Abstract

Customersourcing is a newly coined term representing the on-line version of an older practice, and a defining a sub-category of the now popular Crowdsourcing practice. This article starts with a brief overview of Crowdsourcing and its various sub-categories such as Crowdfunding, and Crowdvoting. Further, the conceptual development of the Customersourcing Model is discussed in which a ‘community of customers’ become the ‘suppliers’ from which a business draws resources such as input to their value chain activities. Finally, a financial framework for categorizing a spectrum of financial models is developed for Customersourcing, including appropriate examples.

Keywords: Customersourcing, Crowdsourcing, Supply Chain, Value Chain

1 Introduction

Crowdsourcing leapt into the on-line and business vocabulary in 2006 when it was first coined as a new term in the landmark article, “The Rise of Crowdsourcing” (Howe, 2006). The original article did not provide an explicit definition, allowing other authors to propose a variety of definitions. Paying homage to the initiator, the authors choose to follow the definition later proposed by Howe:

“Crowdsourcing is the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call.” (Howe, 2008)

The Crowdsourcing concept is rather old, having been used as early as the 1700’s with the Alkali Prize, and the 1800’s by the Oxford English Dictionary. Each of which
called on the general public for contributions as a means of solving a business problem (Brabham, 2013). However, it was not until the rise of the Internet, and especially the dynamically enabling Web 2.0, that the concept became a growing and significant factor in business and society (Tredinnick, 2006; DeVun, 2009; Chaordix, 2014).

There are two important factors in Crowdsourcing: first, the capabilities which the Internet provides in reaching and communicating with people - the crowd. Second, the rising public awareness of Crowdsourcing as an effective and efficient business tool (Horton & Chilton, 2010). This has given rise to a myriad of sub-categories of Crowdsourcing. As a brief overview, some common examples of subcategories include:

- **Crowdfunding**: the process of raising funds for projects by asking a multitude of people each to contribute a small amount; in order to attain a certain monetary goal (Prive, 2012).
- **Cloud Labor (aka: Microwork and Macrowork)**: Leveraging of a distributed virtual labor pool, available on-demand to fulfill a range of tasks from simple to complex. Users complete tasks which can be completed independently, and require a fixed amount of time. Work is compensated based on the size of the task and the skills required to complete it. Participants are paid in exchange for their work (Howe, 2006; Yang & Ackerman 2008; Crowdsourcing.org, 2014).
- **Crowdvoting**: where a website gathers a large group’s opinions and judgment on a certain topic (Brabham, 2008; Robson, 2012).
- **Crowdsearching**: a version of crowdsourcing through geographic location anchoring, which builds a virtual search party of smartphone and internet users to find lost items (such as a pet or person), and return found items (Lombard, 2013).
- **Implicit Crowdsourcing** (aka: Piggyback Crowdsourcing): users do not necessarily know they are contributing, yet can still be very effective in completing certain tasks. Users do another task entirely, while a third party gains information for a different purpose, based on the user's actions (Brabham, 2008; Kittur, Chi & Sun, 2008).
- **Customersourcing**: wherein a community of customers contributes to a firm by performing its value chain activities and/or acting as its supplier (Crane & Kitchens, 2013).

This concept article focuses specifically on Customersourcing, as described by Crane & Kitchens (2013), and investigates the spectrum of financial costs and/or rewards to the customers associated with the business’ use of customers in their role as contributors to the value chain activities.

### 2 Development of Customersourcing

Crowdsourcing existed as an acknowledged business activity prior to Howe putting a name to the activity in 2006. Similarly, Customersourcing started to emerge as a sub-category of Crowdsourcing prior to Crane & Kitchens putting a name to the activity in 2013. By way of developing the concept, the traditional value chain and supply chain
models should be reviewed, with modern modifications discussed as they apply to Internet and electronic business functions; because e-commerce has caused some significant changes to the way traditional business is handled (Laudon, 2012).

2.1 Supply Chain Model
In the traditional supply chain model, the Supplier and the Customer are at opposite ends of the chain, separated by the Firm, Distributor, and Retailer, as depicted in Figure 1: Traditional Supply Chain Model (Kathawaia, 2003).

![Figure 1: Traditional Supply Chain Model](image)

2.2 Value Chain Model
From the Supply Chain model, specifically within the “Firm,” the traditional value chain activities are conducted as described by Porter (1985), as depicted in Figure 2: Traditional Value Chain Activities.

![Figure 2: Traditional Value Chain Activities](image)

In an on-line environment, all of the value chain and supply chain functions continue to exist, although the lines of distinction often become blurred. This is particularly true in the case of pureplay e-commerce situations, where all functions are conducted in an electronic environment. In addition, almost any business function in the supply chain and value-chain has the potential to be sub-contracted to a third party. In this case, the conceptual merging of the value chain and supply chain models forms one large, complex entity; as depicted in Figure 3: Merging of Value Chain and Supply Chain.

![Figure 3: Merging of Value Chain and Supply Chain](image)
2.3 Customersourcing Model

It is important to recognize that some of the value chain and supply chain functions may be outsourced, and acknowledge that such outsourcing could be offered to a firm's very own customers. As such, a new model arises – visually simplistic, yet conceptually quite complex. The complexity comes from the merging the value chain and supply chain models, then merging the suppliers and customers into one blended entity (Crane & Kitchens, 2013). The Customersourcing model depicts the Firm as one box (and all of its related value chain and supply chain functions), providing goods and services to its customers. The customers, represented as two overlapping circles, are in turn providing the firm with goods (including data) and potentially services (including value chain functions). The Customersourcing model is depicted in Figure 4: Customersourcing Model.

3 Costs and Benefits

In business, when participants (the crowd) provide goods or services, it is generally expected that there is an exchange of some type in reciprocity for the participants’ time and effort. Customarily, in a business environment, this is generally a financial exchange for goods and services. Further, the contributors of goods and services are usually receiving the financial portion of the exchange. However, in Crowdsourcing, and by extension Customersourcing, this is not always the case. Indeed, there may be three financial conditions:

- **Net income:** The participants realize a financial profit by their participation
- **Break-even:** The participants realize neither financial improvement nor financial cost through their participation
- **Net outflow:** The participants ultimately contribute financially as a result of their participation

As depicted in Figure 5: Range of Financial Exchanges, These conditions exist for Crowdsourcing as well as its sub-category, Customersourcing.
3.1 Crowdsourcing’s Financial Exchange

Unlike traditional employment, Crowdsourcing does not necessarily require financial compensation in exchange for the services provided by the so-called ‘crowd,’ or participants. As a broad over-arching category of on-line exchanges, Crowdsourcing has a multitude of examples in which a community of disparate participants, working individually, for the benefit of a common goal – with net income, break-even, and net outflow situations abounding.

3.1.1 Crowdsourcing with Net Income to Participants

Communities of crowd-participants are often able to profit financially by participating in Crowdsourcing opportunities. In particular, Microwork and Macrowork are previously described sub-categories of Crowdsourcing in which participants may profit for their efforts (Howe, 2006). For example, Amazon’s so-called “Mechanical Turk” provides an environment allowing users to contribute time and effort to help Amazon complete small tasks. Typically, these are tasks which are difficult to automate, yet not worth hiring a full time employee to complete. They need to be completed none the less (Doan & Halevy 2011; Howe, 2006).

3.1.2 Crowdsourcing with Break-Even Proposition for Participants

Participants may actually be interacting with a community of volunteers on a not-for-profit bases, such as the previously mentioned Crowdsearching subcategory (Lombard, 2013). In this case, a “search community” may be set up on a ‘free’ site such as FaceBook. There may be no profit motive at all (aside from an occasional and voluntary “Reward if Found”). The benefit to the participating ‘searchers’ may be entirely intrinsic – to be the hero-of-the-day, for a complete stranger.

3.1.3 Crowdsourcing with Net Outflow from Participants

The most extreme case of a net outflow from participants is Crowdfunding. In these cases, participants take the time to review start-up business concepts, and decide whether they would like to offer a portion of the venture capital required to get the business started (Prive, 2012). While any amount may be contributed, the typical scenario involves a large number of participants, each offering a small investment. In many cases, but not all, investors are offered a good or service in exchange for their investment. Typically, the offering participants receive is worth significantly less than the funding they are providing – which only makes sense given the goal, to raise capital.
3.2 Customersourcing’s Financial Exchange

Crowdsourcing has entire sub-categories representing the financial net income, break-even, and outflows associated with individual participation. Customersourcing, as a sub-category of Crowdsourcing, has specific organizations practicing each of these financial states.

3.2.1 Customersourcing with Net Income to Participants

A company founded in 2000 in Chicago, called Threadless, is an example of a situation where Customersourcing results in a net inflow of profit to the participating customers. Threadless sells t-shirts. The designs on the t-shirts are created and submitted through the on-line community of users, hoping that their design will be selected for production. For those whose design is selected, Threadless pays $2,000 cash, plus $500 in Threadless gift certificates – thus ensuring that in case the participant was not already a customer, they soon will be (Brabham, 2013; Howe, 2008). While not every design is selected, financially there is a calculable expected rate of return.

3.2.2 Customersourcing with Break-Even Proposition to Participants

In some cases, customers join a community of participants with absolutely no expectation of financial gain, and no fear of financial loss. From a purely financial perspective, their behavior may appear to be a complete waste of time. For example, customers who voluntarily leave customer feedback and reviews after purchasing products on web sites such as Amazon.com. In these cases, a few days after a purchase is made, the customer receives an email from Amazon, asking for a review of the product. The reviews are posted on Amazon for other potential buyers to review before making their own purchase. While this behavior is much appreciated by others, it serves no financial gain or loss on the part of the customer providing the review. It is therefore a break-even proposition, from a purely financial perspective.

3.2.3 Customersourcing with Net Outflow from Participants

As opposed to Threadless, where customers are actually paid in exchange for their design-services; there are situations where the customer not only provides a resource to the company, but also pays the company; in exchange, they may receive some service from the organization. For example, on-line dating services such as eHarmony will both collect their raw material from customers, and charge them for access to other customers’ data. Participants are often required to set up an account and contribute their own personal data as a condition of membership in the community. Then, they are required to pay a fee before they can receive any product or service – in this case, they are seeking personal information about other customers.

Understanding the financial exchange is vital to a complete understanding of Customersourcing. The exchange of money for goods and services is the basis of e-commerce. It is the financial basis of every business plan. Many on-line businesses have gone out of business due to a lack of complete business plan, including sound financial planning.

This analysis of net income, break-even, and net outflow demonstrates the full range of financial exchange situations available under Crowdsourcing and its subcategory,
Customersourcing; as depicted in Figure 6: Range of Financial Models for Crowdsourcing and Customersourcing.

<table>
<thead>
<tr>
<th>Condition:</th>
<th>Net Income to Participant ---</th>
<th>Financial Break-Even ---</th>
<th>Net Outflow from Participant</th>
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<td>Microwork and Macrowork ---</td>
<td>Crowdsourcing ---</td>
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<td>Customersourcing Examples:</td>
<td>Threadless t-shirt design contests ---</td>
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Figure 6: Range of Financial Models for Crowdsourcing and Customersourcing

### 3.3 Customersourcing’s Financial Proposition for the Customer

The unfortunate condition for the customer/participant is that the financial proposition is generally rather bleak. In all three conditions, the customer may be considered the victim when viewed from a purely financial perspective.

#### 3.3.1 Net Financial Income

Studies have shown that the average net financial gain for profit-seeking customers and participants is rather low. One study found that the overall median wage for paid crowdsourcing projects is only USD $1.38 per hour (Horton & Chilton, 2010). This is far less than the current minimum wage standards in the United States.

#### 3.3.2 Financial Break Even

In the case of break-even prospects, the customer/participant contributes time and effort, with no expectation of financial return. From a purely financial perspective this situation would be considered a waste of time. Fortunately, it appears that these participants find intrinsic value in their activities.

#### 3.3.3 Net Financial Outflow

In the case of Crowdsourcing situations where there is a net financial outflow, such as Crowdfunding, there is quite often an exchange of product or service. For example, the participant might be promised a limited edition first-run product, or a signed edition, or the original prototype product. However, the purpose of Crowdfunding is to raise capital to launch a new business. Thus, in all but a very a few situations, any product or service offered in exchange is likely to be far over-priced – if anything is offered at all.

In the case of Customersourcing, such as eHarmony and other on-line dating sites for example, many of these services can be obtained elsewhere at reduced cost (people have been meeting other people without the assistance of the Internet for many thousands of years). One of the benefits they are receiving is simply convenience. From a purely financial standpoint, the net financial outflow is generally a losing proposition for the customer. Yet, for convenience, they are willing to pay.
4 Conclusions
Fortunately, the basic economic principles of supply and demand, along with basic human desire for convenience and intrinsic rewards, are all alive and strong. Many of the examples presented here in the context of Crowdsourcing and its subcategory, Customersourcing, already existed as proven techniques before these terms were coined in 2006 and 2013 respectively. Indeed, it was necessary for these practices to be tested and proven, and to become popularized in order for these terms to become necessary in the categorization of business processes.

Future research should address the intrinsic rewards received by customers and participants. Based on the losing financial propositions, intrinsic rewards are clearly an important component in Crowdsourcing and Customersourcing. Empirical research should be conducted to quantify and document the current status and condition.

5 References


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