sources of information*, 20 crowdsourcing platforms which offer – among others – marketing services and other 20 websites belonging to companies which provide outsourced marketing services. The crowdsourcing platforms were selected based on a general search conducted using Google search engine. Each platform was analyzed and verified to see if it provides marketing services and in the end the following were selected: CrowdFlower, 99designs, YourEncore, NineSigma, MyStarbucksIdea, IBM InnovationJam, Logomyway, Kaggle, Samasource, Threadless, Chaordix Innovation&Creativity, DesignCrowd, Fiverr, Freelancer, OneSpace, Upwork, Clickworker, Damongo, DesignHill, 199jobs. We discarded platforms that either did not offer marketing services (Innocentive, iStockphoto, Marketocracy, Utest, Dell Ideastorm, Yet2) or those where services were limited and marginal such as collecting contact information about influencers (MicroWorkers, Amazon Mechanical Turk).

Regarding outsourcing companies, the top 20 relevant websites offering outsourced marketing services were selected (Process Flows, KC Associates, Redmill Marketing Associates, Marketing Zen, Grapevine Marketing Agency, CMO Axis Marketing Outsourcing Services, Australian Business Consulting & Solutions, Precision Marketing Group, Marketing Brinn, Outsource Marketing, Matrixmarketing Group, Clarityquest, The Mezzanine Group, KBM Group, Marketstar, The Marketing Pose, OB2B Industrial Marketing and PR, Leadfabric, Wipro, Accenture).

We used as a *research instrument* a powerful software package - NVIVO 11 PLUS - to import and analyze web data from selected sources. We employed as a *research method content analysis* because it allows us for both quantitative and qualitative operations. At the beginning we performed a conceptual analysis by examining the existence and frequency of concepts followed by a relational analysis to explore the relationship between concepts (Writing@CSU, 2016). We developed word clouds based on words frequencies for each type of data source

(crowdsourcing versus outsourcing) and grouped the words into concepts for drawing a conceptual model. Additionally, we used text search queries to understand the context in which specific words were used.

To ensure the validity of research results, we discussed the methodology and findings with practitioners. There was no problem with reliability because there had been no manual coding process in NVIVO, instead it was a problem grouping keywords in the most appropriate concepts. Therefore, each author realized his classification and in the end, we checked if the results were similar. Differences were discussed together and the final version was agreed by consensus. The research was conducted in March-May 2016.

4. Results

As we mentioned earlier, the first step in content analysis was to identify the most frequently used words in crowdsourcing platforms, respectively outsourcing websites. The assumption is that, the words that are mentioned more often, are those which reflect the greatest concerns (Stemler, 2001). Therefore we determined the first 100 words mostly used in crowdsourcing and visualized the information using a word cloud (see Figure 1). Words with less than 3 letters and those which represented companies' names were excluded (Google, Accenture, Onespace, etc.).



Figure 1. Word cloud for top 100 frequent words in crowdsourcing

The figure should be interpreted as follows: words written with larger fonts appear more often than words drafted with smaller ones. The same was done for outsourced activities (see Figure 2):



Figure 2. Word cloud for top 100 frequent words in outsourcing

As we can see, the most important words used in crowdsourcing are quite different compared to outsourcing. Thus, words such as *designs, logos, business, services, marketing, community, data, works, express, card* are the most important words in crowdsourcing, while *markets, services, business, customers, helps, content, managing, website, strategy, digital* are the most important words in outsourcing. Obviously, some words are specific only to one of the domain (crowdsourcing or outsourcing) while others are common to both of them. However, we should notice that, even when the same word is found in both domains, the importance could be much higher in the first one, than in the second one. For instance, *community* appears in both domains, but this concept is more important in crowdsourcing (the 6th position in the frequency list) than in outsourcing (the 73rd position in the frequency list).

To understand the differences and similarities between crowdsourcing and outsourcing, we further analyzed and grouped words according to their semantic meaning into five categories: Who is doing “something”? What is (s)he doing? With what results? For whom? and How?

Regarding *Who is doing?* we found differences between crowdsourced and outsourced activities. In the first case, the subjects are called *participants, experts, freelancers, teams* and even *community* while in outsourcing the *company* or *agency* is doing something. Thus, there is a much larger linguistic richness to designate subjects (individual or collective) in crowdsourcing, while in outsourcing the company / agency is the main character.

Regarding *What is (s)he doing?* the conclusions seem at first glance unclear. We find that there are specific verbs to each domain: *join, submit, learn* and *write* for crowdsourcing and *deliver, ensure, support, execute, experiment* and *understand* for outsourcing. But there are also many common verbs: *create, design, manage, provide, search* and *research*. To understand whether these verbs are used in the same context, we run a search text query and found that:

- *Create* is used in association with logo, business card, web banner and graphic design in both outsourcing and crowdsourcing. But what is interesting is that in outsourcing, *created* is also associated with words such as marketing strategy, marketing plan, relationship, delightful customer experience, analytical models, platform, marketing segmentation, best channel. Thus, the scope of this verb considerably extends from the tactical to the strategic level.
- *Design* follows the same pattern. Although it is used in common with logos, website and collaterals, in outsourcing the meaning expands over: design white papers, case studies, direct mail campaigns, user experience and interface, business interactions, strategies. Similarly, design is upgraded from a tactical use to a more strategic approach in outsourcing.
- *Manage* is used in different contexts. In crowdsourcing, the verb is combined with brand or data, while in outsourcing the scope is much larger: manage strategic relationships, manage demand generation programs, complex / fragmented marketing. It seems that outsourced activities are more varied than those crowdsourced.
- *Provide* behaves similarly to manage. If crowdsourcing activities are more limited - provide high quality product, SEO package, on demand access - outsourcing activities are more diverse and complex: provide a holistic view, online marketing strategy, comprehensive analytics framework, database, strategic blueprint, strategic response, complete outsourced sales, customized marketing services and processes, strong operation support, value.
- *Search* has more richer connotations in crowdsourcing than outsourcing. If outsourcing is limited to specific processes and SEO, in crowdsourcing search is associated with product ideas, open innovation resources, technology, keywords, results, relevance.
- *Research* is the only verb that is used entirely similar in both cases: both in crowdsourcing and in outsourcing the market, competitors, customers and the Internet

are researched.

Regarding the outcome of those activities *What are the results?* as long as the verbs used in outsourcing have various meanings, it seems clear that outsourcing generates a more diversified and complex output. So while crowdsourcing “produces” ideas, logos, business cards, banners and graphics, outsourcing “produces” strategy, sales, leads, results, information, insights. Obviously, some results are common such as: solutions, services, product, content or website. Regarding the direct or indirect beneficiaries of these activities - *For whom?* - in crowdsourcing they are named: clients, customers, company, business. Instead, outsourcing is more refined because it uses additional terms like market, community, industry and audience.

The answer to the question *How?* is highly revealing for the added value of the two approaches. Crowdsourcing is using keywords such as quality, best, free, talent, innovative, professional, and express while outsourcing is focusing on strategic, digital, different, integration, performance, optimization, cost, resources, effectiveness, performance, success and relationship.

All these results were synthesized and presented in the attached figure (see Figure 3).

	CROWDSOURCING	OUTSOURCING
WHO	<i>participants, experts, freelancers, teams community</i>	<i>company, agency</i>
WHAT	<i>create, design, manage, provide, search, research</i>	
	<i>join, submit, learn, write</i>	<i>deliver, ensure, support, execute, experiment, understand</i>
RESULTS	<i>solutions, services, product, content, website</i>	
	<i>ideas, logos, business card, banner, graphics</i>	<i>strategy, sales, leads, results, information, insights</i>
FOR WHOM	<i>clients, customers, company, business</i>	
		<i>market, community, industry, audience</i>
HOW	<i>quality, best, free, talent, innovative, professional, express</i>	<i>strategic, digital, different, integration, performance, optimization, cost, resources, effectiveness, performance, success, relationship</i>

Figure 3. Similarities and differences between crowdsourcing and outsourcing

As the analysis revealed so far, although crowdsourcing and outsourcing often perform similar activities and promise the same results, there are also distinct areas in which companies can employ different approaches.

5. Conclusions and recommendations

To deeply understand the value brought by outsourcing and crowdsourcing, the beneficiary company should consider the following:

Outsourcing is done by a company which promises to understand the needs of its customers (outsourcing companies) and based on them will create marketing strategies which will be executed using marketing plans. The company provides customized marketing services to its clients and complete outsourced sales. It performs also simple tasks such as website design and collaterals. It promises to create a delightful customer experience and manage strategic relationships. It guarantees superior performance and success because it is focused on optimization, effectiveness and integration. It can provide also a comprehensive analytics

framework to measure what is happening, as a proof of keeping its promises. In conclusion, outsourcing assumes full management of the marketing process being able to provide comprehensive, complex and effective services. These results support the conclusions of other researches which were investigating the strategic role played by outsourcing (Deloitte Consulting, 2016).

However, what draws our attention is that innovation is missing from outsourced services. Although many beneficiary companies are trying to incorporate innovation into outsourcing agreements, it appears that companies, which are offering outsourced services, are not mentioning and focusing on it. A possible explanation would be that the beneficiary companies still have troubles in defining, tracking, and motivating innovation from their service providers (Deloitte Consulting, 2016). Although it is believed that outsourcing has evolved from an early stage focused on cost-savings, to a second generation stage defined by a strategic relationship, reaching in the end a third generation stage, when companies look to their outsourcing partners to do all of the above and to become sources of innovation (ISS World, 2016), the reality proves that it is still in the second phase of development.

Moreover, the evolution at the third level of development is difficult because it is based on a paradox (Aubert et al., 2015). On one hand, innovation requires freedom of exploration, flexibility and risk taking, favoring a loose agreement while on the other hand outsourcing requires careful, permanent and detailed monitoring, to make sure that promises are kept and objectives achieved, which means a tight contract.

Crowdsourcing instead has a more modest story to tell: a crowd - which is formed by experts, freelancers, talented contributors and sometimes even teams – join together or compete to help you searching for new ideas and solutions. Some of them are also helping you to create logos, business cards and graphic designs to support you managing your brand. They are characterizing their work as being professional, of best quality and innovative. In conclusion, crowdsourcing relies on a collective effort but unfortunately is undertaking punctual, clearly defined and less diversified activities. Their differentiator lies in high quality results.

Considering managerial implications, companies can use either crowdsourcing, outsourcing or both of them. From our analysis, it appears that companies can outsourced not only fragmented marketing activities, but an entire marketing process including both simple and complex activities. The added value lies in streamlining the activities / processes. Instead, crowdsourcing is used mainly for punctual tasks and tactical activities when the quality of results is important. The added value lies in finding the best solutions or marketing ideas.

Summarizing, outsourcing differentiates from crowdsourcing by its positioning - strategic and low costs - while crowdsourcing is tactical and of best quality. Nevertheless, companies should harness the full potential of crowdsourcing. This would mean for example an evolution from a crowd labor approach to building a crowd collaborative communities that could support the company in more complex processes over long periods of time. Only then can we talk about competition between the two approaches.

This study has some limitations. The first one refers to the number of platforms / websites analyzed. It is possible that, if the scope of analysis extends, the top-list of the most frequent words could change. For example, when we initially analyzed 10 crowdsourcing platforms, innovation was in the third position, while when we extended the analysis to 20 platforms, innovation dropped to position thirteen. It is true however, that keyword “design” remained in first position regardless the number of platforms analyzed. By contrast, the top keywords in outsourcing were more stable, regardless of the number of sites analyzed.

The second issue is about how the platforms / websites were selected. If for outsourcing the criterion was straightforward - the first 20 companies websites offering outsourced marketing services - the situation is different for crowdsourcing platforms because there is still no

marketing specialized platforms. Therefore, the existing platforms were scrutinized and we kept only those identified as offering marketing services. Future inquiries might extend the scope of research and use other selection criteria to track the evolution in time of the two phenomena.

References

- AUBERT, B. A., KISHORE, R. & IRIYAMA, A. 2015. Exploring and managing the “innovation through outsourcing” paradox. *The Journal of Strategic Information Systems*, 24, 255-269.
- BAUER, R. M. & GEGENHUBER, T. 2015. Crowdsourcing: Global search and the twisted roles of consumers and producers. *Organization*, 22, 661-681.
- BONABEAU, E. 2009. Decisions 2.0: The power of collective intelligence. *MIT Sloan management review*, 50, 45.
- BRABHAM, D. C. 2008. Crowdsourcing as a model for problem solving an introduction and cases. *Convergence: the international journal of research into new media technologies*, 14, 75-90.
- BRABHAM, D. C. 2012. The myth of amateur crowds: A critical discourse analysis of crowdsourcing coverage. *Information, Communication & Society*, 15, 394-410.
- CHIU, C.-M., LIANG, T.-P. & TURBAN, E. 2014. What can crowdsourcing do for decision support? *Decision Support Systems*, 65, 40-49.
- CLARK, M. L. & AIDE, T. M. 2011. Virtual interpretation of Earth Web-Interface Tool (VIEW-IT) for collecting land-use/land-cover reference data. *Remote Sensing*, 3, 601-620.
- CONLEY, C. & TOSTI-KHARAS, J. 2014. Crowdsourcing content analysis for managerial research. *Management Decision*, 52, 675-688.
- CUMMINGS, S., DAELLENBACH, U., DAVENPORT, S. & CAMPBELL, C. 2013. “Problem-sourcing”: a re-framing of open innovation for R&D organisations. *Management Research Review*, 36, 955-974.
- DELOITTE CONSULTING. 2016. *2016 Global Outsourcing Survey. Outsourcing accelerates forward* [Online]. Available: https://www2.deloitte.com/content/dam/Deloitte/fi/Documents/technology/2016%20GOS%20Exec%20Summary_Nordic.pdf [Accessed 31 July 2016].
- DESIGNCROWD. 2016. *5 Famous Logo Contests - Toyota, Google, Wikipedia & More!* [Online]. Available: <http://blog.designcrowd.com/article/218/5-famous-logo-contests%20--toyota-google-wikipedia%20-%20more> [Accessed 19 July 2016].
- DJELASSI, S. & DECOOPMAN, I. 2013. Customers' participation in product development through crowdsourcing: Issues and implications. *Industrial Marketing Management*, 42, 683-692.
- DONG, J. Q. & WU, W. 2015. Business value of social media technologies: Evidence from online user innovation communities. *The Journal of Strategic Information Systems*, 24, 113-127.
- EMERALD GROUP PUBLISHING LIMITED. 2016. *How to... use crowdsourcing as a research tool* [Online]. Available: <http://www.emeraldgrouppublishing.com/research/guides/methods/crowdsourcing.htm?part=2> [Accessed 24 June 2016].
- FAN, Y. 2000. Strategic outsourcing: evidence from British companies. *Marketing Intelligence & Planning*, 18, 213-219.
- FRITZ, S., MCCALLUM, I., SCHILL, C., PERGER, C., GRILLMAYER, R., ACHARD, F., KRAXNER, F. & OBERSTEINER, M. 2009. Geo-Wiki. Org: The use of crowdsourcing to improve global land cover. *Remote Sensing*, 1, 345-354.
- GABRIEL, Y., KORCZYNSKI, M. & RIEDER, K. 2015. Organizations and their consumers: Bridging work and consumption. *Organization*, 22, 629-643.
- GUPTA, D. K. & SHARMA, V. 2013. Exploring crowdsourcing: a viable solution towards achieving rapid and qualitative tasks. *Library Hi Tech News*, 30, 14-20.
- HEWSON, C. 2014. Qualitative approaches in Internet-mediated research: Opportunities, issues,

- possibilities. *The Oxford handbook of qualitative research*, 423-452.
- HIRTH, M., HOßFELD, T. & TRAN-GIA, P. 2013. Analyzing costs and accuracy of validation mechanisms for crowdsourcing platforms. *Mathematical and Computer Modelling*, 57, 2918-2932.
- HOSSAIN, M. & ISLAM, K. Z. 2015. Generating Ideas on Online Platforms: A Case Study of “My Starbucks Idea”. *Arab Economic and Business Journal*, 10, 102-111.
- HOSSAIN, M. & KAURANEN, I. 2015. Crowdsourcing: a comprehensive literature review. *Strategic Outsourcing: An International Journal*, 8, 2-22.
- HOWE. 2006. *Crowdsourcing: A Definition*. In *Crowdsourcing: Tracking the rise of the amateur* [Web log]. [Online]. Available: http://crowdsourcing.typepad.com/cs/2006/06/crowdsourcing_a.html [Accessed 21 July 2016].
- ISS WORLD. 2016. *Outsourcing history - ISS World* [Online]. Available: <http://www.issworld.com/about-iss/learning-zone/outsourcing-insights/outsourcing-history> [Accessed 29 July 2016].
- KAIPIA, R. & TURKULAINEN, V. 2016. Managing integration in outsourcing relationships—The influence of cost and quality priorities. *Industrial Marketing Management*.
- LEE, C. K. M., CHAN, C., HO, S., CHOY, K. & IP, W. 2015. Explore the feasibility of adopting crowdsourcing for innovative problem solving. *Industrial Management & Data Systems*, 115, 803-832.
- LONSDALE, C. & COX, A. 2000. The historical development of outsourcing: the latest fad? *Industrial management & data systems*, 100, 444-450.
- MARTINEZ, M. G. 2015. Solver engagement in knowledge sharing in crowdsourcing communities: Exploring the link to creativity. *Research Policy*, 44, 1419-1430.
- MORTARA, L., FORD, S. J. & JAEGER, M. 2013. Idea Competitions under scrutiny: Acquisition, intelligence or public relations mechanism? *Technological Forecasting and Social Change*, 80, 1563-1578.
- NESTA. 1714. *British Longitude prize. The best way to tame the perils of the high seas? Build a fabulous clock* [Online]. Available: <http://www.nesta.org.uk/news/guide-historical-challenge-prizes/british-longitude-prize> [Accessed 22 July 2016].
- PRPIĆ, J., SHUKLA, P. P., KIETZMANN, J. H. & MCCARTHY, I. P. 2015. How to work a crowd: Developing crowd capital through crowdsourcing. *Business Horizons*, 58, 77-85.
- RAFORD, N. 2015. Online foresight platforms: Evidence for their impact on scenario planning & strategic foresight. *Technological Forecasting and Social Change*, 97, 65-76.
- SCHOENHERR, T., NARAYANAN, S. & NARASIMHAN, R. 2015. Trust formation in outsourcing relationships: A social exchange theoretic perspective. *International Journal of Production Economics*, 169, 401-412.
- STEMLER, S. 2001. An overview of content analysis. *Practical assessment, research & evaluation*, 7, 137-146.
- STRATEGIC DIRECTION 2013. Innovating with the in-crowd: Crowdsourcing is part of an honorable tradition. *Strategic Direction*, 29, 9-12.
- TEECE, D. J., PISANO, G. & SHUEN, A. 1997. Dynamic capabilities and strategic management. *Strategic management journal*, 509-533.
- WERNERFELT, B. 1984. A resource-based view of the firm. *Strategic management journal*, 5, 171-180.
- WRITING@CSU. 2016. *Guide: Content Analysis* [Online]. Available: <http://writing.colostate.edu/guides/guide.cfm?guideid=61> [Accessed 12 June 2016].