VALUE CREATION IN INNOVATIONS CROWDSOURCING. EXAMPLE OF CREATIVE AGENCIES

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Abstract. *Innovations are crucial for most of the companies to survive. However, the concept of innovation has become broader, including new forms of open innovation, such as crowdsourcing. The aim of this paper is to define the business model of a crowdsourcing-driven organization to create value.*

Empirical research consists of case studies on current crowdsourcing platforms, focus groups with potential crowd members and in-depth interviews with potential customers of creative agencies. Best practices were combined with solutions for closing the most significant gaps in order to create a successful business model.

The developed model suggests separating the crowd into free users and an empowered core team and enabling collaboration. Moreover, an innovative motivational model is introduced. Due to a three-step sequence of solution/idea generation, superior value is proposed to the customer. Another competitive advantage should be flexibility and adaptability to the customer's needs.

The paper is original since extended analysis of all crowdsourcing stakeholders is delivered. It also has practical value proposing a business model for creative agencies.
Key words: c*rowdsourcing, innovations, creative agency, business model, value creation*

Introduction

Innovations are crucial for most of the companies to survive. Despite several attempts to search for innovations in public, almost all companies are stuck with the first-mover advantage. However, Lee, Olson and Trimi (2012) state that the understanding of innovation has become broader. In 2003 Henry Chesbrough came up with a concept of open innovation, which states that by sharing their internal knowledge companies could benefit not only financially, but also boost their knowledge base and accelerate development of

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own products. Lee et al. (2012) also promote the next level of innovations: "co-innovation is a platform where new ideas or approaches from various internal and external sources are applied differently to create new value or experience for all stakeholders, including consumers" (Von Hippel et al., 2011 as quoted by Lee et al., 2012, 824 p.).

In 2006, Jeff Howe came up with the term "crowdsourcing" by combining outsourcing and the crowd. It means outsourcing of the work to the crowd, who would volunteer to perform it in exchange for compensation. Crowdsourcing is a narrower term compared to open innovation or co-innovation, as the latter two encompass any inflows or outflows of innovation in any way, crowdsourcing focuses more on inflows from efforts of single individuals or small groups. In combination with Web 2.0 technology, which enables information to be transferred both ways among many individuals or small groups, crowdsourcing may have cost efficient practical implications.

Even though crowdsourcing has its niche in contemporary industries, it is not very popular due to several reasons. First, crowdsourcing has erroneous perceptions: as cut-of-costs activity – even if it is true in some cases, it is not the main focus of creativity aimed crowdsourcing (discussed further in the paper); or as public relationship (PR) campaign – absolutely vital among participants from developing markets, for which it is a brand new phenomenon. Second, it is not equally easy to implement crowdsourcing for an unknown small to medium sized enterprise (SME) or even a larger company acting in emerging economies compared to a well-known large, usually western, corporation. And third, crowdsourcing does not have a well developed model which could create the highest value to all parties involved. Moreover, creative agencies tend to ignore crowdsourcing or, even worse, see it as a threat, not as an alternative to their current business model.

The problem of this paper is how to create the value by crowdsourcing innovations for the customers. Therefore, *the aim* is to define a business model of a crowdsourcing-driven organization to create value.

Literature sources focus on the development and forms of innovations (Lee et al., 2012; Duarte & Sarkar, 2011; Russo-Spena & Mele, 2012), and motivation to be involved in open innovation communities (Antikainen, Makipaa & Ahonen, 2010). Since the field of open innovation, co-innovation, crowdsourcing is still fresh, there is little of empirical research conducted. Some examples involve a survey of innovation intermediaries in France, Netherlands and Finland (Antikainen et al., 2010), or European companies adopting open innovation (Schrol & Mild, 2011). However, there is a lack of research involving all the stakeholders of open innovation, namely crowdsourcing, lack of focus on creative agencies in the field of value creation for customers. This paper is unique in providing a business model for a crowdsourcing-driven organization. The intended business model is one of the first attempts to suggest a multi-directional value flow depiction in crowdsourcing initiative run by a dedicated company by combining literature suggestions, best practices and unmet expectations of stakeholders. The model (or part of it) is expected to be defined quantitatively before its application in an actual venture.

Emerging economies usually lack funding for innovations, therefore conventional forms of innovation and development struggle. There is a need to implement new innovation harnessing techniques as addition to conventional ones, but not as their replacement. As an example, a few decades ago South Korea was the best on reverse engineering and now its products sometimes surpass western analogues. Bearing in mind Eastern European (including Lithuanian) experience, diverse thinking patterns and educational background, crowdsourcing may become another success story. On the other hand, due to modest quantity of possible crowd members, crowdsourcing would be more efficient if it was concentrated and managed by few dedicated entities.

Literature review

Literature overview consists of crowdsourcing related issues raised by various authors. Those issues are later on combined into one pattern used to evaluate crowdsourcing based platforms currently available in the market (see Chapter 3).

Open Innovations and Crowdsourcing

Innovation is usually perceived as a positive change in the organizational *status quo*, therefore improving one or more of its strategic elements (e.g., Luecke & Katz, 2003; Baregheh, Rowley & Sambrook, 2009). Believing that current innovation strategy goes down in its power, Chesbrough came to the concept of open innovation in 2003 (as cited in McKay, 2010). According to Chesbrough, the main reason of open innovation to be employed is that not all innovators work in the company, therefore external R&D might bring additional value to the company and new ways of harvesting it should be sought.

According to Lee et al. (2012), "innovation is directly tied to value creation" (818 p.) for the organization and its stakeholders, including customers (Gupta & Govindarajan, 2003 as cited in Lee et al., 2012; Russo-Spena & Mele, 2012).

In 2006, Jeff Howe came up with the so called buzzword "crowdsourcing", a type of open innovation. He defines it as "the act of taking a job traditionally performed by a designated agent and outsourcing it to an undefined, generally large group of people in the form of an ''open call" or simply as "application of Open Source principles to fields outside of software" (Howe, 2006).

Study on crowdsourcing success by Sharma (2010) gives five critical factors to attract participation in crowdsourcing initiative, which are shown in Figure 1.

According to Sharma's (2010) model, the success of crowdsourcing depends on motivation of the crowd. Motivation is built by five factors:

- Vision and Strategy of the company, initiative, product or service for which a crowdsourced solution shall be given;
- Human Capital or skills and abilities of the people who are involved in collaboration (including other users/contest participants and administrators of the contest);

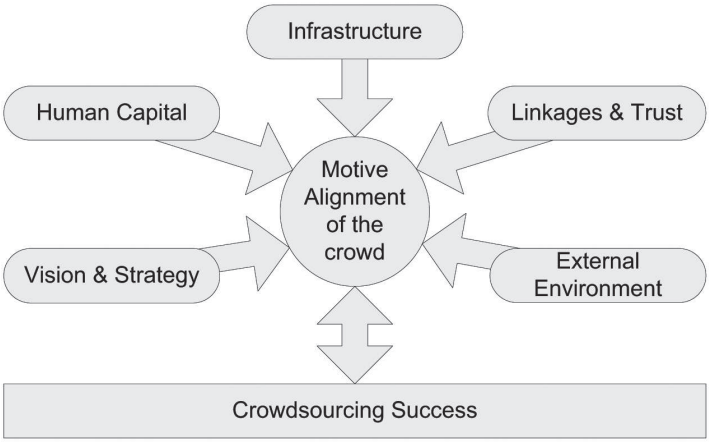

FIGURE 1. **Critical factors for crowdsourcing success**
Source: Sharma (2010).

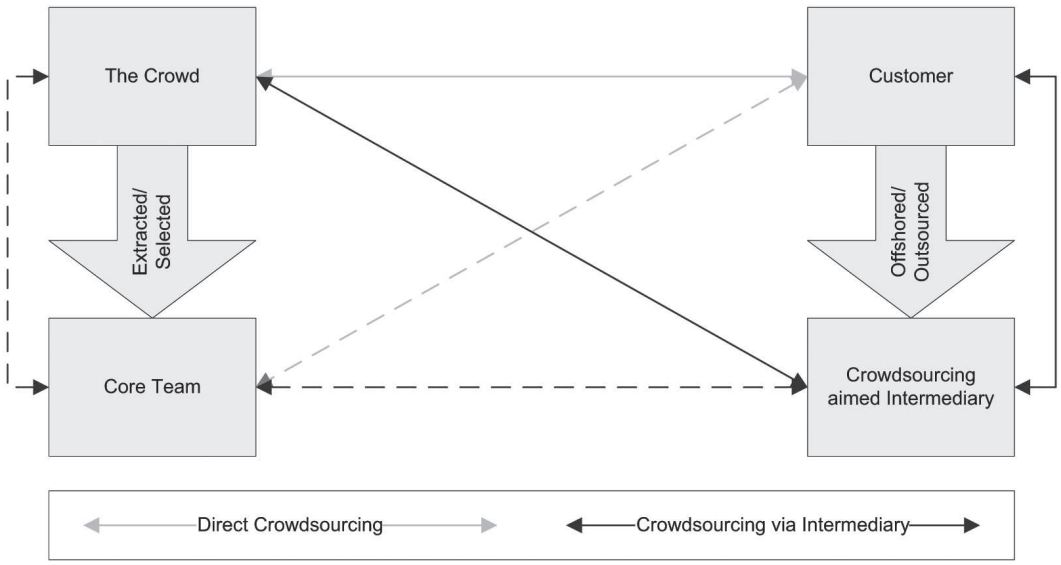

FIGURE 2. **Interaction among potential crowdsourcing participants**
Source: created by the authors.

- Infrastructure or the capabilities of the platform on which the contest is held;
- Linkages and Trust as a public image of the solution purchaser or platform owner in terms of respect, liability and ethical issues;
- External environment or other factors not mentioned above and barely influenced by the involved parties.

The success itself also works as an additional factor to increase the motivation of the crowd.

Figure 2 represents the parties which could be involved in crowdsourcing. Only two participants are necessary for crowdsourcing – the crowd and the customer (or a purchaser of the crowd's knowledge). However, some individuals could be separated from the crowd due to their specific abilities to form a closed core team. The customer also has a possibility to choose whether to engage in crowdsourcing activities or

outsource it to a subsidiary/external company. Thus, the maximum number of effective crowdsourcing participants is equal to four.

Despite the number of involved parties, there are several issues to be assessed while running a crowdsourcing initiative. Among those are:

- Intellectual property (Marketing Week magazine, 2009).
- Handling of ideas (Sullivan, 2010; Drummond, 2011).
- Hostility towards crowdsourcing (Schmitt, 2009).
- Crowd control (Jaron Lanier as cited in Nash, 2010)

Crowdsourcing from the Perspective of the Crowd

Participation of the crowd (and the core team, if applicable) is essential for crowdsourcing, but it should also meet three main requirements to become an effective tool (Trends E-magazine, 2009):

- the crowd should have diverse reasoning patterns;
- the crowd should be provided with a comprehensive tool for retrieving primary information, submitting their solutions and putting all the diverse ideas together;
- the participation of the crowd should be incentivized or a reason to be involved given.

Ensuring diversity

The success of crowdsourcing depends on successful attraction of the critical mass of diverse participants. The crowd may be formed of groups, usually according to their attitudes towards or relationships with the purchaser of the solution (Palumbo, 2009). However, collaboration in a form of discussion is encouraged among these groups. To measure the possible value of group collaboration, Metcalfe's Law could be used, which states that the value of a network increases exponentially for every n-node added to the network (Shapiro & Varian, 1999, p.184).

Making ideas handling easy

The most valuable crowdsourcing feature is ability to transcend geographic, political, economic barriers (Sharma, 2010). This enables creation of cross-functional teams in a broad scope of problems. However, diverse cultural backgrounds lead to longer time needed for the final decision to be taken (Way, Ottenbacher & Harrington, 2011). Therefore, platform's infrastructure should work as a tool for the crowd for retrieval, submission and aggregation of information to compensate the time used for taking decisions. "Rules of the game", including submission guidelines and intellectual property protection, should also be presented clearly (Drummond, 2011).

Incentivizing participation

Motivation and incentives for the crowd's participation should be considered very carefully. The crowd should be perceived as a partner, therefore strong connection

between the crowd members and those who conceptualize suggested ideas should be built (Sharma, 2010). Motive alignment study of participants in the SAPiens Ideas Competition (Leimeister, Huber, Bretschneider & Krcmar, 2009) resulted in a comprehensive categorization of motives and incentives for the crowd (Table 1).

TABLE 1. **Motives and incentives of the SAPiens Ideas Competition**

Motives	Incentives
Learning	Access to the knowledge of experts, mentors and peers
Direct compensation	Prizes and career options
Self marketing	Profiling options
Social motives	Appreciation by organizer and peers

Source: Leimeister, Huber, Bretschneider &Krcmar (2009)

Antikainen et al. (2010) also raise an issue of rewarding for groups versus individuals, since until lately the major focus was put on the latter.

Crowdsourcing from the Perspective of the Company

Companies could engage in crowdsourcing due to various reasons. To check whether crowdsourcing exists among the necessities the company should answer the following questions (Jouret, 2009):

- Does idea generation is a pain point for the company and will the crowdsourcing solve it?
- Is crowdsourcing applicable and effective in the company's native industry?
- Is this one of the highest priority?
- Does the company have enough capabilities to engage in it?
- Will it give a competitive advantage of some kind for the company?
  Those answers of the company originating from the emerging markets most probably would have "Yes, but…" element. Then Jouret (2009) suggests another set of questions to determine whether to engage in direct crowdsourcing, or outsource it:
- Will the intensity of crowdsourcing be high enough to make it worth investing?
- Are the brand and its image capable to attract a critical mass of participants? What could be offered as an incentive for the participants?
- Are there enough resources available for the preparation of the task and handling of submissions? Is the company ready to take risk of possible copyright infringements?

Only few companies acting in the emerging market could answer positively to the questions above. This leads to a clear need of an intermediary where crowdsourcing activities could be outsourced to.

Crowdsourcing from the perspective of the creative agency as an intermediary

The creative agency may be defined as an organization which creates intellectual property (IP) for profit. Due to human resources limitations, creative agencies usually focus on a specific industry: e.g., Marketing/Communications, Web Design/Development, Multimedia. However, the creative agency could also be perceived as an organization with a main goal of creating new knowledge by using knowledge management principles. To accomplish such transformation, creative agencies should change attitudes towards crowdsourcing, focus on sustainability and fulfil certain obligations for a business model. In that way, crowdsourcing is expected to become more professional with business-like outlook between the customer and the crowd (Parpis, 2009).

Growing popularity of crowdsourcing is seen as a threat for current creative agencies, because crowdsourcing practices are developed the best in the same industries creative agencies are working in (Winsor, 2009). However, John Winsor (2009), as CEO of an advertisement agency based on crowdsourcing principles, believes that all professionals should employ crowdsourcing as a tool which pushes creative agencies to transform current and develop new business models. Moreover, usage of crowdsourcing is a desired feature of the customers who would like to take part in strategy formation of their beloved companies (Noam Buchalter as cited in Murphy, 2009).

Methodology of the empirical research

Research Problem Definition

Since the main *problem* with crowdsourcing is disability to create value in the way it could be main revenue stream for the company and become a regular way in the market for obtaining innovations, the research is *aimed* at creation of the business model for a crowdsourcing-based company to create value by combining best practices and addressing unmet expectations from all the parties involved.

Selection of the Model Framework

The paper is based on the business model canvas suggested by Osterwalder, Pigneur, Smith, and 470 other practitioners (2010). It is worth mentioning that the business model itself is neither questioned as a concept in this paper, nor is it intended to present the selected as the most appropriate one. Alignment of the critical factors of crowdsourcing success proposed by Sharma (2010) (Figure 1), with the business model canvas by Osterwalder et al. (2010) provides a foothold for our research model (see this combination in Figure 3).

The essence of the combination is that human capital is treated as partners, and activities are held to build the trust. Infrastructure is the platform itself, which is also

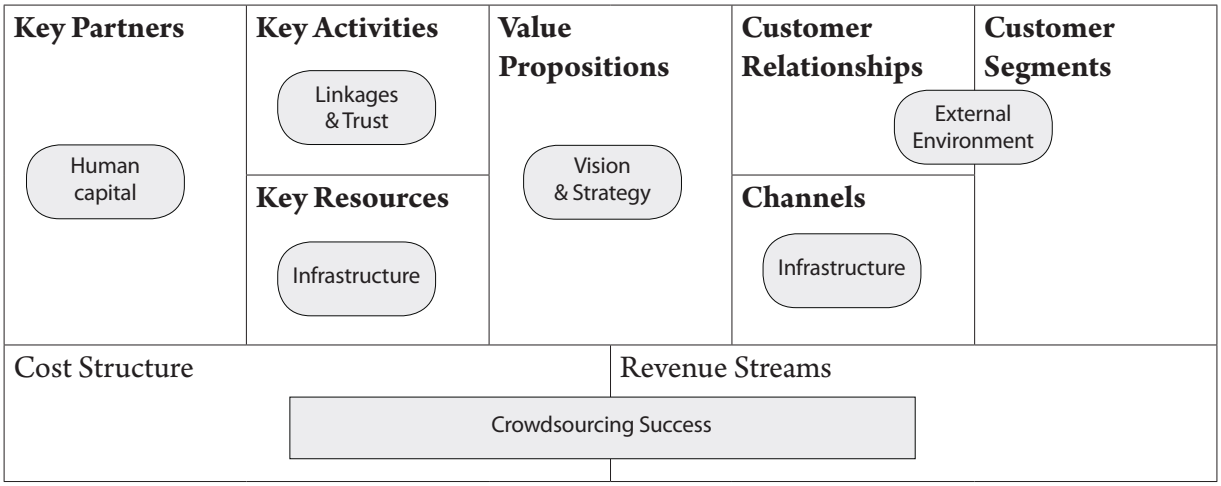

FIGURE 3. **Business model canvas with aligned success factors**
Source: Osterwalder, Pigneur & Smith (2010) [Edited by the authors].

treated as a resource and the main collaboration channel. Vision and Strategy reflects the value proposition for both: the users and the purchasers of the solution. The difference of cost and revenue streams, to be more specific, the difference between positive and negative cash flow could be defined as success of crowdsourcing.

Human Capital

Human resources consist of in-house employees and the crowd. On the other hand, in crowdsourcing it is critical that the crowd is visualized as a partner. Since the crowd has diverse skills, abilities and the current level of professionalism, it could be split into two or more levels, where different roles of users are authorized to use different features of the platform. The possibility to collaborate between levels or among teams, if these are applicable, should be evaluated in terms of effectiveness as well.

Linkages and trust

Crowdsourcing should be a fair game. Clear information about odds of winning, selection criteria should be stated. Another very important issue is intellectual property protection. Rights and ownership of work after the submission and after the end of contest should be clearly defined.

Support of well-known corporate stakeholders gives more trust to the users. Government is perceived as stability warranty. Any association with or support from governmental institutions is more likely to add trust. Previous success stories or testimonials also add some trust elements.

Infrastructure

The organization of ideas is represented by the platform. The major focus shall be allocated to presentation of primary material, which is used by crowd for elaboration

on ideas. In general, the platform should be user-friendly and capable to process and evaluate submitted ideas. From the perspective of the purchaser of ideas, additional capabilities, like an environment for an iterative approach to service innovation, are also important.

Vision and Strategy

The best disclosure of value proposition is mission, vision and objectives statement. However, here comes value for two parties, the crowd and purchasers of the end-product. The community requires an incentive as a reason to participate. This includes needs, aspirations, motivation and must remain the most important consideration while developing the crowdsourcing initiative.

Value proposition for companies concerns newness and customization, design advantages and cost reduction, and convenience. The main idea is to provide a low-friction, cost-effective environment for collaboration.

External environment (purchasers)

The purchasers are concerned about external ideas incorporation into the strategic planning process. However, Make/Buy/Partner decision is made by evaluating internal capabilities to exploit crowdsourcing: lack of in-house professional team for ideas supply or any network with suppliers, vendors, competitors or inventors minimize the likelihood of Make decision; the scope of crowdsourcing usage and that the company offers in exchange for ideas (cash, workplace, long term partnership) usually determines either Buy or Partner decision.

Success

The success of crowdsourcing depends on participants and their willingness to share ideas. The essence of the business model, however, is to get the maximum for the concept from the purchaser and to pay as little as possible to the crowd. The main cost lines of the platform include cash incentives, platform acquisition and the company's maintenance costs.

There is no possibility to find out exactly how much the platform owners get from the project. But it is possible to identify the revenue model like one-time customer payments or recurring transactions due to post-purchase customer support, or both. These details could be used to determine pricing strategy, whether it is value driven or offers only cost-saving possibilities.

Methodological Approach

The nature of the research object determined qualitative empirical research. Deductive approach is conducted first to match the pattern suggested by literature review with that currently available in the market. Later, the importance of retrieved best practices

is tested with direct stakeholders of crowdsourcing initiative. Moreover, the parties involved are surveyed to extract either already satisfied or still open needs and expectations of potential customers (Table 2).

TABLE 2. **Research design**

Method	Sample	Expected results
Case studies	Six crowdsourcing platforms with different capabilities and target audience	Extraction of key crowdsourcing practices currently used in the market and their gaps with literature
Focus groups	Three focus groups of similar respondents within the group, but different environment for each group	Ranking of known crowdsourcing practices in terms of relevance and discovery of unmet expectations
In-depth interviews	Three representatives of companies/ organizational bodies, which vary in size and are from different industries	Definition of current and potential uses of crowdsourcing, identification of collaboration with intermediary possibilities

Source: created by the authors

Case Studies

Case studies are conducted in order to compare the pattern of activities obtained from the literature review with the ones currently used by crowdsourcing platforms. The aim of this research part is to extract current best crowdsourcing practices and to identify areas for improvements.

The crowdsourcing platforms selected for case studies have different approach and different target audience:

- InnoCentive – a platform known for challenges (high level of expertise, high awards);
- Victors&Spoils – a platform used as a tool by a creative agency;
- TopCoder – a software related crowdsourcing platform;
- IdeaStorm – Dell's inside platform to collect its customers impressions, comments;
- CrowdSpring – a platform for design freelancers;
- IdeaBounty – a platform, known for its famous customers.

  Case studies on selected crowdsourcing platforms are held by filling in pre-defined research questions matrix (see Table 3) which is prepared according to the selected business model framework (see Figure 3) and insights of Antikainen et al. (2010), Drummond (2011), Leimeister et al. (2009), Marketing Week magazine (2009), Schmitt (2009), Shapiro and Varian (1999), Sharma (2010), Sullivan (2010) and others.

TABLE 3. **Topics association of the business model areas in case studies**

Research object		
Human capital	Quantities	HC1.1 Number of participants HC1.2 Metcalfe's law application [n(n – 1)/2] HC1.3 Number of internal employees HC1.4 Employee/participant ratio HC1.5 Existence of useless mindflow (average percentage)
	Diversification	HC2.1 Access restrictions HC2.2 Level of professionalism HC2.3 Existence of divisions HC2.4 Target audience HC2.5 Possibility to team up
Linkages & trust	General info	LT1.1 Competition rules & policy LT1.2 Selection of winners policy LT1.3 End customers (purchasers of the idea) are/are not public
	Intellectual property (IP)	LT2.1 Explanation of legal protection LT2.2 Publicity of individual submissions LT2.3 Announcement classification - public/non-public (patent issues) LT2.4 IP holder after announcement LT2.5 Legal safeguards for the platform
	Respect	LT3.1 Adequate challenges (in terms of reward) LT3.2 Deadlines (tight or adjustable) LT3.3 Responses (responses for all or just for selected ones)
	Ext. support	LT4.1 Support from the Government LT4.2 Previous examples (success stories) LT4.3 Buzz on the platform in public
Infra-structure	Accessibility	IN1.1 Languages available for choice IN1.2 Adaptation for the disabled IN1.3 Mobile access
	Capabilities	IN2.1 Ease of use IN2.2 Possible functions (accumulate ideas, test feasibility, trial in the market, etc.) IN2.3 Presentation of primary material IN2.4 Possibility to link ideas to each other
	Evaluation	IN3.1 Dimensions for evaluation (newness, market potential, customer value) IN3.2 Ranking types (voting, comments)
Vision & Strategy	Learning	VS1.1 Access to knowledge sources (experts, DB, etc.) VS1.2 Availability of mentors/help VS1.3 Working as an incubator of ideas VS1.4 Feedback from peers (comments, private messages) VS1.5 Feedback from professionals (after evaluation part)
	Direct compensation	VS2.1 Monetary prizes VS2.2 Prizes by products/services VS2.3 Career opportunities
	Appreciation & Self-marketing	VS3.1 Appreciation by the host VS3.2 Appreciation by peers VS3.3 Profiling options VS3.4 Networking possibilities

Research object		
Success	Costs	SC1.1 Cost/Value driven SC1.2 Average prize in cash SC1.3 Average value of non/monetary prizes SC1.4 Complexity of the platform (cost of IT support)
	Revenue	SC2.1 Project/Brokerage Revenue SC2.2 Single/continuous support purchase SC2.3 Additional revenue models

Source: created by the authors.

Focus groups

Focus groups are aimed to rank practices extracted from literature and case studies (therefore are conducted afterwards); to discover needs and unmet expectations of possible platform users. Time and access limitations led to the selection of convenience sampling to form the groups:

- group 1 – internal employees of Skandinaviska Enskilda Banken, Vilnius Branch, directly responsible for improvements of the processes related to financial operations; 12 in total addressed with an invitation, 4 responded; the main aim was to evaluate attitudes of internal employees towards crowdsourcing;
- group 2 – time proven idea generators; people personally known by one of the authors as creative and innovative individuals (co-workers or collaborates in some way); 8 in total addressed with an invitation, 2 responded; the main aim was to identify value creating activities for potential participants in crowdsourcing initiative;
- group 3 – public initiative "MesDarom" volunteers; 4 participants were selected by the initiative manager as most suitable for the focus group; the main aim was to clarify the needs of platform users for solving NGO's problems and acquirers of NGO tailored solutions.

Participants are provided with suggested topics, the objective, and the structure of the discussion. Questions were raised (see Table 4) to reflect the key business model framework areas which were not disclosed to participants.

TABLE 4. **Topics association to the business model areas in the focus group surveys**

Topic/Question	Addressed Area(-s) of the Business Model
Attraction to participate	Value Propositions and Key Activities
Direct & other incentives	Value Propositions and Cost Structure
"Fair game" concept	Key Activities, Key Partners and Channels
IP issues	Value Propositions and Key Activities
Handling of ideas	Key Resources, Channels, Value Propositions and Revenue streams
Collaboration & Communication with other users	Human capital and Key Resources

Source: created by the authors.

In-depth interviews

In-depth interviews are performed to identify current and potential uses of crowdsourcing in different companies/organizational bodies as well as determine possible ways of collaboration, to discover their needs and expectations. Convenience sampling is used for the selection of respondents. However, different companies in terms of their size and activities were selected:

- interview 1 – manager and owner of a small on-line advertising company, for which innovations were the most important competitive advantage and crucial to survive;
- interview 2 – managing director of a large and leading international market research and analysis company, for which innovations were the way to ensure their market share, but these are shared globally;
- interview 3 – head of the department for strategic planning in a Lithuanian governmental institution, for whom improvements and consultations with society were a duty.

In-depth interviews questions were designed to address Customer Relationships and Customer Segments elements of the business model framework mostly, as these were not assessed in previous research steps. Suggested topics (Table 5), the objective, and structure of the discussion were provided in advance.

TABLE 5. **Topics association to the business model areas in in-depth interviews surveys**

Topic/Question	Addressed Area(-s) of the Business Model
Innovative spirit level	Customer Segments
Outlook to external knowledge	Customer Segments, Channels
Purposes of innovation	Customer Segments, Value Propositions
Compensation suggested	Revenue Streams
Expectations from collaboration with intermediary	Customer Relationships, Value Propositions
Work routine with intermediary	Customer Relationships, Channels

Source: created by the authors.

The findings of the research

Results of the Platforms Case Studies

Platforms case studies were held in order to compare the pattern of current activities with the one obtained from literature review, to disclose existing gaps. The results (see summary in Table 6) are presented in the same logic as the questions were ordered in the questions matrix (see Table 3).

Human Capital

Well known platforms are capable to attract thousands of users (HC1.1 – see categories in Table 3), but in most cases these fail to make them collaborate. Metcalfe's law states

that potential of collaboration grows exponentially with every additional node, but with limited interaction between nodes it becomes useless (HC1.2). On the other hand, this emphasizes quantity rather than quality, because lots of participants create huge amount of information, and simultaneously a problem of processing it effectively.

Another problem is useless mindflow (HC1.5) in the platforms due to lack of proper user and submission tracking. Some platforms are very easy to join, like Dell's IdeaStorm, which creates overload of users and information.

Linkages and Trust

In all cases except Dell's IdeaStorm, participants try to meet the demand from the customer, not to supply ideas despite the demand (LT1.1). As it is shown by example of InnoCentive or TopCoder, the more complex the challenge is, the better criteria of selecting the winner are described (LT1.2). All the examined platforms act only as a medium for collaboration between the solution purchaser and the crowd and give almost no efforts in creating any other value by them.

All platforms propose quite adequate direct rewards for the solved challenges (LT3.1). And the last thing causing trust in the platform is participation of governmental and non-governmental organizations (NGO) as customers of the project (LT4.1).

Infrastructure

Ease of use correlates with the number of possible functions and primary material presentation capabilities (IN2.1, IN2.2, IN2.3). However, there were some well- balanced examples like CrowdSPRING or InnoCentive, and some imbalances, like IdeaBounty. Presentation of primary material is mostly based on "text only" principle, only part of platforms has capabilities for attachments or presentation of visual content (IN2.3). CrowdSPRING simply gives a pre-defined template according to challenge type for the customer to fill in and posts it without edition. Evaluation is put outside the platform (IN3.2), therefore it makes participants guess the real dimensions of the evaluation (IN3.1) and also wastes resources of human capital, especially when mindflow is intensive.

Vision and Strategy

While talking about platforms as a source of experience (VS1.1), IdeaStorm or Victors&Spoils have some practices in place. Mentors, if available, guide towards a particular way, unfortunately, they do not help with individual feedback (VS1.2). And there is no feedback from peers (VS1.4), except Dell's example. Having very limited feedback, it is hard to say that platforms are acting as incubators (VS1.3), where good ideas can grow.

Monetary prizes are attractive enough (VS2.1). In most cases the winner is a single person or a group. Non-monetary prizes are also available (VS2.2), but, in the same way as career opportunities (VS2.3), are rarely used in practice. Still, Victors&Spoils platform suggests the model of making a career within the platform.

Success

All platforms present themselves as value driven (SV1.1) and propose an award according to value-in-use pricing. E.g., IdeaBounty insists that it is working on a free market principle, that the more significant the award is, the better are ideas to choose from. The cost of mediation depends on the platform (SC2.1), varying from fixed rate plus 15% of the award to 100% of the award. Victors&Spoils employs an option where the project is owned by the intermediary and only part of the money for winning ideas is shared with the crowd. None of the platforms provide post purchase support (SC2.2).

Aggregation of the results of the case studies

To sum up, even though platforms are orientated to different target audience, the means they are employing do not differ a lot. Users are treated as individuals, not as an integral source of knowledge, therefore their collaboration is minimal. Incentive models do not vary much, either, and lack of trust building activities usually lowers the effect of motivational options applied. Although capabilities of platforms are different and represent offered services quite neatly, they have a common drawback – knowledge submitted by the users is not processed by an intelligent creature. Figure 4 shows generic knowledge exchange model currently available in the market. The elements distinguished by dashed lines are seldom used.

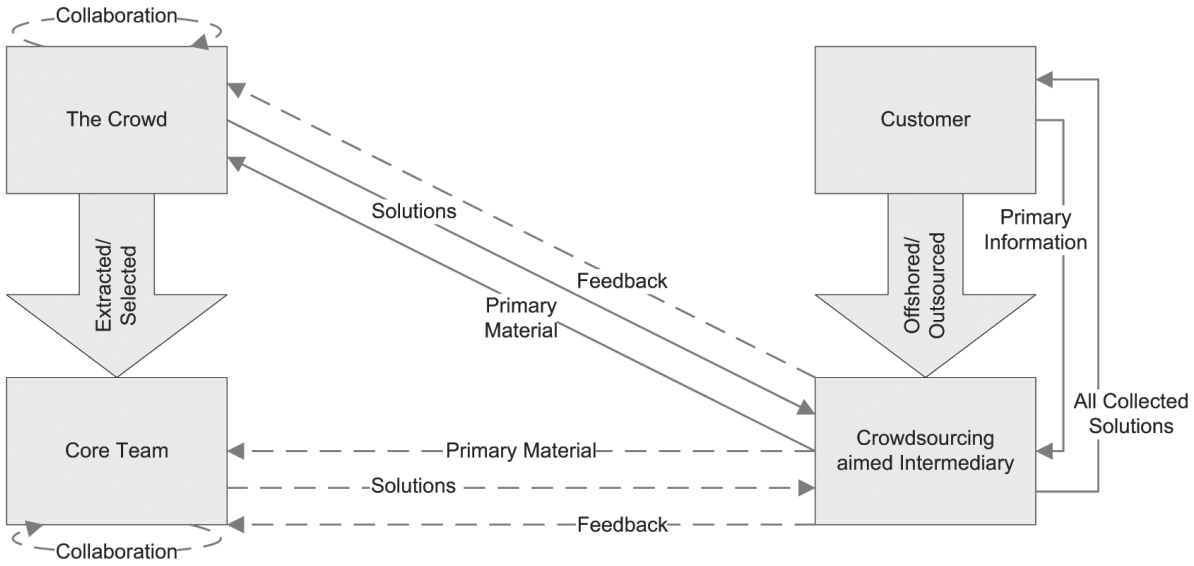

FIGURE 4. **Generic knowledge exchange model**
Source: created by the authors.

The major downside of the current business model observable in the market is that knowledge which goes through it is not enhanced in any other way than useless information filtering. This means that the intermediary acts only as a collector of individual thoughts of the crowd members, which are passed to the customer "as is". Nothing is done inside the platform to aggregate, summarize or evaluate this knowledge,

the knowledge is not even attempted to be transformed to the commercial product which could be sold to the customer afterwards. Table 6 summarizes the key findings of case studies and identifies the observed gaps from literature suggestions.

Focus Group Research Results

The aim of this research part is to evaluate the significance of practices extracted from literature and case studies, and discover real needs and unmet expectations of possible platform users. The results (Table 7) are presented by pre-defined categories: first goes *motivation,* the second one is *risks and obstacles* which decrease the motivation, then expected *"rules of the game"* are presented, and the last one is required *technical capabilities* of the platform.

Motivation

The main motivational issue was that youth values *experience* (including feedback and career opportunities), older people are satisfied with *acknowledgement*, but *money* retains relevancy as well (Group 3). First of all, any commercial implementation of the idea is expected to be rewarded with cash or any other direct and tangible benefit. Direct motivation could also be given in a form of salary, if the user submits a certain number of ideas for a pre-determined period of time (Group 2). The other motivation option is freely gained experience. It could be expressed in several ways: sharing of perspectives through the eyes of a worker from another industry (Group 3), a possibility to use the skills one has, and a possibility to implement the idea with professionals.

Feedback from experts is perceived as necessity, especially for students (Group 1). Feedback from peers, however, might be very subjective, but some kind of discussion would be valuable.

Risks and Obstacles

The most common problem in crowdsourcing is willingness to own ideas even if one does not have any possibility to implement them. The risk of ideas theft or loss prevents people to share ideas publicly or even privately with a potential investor. One of the possible solutions how to deal with the IP concerns is to make the contest in several levels (Group 1). As the first step, all ideas could go public, but those are just raw material for real projects. In the second step submissions could be private and all participants should get some symbolic appreciation from the host of the idea sharing platform (Group 2).

Since people are participating on a voluntarily basis, lack of responsibility is always present. Without proper motivation, crowdsourcing may be perceived as a cheap way for companies to get ideas (Group 1).

To ensure capabilities for assignment, the platform should have a clear segmentation. Only people with expertise make the discussion effective. However, fresh ideas are

TABLE 6. **Aggregation of the results of the platforms case studies**

	Human Capital	Linkages & Trust	Infrastructure	Vision & Strategy	Success
Key Practices	- Large number of participants but low (or none) collaboration - Access limits for some challenges - Complicated or non-existing team-up possibilities - Existence of useless mindflow (multiple users & submissions) - Influence to final product by mentors - Non-representative group's influence on customers - Applicable to technical solution search as well	- Submissions are not public in most cases - Separated levels of different contests - Segmentation, but not prevention from entrance - Transfer of IP may be required even in private contests - Criteria are not always clear, selection depends on customer - "General release" of platform in terms of liability -Response to the participant is vague - Voice of the customer - Almost no empowerment - Involvement of NGOs builds trust and interest	- Ranking & comments are not very common - Balance on functions and ease of use not always achieved - Text based primary material - Preparation of primary material usually done (in active or passive manner) by the platform - Two submissions methods: web based fields to fill and file upload (or a combination of both) - Evaluation is an outside evaluation - Lack of accessibility options (especially mobile access)	- Adequate direct (monetary) award - Risk of possible split of monetary prize if several winners are selected - Career is not usually an award option - Lack of self marketing & networking capabilities, portfolio options - Previous winners are shown - Profiles give statistic only or there is even no public profile - Low involvement, low level of primary knowledge sharing - Limited or no feedback on improvement - No access to extensive knowledge databases, only generic tips for success	- Not a tool, just a space for direct purchaser-solver communication - Demand goes first, or contest based approach - Sharing of contacts allows to bypass the platform - Value driven, but saves cost because only the selected idea is purchased - Revenue per project from 15% to 100%, fixed fee (e.g., listing fee) may exist - Intermediaries responsibility for the project is limited, except V&S case - No post purchase support enabled via the platform - Expectations on the final product are assumed from the platform image in public - No direct advertising in platforms, featured challenges only - Participants involvement in the platform development is not very common

	Human Capital	Linkages & Trust	Infrastructure	Vision & Strategy	Success
Gaps Compared with Literature	- Collaboration gives more intelligence (synergy effect) - Workload of internal employees should be low - Low entrance barriers usually equal low quality - Technical challenges should be left for professionals	- Effective Business Model versus First Mover advantage - Cross industries innovations - Customers & suppliers integration in R&D - Diversity of the crowd is required - Aggregation of ideas, how and by who? - Proper vision to attract NGOs - Compatible with international business norms - Long term partnership orientation - Transcend barriers with collaboration - More accountability to crowd members - Clear rules of the game - Individual responses with explanations - Imply as much of legal protection of submission as possible	- Enables the companies' internal & external collaboration - Provides cost effective environment - Employs various other than innovation functions - Clear primary material, more raw data to get a solution from unexpected perspectives - Ranking possibility in several dimensions (originality, usability, etc.) - Handling of unused ideas after the contest ends (what kind of system should be used) - Ideas of the person/ team should be organized, portfolio possibilities	- To be an unconventional job solution - Good ideas cost much - Value to customers created outside & inside the intermediary - Provision of career possibilities, skills improvement - Previous success stories to build the trust - Self marketing & profiling to enable networking - Flexible deadlines whenever possible - Trainings are possible, but may influence the final product - Adequate and often individual feedback is better than trainings	- Absorptive capacity is not used in the platform, only by the customer - Use as a tool for innovations, not communication only - leave it to forums - Empowerment cuts off costs - Dynamic business model acting according to expectations of participants & customers all the time - Viral effect of contest should be communicated to the customer

Source: created by the authors.

always relevant, thus students may be employed. From the platform's perspective, the customer should give clear criteria to the intermediary (the platform owner), who on his own behalf should prepare a task for the crowd (Group 2).

"Rules of the game"

First of all, challenges should be separated according to the expected final result. Crowd is more interested in creative, not technical challenges – the technical ones should be left for the experts of the field (Group 1).

Users are about to be separated to segments (Group 1). Access limitations should be applied by splitting the contest into several stages (Group 2). To prevent premature loss of interest, access to the first stage of challenges should be granted for all, and different ways to get to the second stage (as a short-term incentive) should be ensured.

Technical capabilities

The platform itself should be easy to use and easy to join. On the other hand, access restrictions should be employed to prevent anybody and everybody from entering and ruining the competition (Group 3).

The task should be presented in a clear structure to save time and prevent misinterpretations. If the task is good, the answers/solutions will be good as well (Group 1). The company's capabilities to implement the final product should be stated to avoid unreal suggestions (Group 3), and needless efforts.

As an additional revenue model, traditional approach of ideas bank should not be discarded. Companies may be paying for the access to that knowledge base as well (Group 2).

Aggregation of the results of the focus group surveys

To sum up, cash is still a really relevant motivational option for the users of the platform. Other options of incentives are barely addressed in the current market: experience gaining in the way of feedback, knowledge transfer, mentorship and acknowledgement. Having this in mind, the desired value flow among the users of the platform is shown in Figure 5. This chart completely represents the element of Value Propositions of the business model for the users of the platform.

The value flow was designed by making assumptions that users from different levels are collaborating between each other and provide mutual value. Due to collaboration among peers of the same level, value is created and shared within this level as well. The intermediary's activities towards its users are aimed in the way that all value goes to the users in exchange for fresh ideas. The core team gets more value to become a desirable target for the crowd's members to pursue.

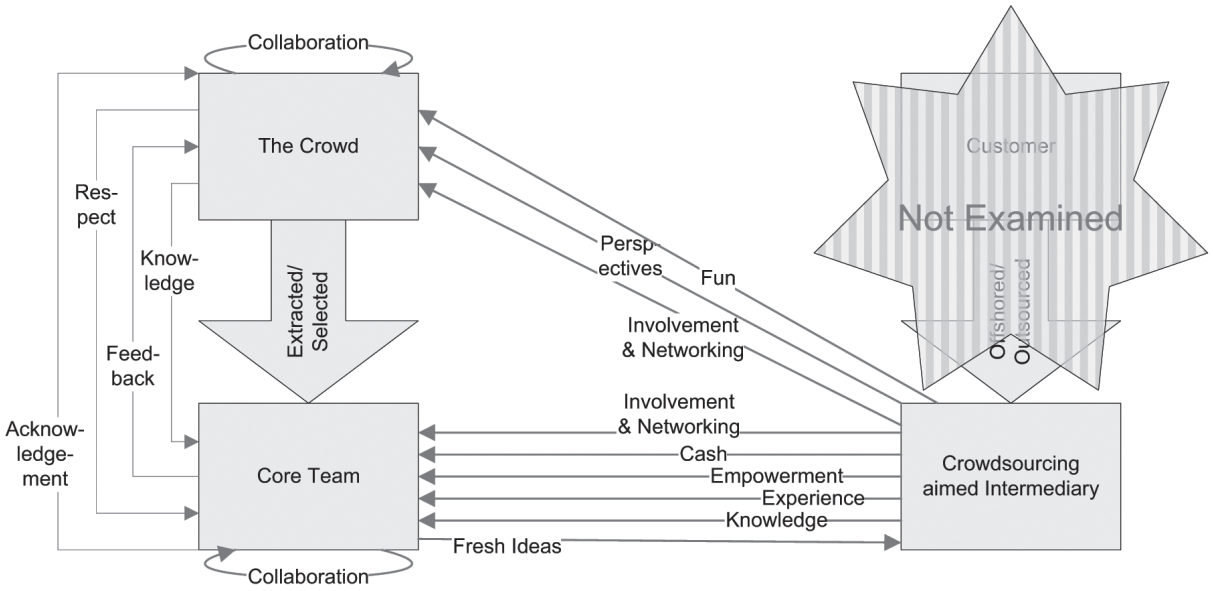

FIGURE 5. **Desired value flow between user and intermediary**
Source: created by the authors

In-depth interviews results

The *main objective* of the interviews was identification of current and potential uses of crowdsourcing in represented companies/organizational bodies and discovery of possible ways for collaboration. The results are presented by categories in a particular structure (see Table 5).

Value of Innovations

Small companies acting in niches or by a non-conventional business model usually live from innovation or are innovations themselves (Interview 1). Approach of large companies towards open innovations is problematic. R&D departments do not tend to share any part of their knowledge with outsiders due to theft possibility or underlying games by competitors (Interview 1).

Innovations and improvements in governmental solutions are driven by expectations of the society. Various committees are formed by members originally working in consulting or similar business, public associations, etc. Members are selected according to the purpose of the commission and are working on a voluntarily basis; they get no other than emotional compensation, e.g., acknowledgement (Interview 3).

Current Uses of Innovation Sources

Small to medium sized companies are really good at sharing information inside the company, because it is crucial for them and it is easier with a smaller number of employees. A forum-like on-line discussion place is perfectly suitable for such type of a company. However, such companies use secondary data and rarely are involved in any public request for primary material, designed specially for them (Interview 1).

TABLE 7. **Aggregation of the results of the focus groups research**

	Motivation & Costs	Risks & Obstacles	Rules of the Game	Infrastructure & Revenue Model
Key Findings	- Awards for all participants - Paying salary - Cash from commercial gain is expected - Working on your own feeling - Creating image of platform - Involvement leads to experience - Feedback is given more often - Evaluation from aside - Sharing of perspectives - Doing something right (NGO case) - Self marketing & social networking - Ability to propose your own motivation measures	- Quite Proprietary outlook to own ideas - Own implementation attempts instead of sharing - IP ownership depends on time spent on the solution - awards should be perceived as adequate - Prevention of overlapping solutions to avoid future conflicts - Team-ups should be effective - Possibility to discard the contract for the customer - Lack or responsibility & empowerment	- Limitation of user number, but balanced access rights - Primary selection of the users should be advanced - Contest is divided into steps, natural selection is applied - Clear differentiation of challenges - Team-ups evolve from discussion - Involvement of students - Elaboration trail of own idea should be seen - Image of honesty - clear documentation	- Well prepared primary material - Presentation by the company's representatives - Moderation of challenge, clear communication - Submission efforts should be equal to awards - Ranking by peers - Ability to buy raw ideas - Ideas bank approach
Conflicts to be Addressed	- Increased awards equal increased costs - Final result/implementation phase not shown to the author - Feedback from peers may be insulting - Experience is free for user but costs for intermediary - Strict moderation may lead to rigid guidance - Measurement of productivity - not to become another social network - Moderation of legal conflicts	- Publicity and retention of IP are hard to implement - Develop search engine to prevent overlapping - Prevent free riding in teams - Not to raise costs too much	- Restricted access to the platform leads to loss of particular segments - Limited access in terms of experience - Premature loss of interest - Who and how selects the winner? - Make the same users participate in different challenges - Participation of the author is not always welcome - Not to become "students only" portal - Honesty may stop some users	- Additional work to the customer - In some cases links to home page of the company (customer) are enough - Do not prevent free development of ideas - Peers evaluation should be only a part of the total evaluation - Loss of motivational benefits - Handling of unused ideas - Possible disclosure of confidential information - Language barrier, different wording, other communication issues

Source: created by the authors.

The most common application of crowdsourcing in large companies is the usage of small groups of selected people, usually customers, to get some ideas or test the market options. As a platform, social networks like Facebook or tiny applications in own site, are used. From the company's perspective – one cannot create a suitable final product without knowing enough internal information which is confidential.

There are three key sources for suggestions on new legislative projects: individual expertise of a regular employee, various committees and boards, and collective knowledge from society (Interview 3).

Partnership Possibilities

For small companies outsourcing means significant cost savings, because they give away considerable part of their internal labour force (Interview 1). Large companies are also keen on outsourcing when it is more effective than having an in-house specialist (Interview 2).

To become a partner of for-profit corporations, crowdsourcing intermediary should have a clearly defined market in terms of industry and target audience to: (1) have highly skilled insiders (or outsiders) that are able to prepare the final product for the customer, (2) be able to propose real innovations and gain trust of the customers R&D department (Interview 1).

Aggregation of the results of the interviews

Figure 6 presents a generic pattern for the desired value flow between the intermediary and its customer. Despite higher amount of value streams from the intermediary to the customer, there is only one intentional – Fresh and Professional ideas. Others come from the nature of crowdsourcing unconsciously. On the other hand, it is not always all three inbound value streams coming to the intermediary. Intermediary-crowd value exchange is shown in Figure 5.

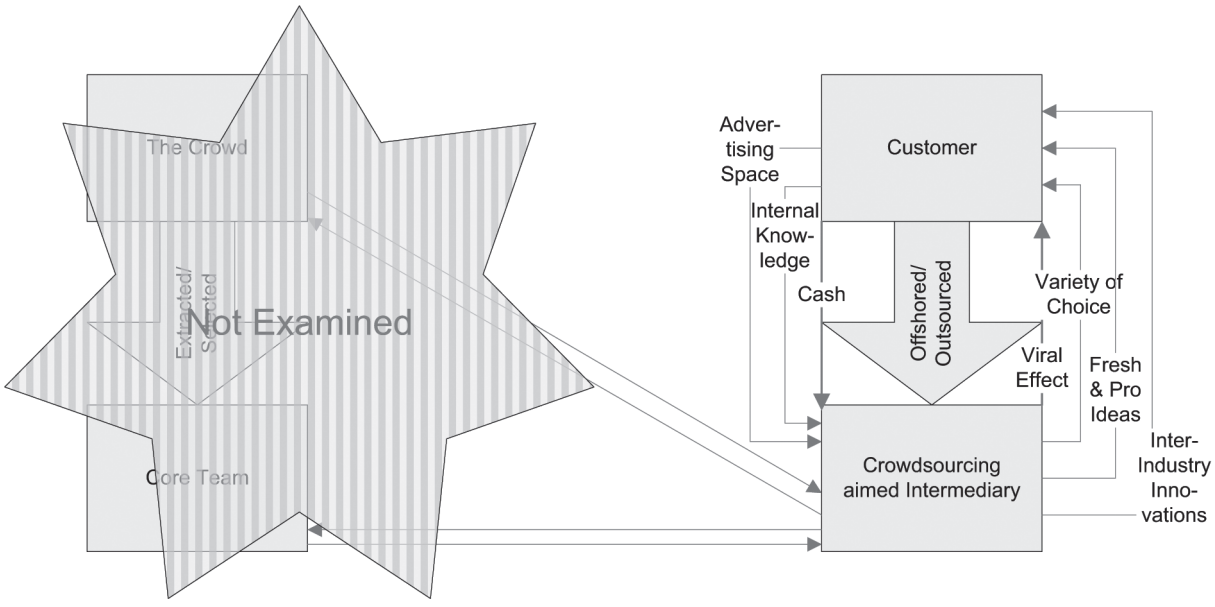

FIGURE 6. **Desired value flow between intermediary and its customers**
Source: created by the authors

TABLE 8. **Summary of the results of the in-depth interviews**

	Small Companies	Large for Profit Companies	Governments & NGOs
Value of Innovation	- Living innovation, crucial to survive - Should be constant, part of the business model - Niche players, expectations from the customers	- Keep the market share - Increase efficiency in IT and HR sectors mostly - Collect feedback from suppliers and customers - Public relationship campaign	- Direct purpose of existence - Required by law, international conventions & bodies - Expected by community
Current Uses of Innovation	- Development of non-conventional solutions - Monitoring the market (including competitors) by all employees - Use of secondary data, primary are perceived as costly	- Innovation moves vertically, both up and down - Responsibility lies on managers, employees are only encouraged to innovate - Division of work creates barriers, therefore internal measures are not effective	- Publication of projects for public awareness reasons - Public consultations to find the best solution - Purchased feasibility studies - Various commissions & boards formed of independent experts
Possibility to Collaborate & Revenue (Intermediary's Perspective)	- Possibility to sell application or place for internal use only - Outsourcing of creative department (sell creative services) - Occasional requests for primary data collection from participants - Engagements in joint ventures with the platform or a partner - Barter market is possible	- Platform for horizontal collaboration - Occasional requests for external innovations - Possibility to find partners - Collecting feedback from suppliers & customers	- Place to post legislation projects and collect feedback simultaneously - Platform for public consultations, summaries & aggregation of information - Requests for feasibility studies - On-line collaboration solution for experts - Test of reaction of society to a particular project

Source: created by the authors.

As the presentation of the results show, the needs differ in all the three segments; therefore Table 8 gives rather a summary of the interviews findings than an aggregation.

Discussions

The research results show clearly that the expectations of users and customers are far from being met by the existing platforms. These also fail to implement significant part of tweaks proposed by scholars in literature. The major gaps not closed yet are as follows:

1. collaboration among the users of the platform and constructive feedback;
2. value creation in the intermediary internally to create a professional and complete final product;

3. empowerment of certain level users, thus giving them additional motivation;
4. involvement of the idea author in further development of the idea;
5. growth of users' competence and career possibilities;
6. facilitation of governmental duties to build the trust;
7. honesty and clearance of the "rules of the game";
8. low quality of primary material given for the crowd;
9. missing general capabilities to evaluate idea inside the platform;
10. profiling and networking possibilities;
11. usage of other than regular WWW channels to increase time spent on the platform;
12. usage of all media (not text only) for communication;
13. dynamic proposals for customers to meet their needs;
14. supply first approach is not considered as additional service;
15. other than cash incentives are under-evaluated;
16. barter market with customers, especially not-for-profit ones.

As it is shown by the Generic Knowledge Exchange Model (see Figure. 4), all existing platforms of crowdsourcing are basically a space where the purchaser meets a solver, which makes them simply a next generation of web forums, but not a real innovation tool. To create a successful business model for the crowdsourcing intermediary, aforementioned 16 open gaps are mapped on the business model framework (see Figure 7). Therefore the business model for the crowdsourcing aimed creative agency is created (see Table 9) in brief; a comprehensive model is provided in Appendix A.

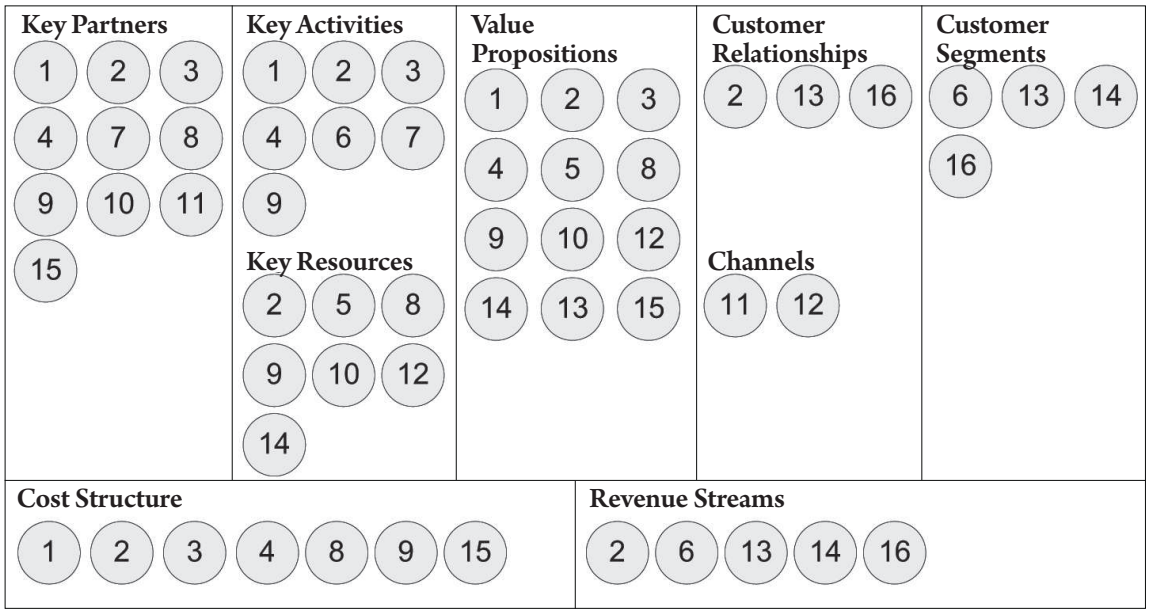

FIGURE 7. **Gaps mapped on the business model framework.**
Source: created by the authors.

The model accompanied with key resources (the platform and internal employees, further referred to as internal HR) is capable to provide superior value for both – the customers of the intermediary and the users of the platform, or the crowd. However,

TABLE 9. **A Brief Business Model**

<table>
<tr>
<td rowspan="2">Key Partners – users that provide knowledge
General features:
Self marketing - profiling options & portfolio;
No trainings on particular contest;
Author follows own idea;
Different level users:
1st level – anyone and everyone;
2nd level – core team (selected).

1st level users:
Public submissions;
All collaboration options;
Self moderated comments;
More competitors – more diversity;
Various ways to get to the core team.

Core team:
Trial period;
Empowerment;
Team-ups;
Fair team evaluation.</td>
<td>Key Activities – building the trust of users
Long term relationship orientation:
Technical IP protection;
Legal help for users;
Honesty - clearly explained rules;
No cheating;
Ensure responses;
Give testimonials.</td>
<td rowspan="2">Value Propositions – to users & customers
Users get:
fun;
experience;
career inside the platform;
insider status;
knowledge resources;
empowerment;
involvement;
profiling & networking.

For customers:
wide range to choose of;
“fresh” ideas;
cost savings;
no useless mindflow;
professional and complete solutions;
inter-industries innovations;
viral effect</td>
<td>Customer Relationships – Building trust & convenience for customers
Performance management;
Responsibility for the product;
Interim reviews;
Possibility to drop the project;
Post purchase support;
Target managers;
Dynamic propositions.</td>
<td rowspan="2">Customer Segments – according to the value created for them
Both demand first and supply first approaches. Occasional customers;
Interested in ideas flow;
Dedicated “branded” space;
Niche players;
Integrators of customers & suppliers in internal R&D;
Primary data seekers;
Partners who outsource their creative department;
Efficiency leaders.

Government for:
Publication & feedback on legislation projects;
Feasibility studies;
External committees.

NGOs for:
Free or cheap expert knowledge;
Awareness.</td>
</tr>
<tr>
<td>Key Resources – platform & internal HR
Internal HR:
Prepares primary material;
Guides the core team;
Creates the final product.

The platform ensures:
on-line game like users’ roles;
no collaboration barriers;
enhanced primary material;
rankings of posts in different dimensions, comments.</td>
<td>Channels – information & knowledge transfer
Conventional communication;
Video/audio material;
Video/audio conferences;
Interactive media, e.g., simulations;
Mobile access (incl. SMS/MMS).</td>
</tr>
<tr>
<td>Cost Structure
Cost cut:
Dynamic model of external HR;
Freelancers in the core team;
Empowerment.</td>
<td colspan="2">Cost added:
Initial investment in platform & its maintenance;
Internal HR salaries;
Lawyers in case of conflict;
Sales & marketing of the platform.</td>
<td colspan="3">Revenue Streams
Value-in-use pricing. Extras cost extra.
Fine and kept advance payment for dropping the project
Direct advertising on the 1st level of contests.
Fees for “branded” space, and browsing through ideas bank & portfolios.
Barter market (especially with NGOs)</td>
</tr>
</table>

Source: created by the authors

the main challenge is not only to develop the platform and find appropriate employees, but also educate the customers so that crowdsourcing might create a satisfying final product, equal to the product outsourced from any other company or even better. Further in this chapter, each part of the model is described in detail.

Key Partners

First of all, users should not be treated as a resource as it is common currently. Users provide the most valuable resource for the company, therefore they should be considered as key partners. To provide a better organization of users, they should be separated into two groups – free users, or first level users – anyone who joins the platform; and the core team or the second level users, who are carefully selected from the first level users by internal HR to help in elaboration of primary ideas to the final product. Therefore, each product goes through two stages – brainstorming among the first level users and elaboration of the selected ideas in the core team. The final product is generated by internal HR using suggestions of the ideas selected by the core team.

While first level users ensure diversity of the crowd, second level users perform higher quality work. More capabilities should be given to the core team members: 1) empowerment: they are acting as moderators and mentors simultaneously; 2) possibility to team-up with other members.

Key Resources

Two types of property are considered as key resources – its internal HR and the platform itself. Internal HR is really valuable, therefore an expensive resource. First, internal HR is responsible for preparation of the primary material for the first stage of the idea generation process as well as guidelines for the core team in the second stage. Another responsibility of internal HR is to finalize the product for the customer, if necessary.

The platform itself does not cost much while in use, but initial investment is quite significant here. The platform should clearly define the users' roles and responsibilities. It should also provide different ways of primary material presentation as well as transcendence of collaboration barriers.

Key Activities

Very basic requirement for trust is insurance of IP protection. First it should be done technically by preventing theft and regulating work of the search engines' bots. Another means is to prepare legislative agreements of juridical power.

Another requirement for building the trust is honesty. That one obliges clarity of the"game" rules. Conventional terms of use should go together with a simple explanation how the platform works and how submissions are handled in terms of IP.

Value Propositions

Ability to choose is a motivation itself. Therefore, each user should be capable to rank his motivational options in the profile. Possible motivation options should be different for free users and the core team.

Customers, on the other hand, also have some motivation options, which stimulate their choice of the company as an external service provider. They get not only a lower costs product, but the possibility to choose from a wide range of "fresh" ideas.

For better understanding of value flows, a joint model of those desired by potential users (Figure 5) and desired by customers of the crowdsourcing intermediary (Figure 6) is presented in Figure 8. Moreover, since advertising in the first stage of competitions is approved, additional revenue stream from third parties is marked with dotted arrows. *The success of business model* could be very simply explained by looking at this value flow chart: the company will make profit as long as inbound value flows exceed outbound flows in terms of cash, and this difference is higher than the costs of the company maintenance.

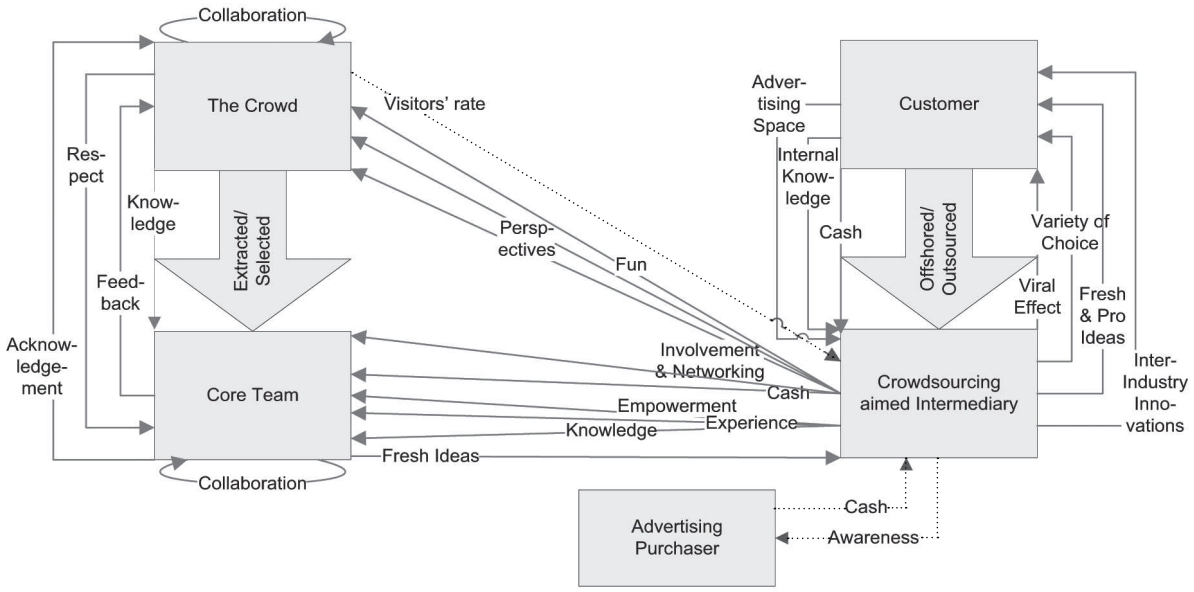

FIGURE 8. **Flow of value among the subjects in the developed business model**
Source: created by the authors

Customer Relationships

As mentioned previously, the final product given for the customer is comprehensive and professional. Interim reviews, where the customer participates in the selection of ideas at the first or second stage, could be held upon request of the customer.

Another virtue of the platform owner is to make dynamic value propositions according to the needs of the customer. To enable it, the platform itself should have customization capabilities. One tough task is to promote the crowdsourcing industry itself. Despite current crowdsourcing approaches, companies still tend to create value internally only.

Customer Segments

Due to dynamic propositions, the intermediary should be able to serve various segments of customers: from occasional users with the need of very basic service to governmental institutions with large set of regulations and other requirements to be fulfilled. Another group of customers is small companies which are looking for non-conventional solutions. Such companies may look for primary data instead of secondary data they usually base their strategy upon. The last significant segment is governmental institutions and NGOs.

Channels

In addition to a conventional text based on-line communication, audio and video media could be used. Moreover, interactive media, e.g., simulations, could be used in order to let "touch the model", but not disclose the commercial secrets. Different access capabilities, like smartphone applications accompanied by mobile internet access would increase the time spent on the platform as well as the number of active users.

Cost Structure

Main costs of the intermediary consist of acquisition and maintenance of key resources. First, development of the platform itself would be a major part of initial investment. Also maintenance of the platform would be a part of variable costs. The biggest part in variable costs would be for internal HR salaries and other incentives. On the other hand, dynamic nature of external human resources (the crowd) allows cutting the costs significantly, as it is relatively easy to adjust its size to existing demand. However, cash compensation to the core team should be considered anyway.

Revenue Streams

Value-in-use pricing approach would be used in the model, still keeping the space for cut of costs. Besides a regular challenge price, the customer could be charged for extra services where some part of work should be outsourced by the intermediary.

The government could be charged exclusively for feasibility studies and building of external committees. NGOs most probably could engage in barter market – services for them could be provided in exchange of internal knowledge, which is used later to build internal knowledge base or for the advertising space of the platform.

In order to diversify revenue streams, both demand (purchaser asks) and supply (crowd offers) based crowdsourcing approaches are employed (see Figure 9). Moreover, companies are encouraged to share internal knowledge in exchange for discount or similar benefit. By using this knowledge, internal knowledge base is supposed to be developed and used as incentive for the users of the platform in that way saving costs on cash incentives. Compared to forum-like knowledge exchange model (see Figure 4), the developed business model is a way more stable than these currently available in the market.

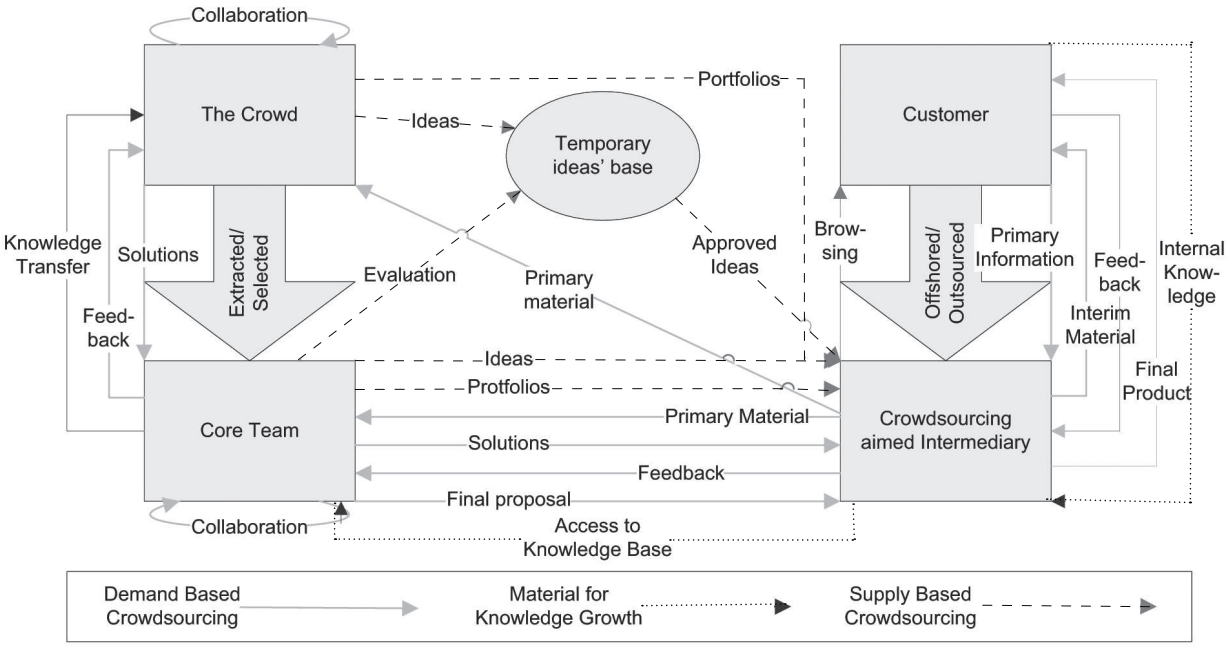

FIGURE 9. **Flow of knowledge among the subjects in the developed business model**
Source: created by the authors.

Conclusions, Limitations, Further Research Topics and Practical Implications

Crowdsourcing gained popularity due to favourable circumstances present in the market. Global cut-of-costs policies, reached limits of traditional business models and demand for non-conventional solutions led companies to search for alternatives. Due to the nature of crowdsourcing, not all companies are capable to engage in direct application of it, so crowdsourcing intermediaries jumped in the market. However, these are struggling with further development due to absence of a business model which would enable value creation, while innovations are crowdsourced by intermediaries for their customers. This laid back approach of crowdsourcing intermediaries not only leads to under-use of crowdsourcing in western business environment, but also is the reason why the word crowdsourcing itself needs additional explanation for most entrepreneurs in emerging markets.

The results of empirical research have shown the major gaps with expectations and best practices of current crowdsourcing intermediaries. By combining the research results, the best current practices and those suggested by literature, a comprehensive business model for the innovations-aimed crowdsourcing-driven creative agency is developed. Since the aim of the paper was to create a *successful* business model, the success is defined by the ability to capture more value in terms of cash than it costs to maintain the company. In other words, the difference between inbound value flows and outbound value flows should exceed the total costs of the creative agency.

The main limitations of the paper exist due to the type of the survey. Therefore since in-depth interviews were held with only one individual from a separate segment,

generalization of the results should be made with caution. On the other hand, qualitative research serves as a foundation for further quantitative research to obtain certain values or measures of variables included in the model. These could encompass compensation issues, human capital required as well as proper distribution of incentives to attract the crowd, but simultaneously keep the intermediary healthy having in mind that crowdsourcing success is not guaranteed in each and all cases.

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Appendix A. Comprehensive business model

<table>
<tr>
<td rowspan="2">Key Partners – users that provide knowledge
Different level users:
– 1st level – anyone and everyone;
– 2nd level – core team (selected).
Full collaboration in the 1st level, team-ups in the 2nd level.
Empowerment to the core team (transfer of responsibility): the core team gives feedback and evaluates the 1st level users.
Self marketing by enabling good profiling options & possibility to create portfolio from unused ideas/solutions.
No trainings concerning the field before the contest in order to lower the influence and diversify the crowd.
Higher number of competitors lowers the risk of particular groups influence on customer's market decisions.
The author of winning solution is included in further development of the idea (within the intermediary) to the final product.
Feedback is moderated by the user: he/she is able to hide inappropriate comments.
Team efforts are evaluated:
– 1/3 equally;
– 1/3 by peers;
– 1/3 by leader.
Ways to get to the 2nd level:
– Winning the 1st level;
– Invitation to team from a core team member;
– Taking tests.
Trial period is present in the core team.</td>
<td>Key Activities – building the trust of users
Ensure technical IP protection.
Despite "general release", legal help is always offered (presuming that the user is more vulnerable than the customer).
Honesty - clearly explained rules.
Compatibility with business ethics.
Long-term relationship orientation.
Transfer more responsibility to the crowd.
Ensure responses:
– From the core team to 1st level users;
– From internal HR to the core team.
Announce previous success stories.
Never do anything that could be perceived as cheating.</td>
<td rowspan="2">Value Propositions – to users & customers
For users:
– Fun, place to express themselves;
– Experience from the core team to users and from internal HR to the core team;
– Career inside the platform;
– Status of being insider for the core team;
– Knowledge base for the core team;
– Possibility to evaluate others;
– Involvement by making users interested;
– Profiling & networking possibilities.
Users should be able to rank motivational options in their profiles.
For customers:
– Wide range to choose from;
– Value of "fresh" ideas;
– Cost savings;
– Elimination of useless mindflow;
– Value created by external knowledge sources is professional and complete;
– Inter-industries innovation possibilities;
– Viral effect on the project.</td>
<td>Customer Relationships – Building trust & convenience for customers
Process statistics of users to define capabilities of the platform.
Ability to provide the final product and be fully responsible for it.
Interim reviews to guide generation of the final product to a more suitable one.
Possibility to drop the project.
Post purchase support.
Target managers.
Dynamic propositions – may vary according to the demand of the customer.
Elaborate the outlook of "proudly found elsewhere".</td>
<td rowspan="2">Customer Segments – according to value created to them
Occasional customers (want to try).
Interested in ideas flow, and able to process these internally.
Dedicated "branded" space seekers for communication with supercustomers.
Niche players searching for non-conventional solutions.
Integrators of customers & suppliers in internal R&D.
Primary data (instead of secondary data) seekers.
Partners who outsource their creative department.
Efficiency leaders who would outsource everything if it saves cost.
Government for:
– Publication & feedback on legislation projects;
– Feasibility studies;
– External committees.
NGOs for:
– Free or cheap expert knowledge;
– Awareness.
Both demand first and supply first approaches.</td>
</tr>
<tr>
<td>Key Resources – platform & internal HR
Internal HR for:
– Preparation of primary material;
– Guidance of the core team;
– Aggregation of knowledge to the final product.
Platform for:
– Definition of users' roles & responsibilities (on-line game like);
– Transcendence of collaboration barriers;
– Various ways of presenting primary material;
– Rankings of posts in different dimensions, comments;
– Digital verifications (signatures).</td>
<td>Channels – information & knowledge transfer
Conventional on-line text based communication.
Video/audio material.
Interactive media, e.g., simulations, which let "touch the model", but not disclose the commercial secrets.
Video/audio conferences for the core team to facilitate discussions.
Mobile access to increase time spent on the platform.</td>
</tr>
<tr>
<td colspan="3">Cost Structure
Dynamic model of external HR – easy to control costs by controlling amount of external HR.
Initial investment in the platform & its maintenance.
Internal HR salaries for preparation of primary material & aggregation of the final product.
Other services, like design, animation, copywrite could be taken cheaply from freelancers in the core team.
Compensation for the core team. Empowerment of the core team cuts costs on compensation for 1st level users.
Lawyers who could help in case of conflict (outsourced or kept as barter exchange result).
Sales & marketing of the platform.</td>
<td colspan="3">Revenue Streams
Value-in-use pricing – good & complete solutions cost much.
Challenge price – price for the final product. Extras cost extra: featured project listing price, urgent solution, highly complex solution (platform is not capable to do it by itself) fees, feasibility studies fee.
Fine and kept advance payment for dropping the project (instead of requirement to pay full amount).
Direct advertising in 1st level of contests.
Fee for "branded" space. Fee for building external committees.
Fee for browsing through ideas bank & portfolios
Barter market (especially with NGOs) – services provided in exchange of internal knowledge (which is used to build knowledge base for the core team) and advertising of the platform.</td>
</tr>
</table>

Source: created by the authors.