

#### **REPORT**

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| date April, 2014                                   |  |
| location Bulgaria                                  |  |
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| type of report The United Kingdom National Report  |  |
| *In attachement the registration signature         |  |
| Objectives and general description of the activity |  |

# User perception on university- business crowdsourcing initiatives: The United Kingdom national report

The main purpose of this report is to review and provide visual interpretation of the analysed data obtained from the UC Crowd questionnaire that has been conducted in the UK. This report illustrates useful information in relation to 3 key stakeholders which are:

- 1. Students,
- 2. Academics and
- 3. Companies.

The report highlights the perceptions of each key stakeholder in relation to the concept of crowdsourcing, specifically focusing on:

- 1. The familiarity of concept of crowdsourcing
- 2. User experience of crowdsourcing platform, including their motivations and challenges
- 3. User perception on functionality of the crowdsourcing platform

The report will act as a guideline for the project members to effectively design and programme the desired crowdsourcing platform.

UK national report in relation to:

WP3 - EU Business Case;

WP4 – Teaching Learning case study – Academics/Professors;

WP5 – Teaching Learning case study – Students.





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#### 1.0 Objectives and general description of the activity

#### 1.1 Objectives

The main purpose of this report is to review and provide visual interpretation of the analysed data obtained from the UC Crowd questionnaire that has been conducted in the UK. This report illustrates useful information in relation to 3 key stakeholders which are:

- Students,
- Academics and
- Companies.

The report highlights the perceptions of each key stakeholder in relation to the concept of crowdsourcing, specifically focusing on:

- The familiarity of concept of crowdsourcing
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The report will act as a guideline for the project members to effectively design and programme the desired crowdsourcing platform.

#### 1.2 Description of the activity

This report is informed by data collected through questionnaire distributed to the three stakeholders (students, academics and companies). The online version of the questionnaire can be found here:

https://iscteiul.co1.qualtrics.com/SE/?SID=SV\_dmrzR6Sq0VPF0xn&SaveButton=1&SSID=SS\_9nNeWEUucl9PHtH

In total, there were 176 respondents from the UK, which consist of 146 students (where majority of the students are from University of Wolverhampton); 15 academics; and 10 companies.



#### 2.0 Results of the analysis

### 2.1 Familiarity with the concept of crowdsourcing

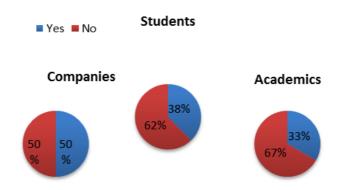


Figure 1 Familiarity with concept of crowdsourcing among UK's students, academics and companies

Figure 1 illustrates that majority of the respondents are not familiar with the concept of the crowdsourcing (90% of all companies, 67% of all academics and 62% of all students). The concept of crowdsourcing has been coined in the year 2006 and has become very popular ever since (Brabham, 2010)¹. Nevertheless, it still remains to be rather unexplored and blurry concept for all of the key stakeholders in the UK.

#### 3.0 Experience of Crowdsourcing platforms usage

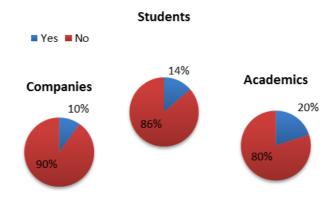


Figure 2 Experience of crowdsourcing platform usage among UK students, academics and companies

<sup>&</sup>lt;sup>1</sup> Brabham, D (2013) Moving the Crowd at Threadless, Information, Communication & Society, 13:8,1122-1145



Figure 2 highlights that the majority of participants (86% students, 80% academics and 90% companies) have never used any type of crowdsourcing platforms before. In comparison, it can be seen that only a small percentage of all respondents (14% students, 20% academics and 10% companies) have experience of using crowdsourcing platform. The latter fact serves as an evidence of the fact that there is a need for more awareness on the concept of crowdsourcing and highlights the potential of usage for the crowdsourcing platform to be introduced into the universities in the UK.

#### 3.1 Opportunities

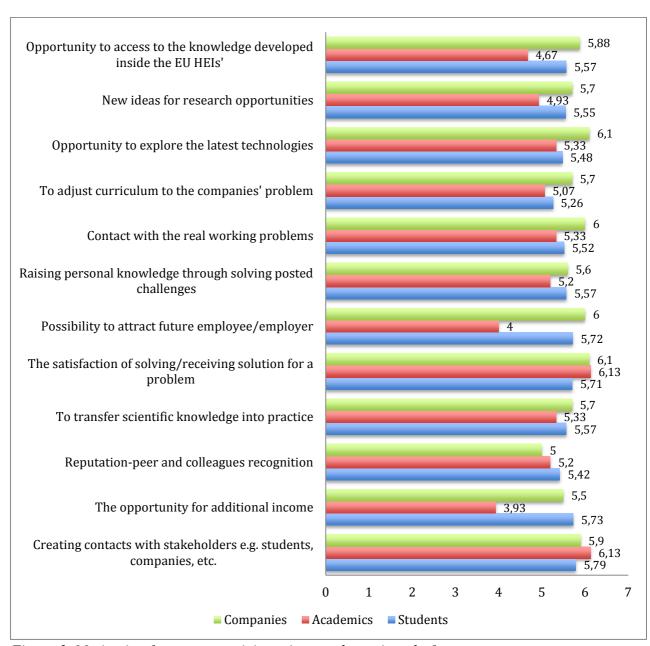


Figure 3, Motivation factors to participate in crowdsourcing platform



The most important opportunities and motivational factors for companies are:

- 1. The satisfaction of solving of a problem or receiving a solution for your problem (score 6,10)
- 2. Possibility to attract future employees (score 6)
- 3. Contact with real working world problems (score 6)
- 4. Creating new contacts with stakeholders e.g. companies/academics/students, etc. (score 5,90)
- 5. Opportunity to access to the knowledge developed inside the HEI's across Europe (score 5,88)

The most important opportunities and motivation factors for academics are:

- 1. The satisfaction of solving of a problem or receiving a solution for your problem (score 6,13)
- 2. Creating new contacts with stakeholders e.g. companies/academics/students, etc. (6,13)
- 3. To transfer scientific knowledge into practice, by developing research projects based on the companies' problems (5,33)
- 4. Contact with real working problems (5,33)
- 5. Opportunity to explore the latest technologies developed by researchers and presented on the profile (5,33)

The most important opportunities and motivational factors for students are:

- 1. Creating new contacts with stakeholders e.g. companies/academics/students, etc. (5.79)
- 2. The opportunity for additional income (score 5,73)
- 3. The satisfaction of solving of a problem or receiving a solution for your problem (score 5,72)
- 4. Possibility to attract future employer or opportunity to obtain internship (5,72)
- 5. To transfer scientific knowledge into practice, by developing research projects based on the companies' problems (score 5,57)

Figure 3 illustrates the opportunities that the participants may want to seek by participating in the crowdsourcing platform. It is clear that such opportunity as the satisfaction of solving a problem or receiving a solution for your problem was evaluated as one of the most important motivation factors among all stakeholders. The latter fact demonstrates that the key stakeholders in the UK are more likely to be motivated through various intrinsic motivation factors i.e. personal satisfaction, personal interest, volunteering, etc. rather than extrinsic e.g. financial rewards, vouchers, product samples, etc. Nevertheless, UK's students have found financial reward (purely extrinsic motivation factor) to be more important that personal satisfaction. In contrast, academics/professors have evaluated financial rewards as the least important motivation factors among all of the proposed answer options.



One important point that needs to be highlighted is the fact that all stakeholders have considered opportunity to create contacts with various stakeholders e.g. research institutions, communities, companies, students, etc. to be highly valuable. This finding indicates that all of the stakeholders are interested in mutual cooperation and efficient crowdsourcing platform can effectively facilitate the cooperation.

#### 3.2 Challenges

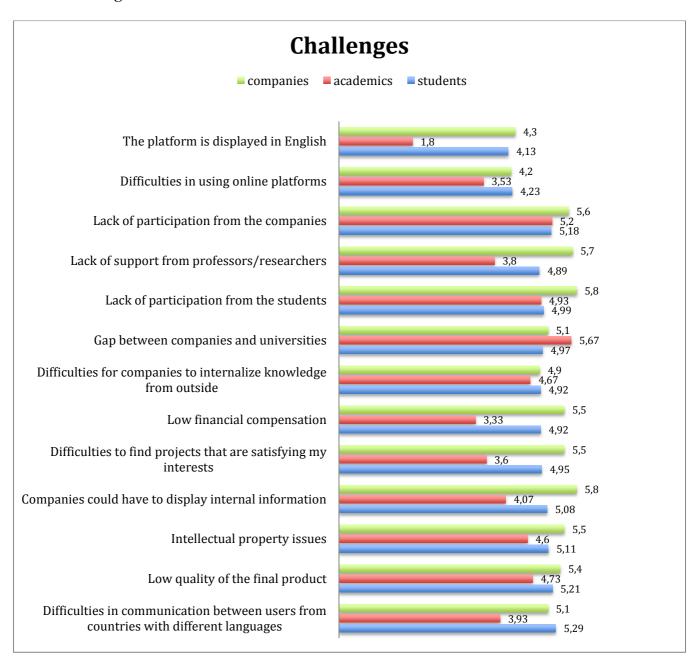


Figure 4, Factors that may hinder stakeholders to participate in crowdsourcing platform



#### The most important obstacles for companies are

- 1. Companies could have to display internal information (score 5,8)
- 2. Lack of participation from students (score 5,8)
- 3. Lack of support from professors/researchers (score 5,7)
- 4. Lack of participation from companies (score 5,6)
- 5. Intellectual property issues (score 5,5)

#### The most important obstacles for academics/professors

- 1. Companies have the perspective that there is a gap between what is taught in universities and what is useful for companies (score 5,67)
- 2. Lack of participation from companies (score 5,2)
- 3. Lack of participation from students (score 4,93)
- 4. Low quality of the final product (score 4,73)
- 5. Difficulties for companies to internalize the knowledge from outside (score 4,67)

#### The most important obstacles for students

- 1. Difficulties in communication between users from countries with different languages (score 5,29)
- 2. Low quality of the final product (score 5,21)
- 3. Lack of participation from companies (score 5,18)
- 4. Intellectual property issues (score 5,11)
- 5. Companies could have to display internal information (5,08)

Figure 4 showcases the factors that may hinder stakeholders to participate in crowdsourcing platform. It is interesting to see that the "lack of participation from the companies" highlight the major challenges that lies ahead for the platform to function effectively. It indicates that companies may be less interested to spend some time in participating in the crowdsourcing compared to other stakeholders.

In order to make sure companies are interested to participate, concerns by student and academics in relation to the quality of final product also need to be taken into consideration.



#### 4.0 Functionality of the crowdsourcing platform

#### 4.1 Incentive mechanism

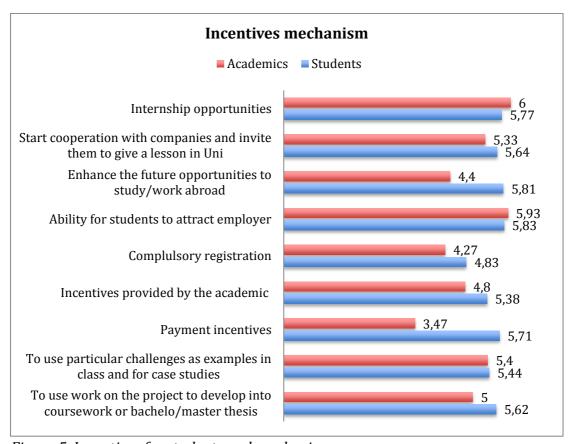


Figure 5, Incentives for students and academics

The most important incentives for Students are:

- 1. Ability to attract future employments (score 5,83)
- 2. Enhance the future opportunities to study and/or work abroad (score 5,81)
- 3. Internship opportunities (score 5,77)
- 4. Payments incentives (score 5,71)
- 5. Start cooperation with firms and invite them to give a lesson/talk in university (score 5,64)

The most important incentives for Academics are

- 1. Internship opportunities (score 6)
- 2. Ability for students to attract future employments (score 5,93)
- 3. To use particular challenges as examples in class and for case studies (score 5,4)
- 4. Start cooperation with firms and invite them to give a lesson/talk in university (score 5,33)
- 5. Incentives provided by the academics teaching material related to learning process (score 4,8)



Figure 5 highlights a number of similarities in terms of incentives evaluation pattern between students and academics. It can be seen that both parties are keen on employability agenda for students, such as internship opportunities, ability for students to find future employer as well as start cooperation with companies and invite them to give a lesson/talk in university.

Another interesting observation was that students have put large emphasis on payment incentives, therefore it can be suggested that students could be motivated and encouraged to start using the platform if they get any type of financial compensation.

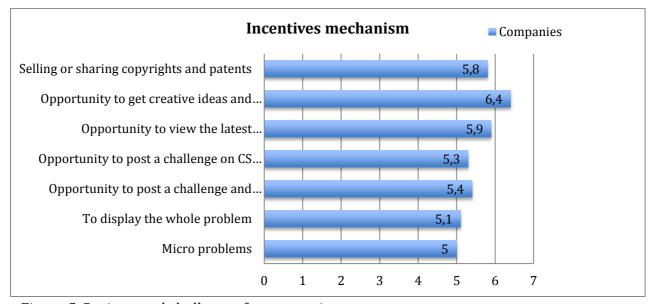


Figure 5, Projects and challenges for companies

The most important incentives for companies are:

- 1. Opportunity to get creative ideas and develop new products services
- 2. Opportunity to figure out the latest developments in particular area in order to save time and other possible costs on "wheel reinvention"
- 3. Selling or sharing patents/copyrights-opportunity to find other companies that may be interested in your developments and continue developing them
- 4. Opportunity to put a challenge on the CS platform and award only those users who came up with the best solutions
- 5. Opportunity to put a challenge on the CS platform and award the university that hosts the users who came up with the best solutions

Figure 5 illustrates that companies consider opportunity to get new ideas in order to develop new products/services to be the most important incentive that crowdsourcing platform may offer. Apart from the incentives mentioned above, all of the rest incentives were evaluated rather equally and therefore, it can be stated that all of the proposed incentives were attractive for companies.



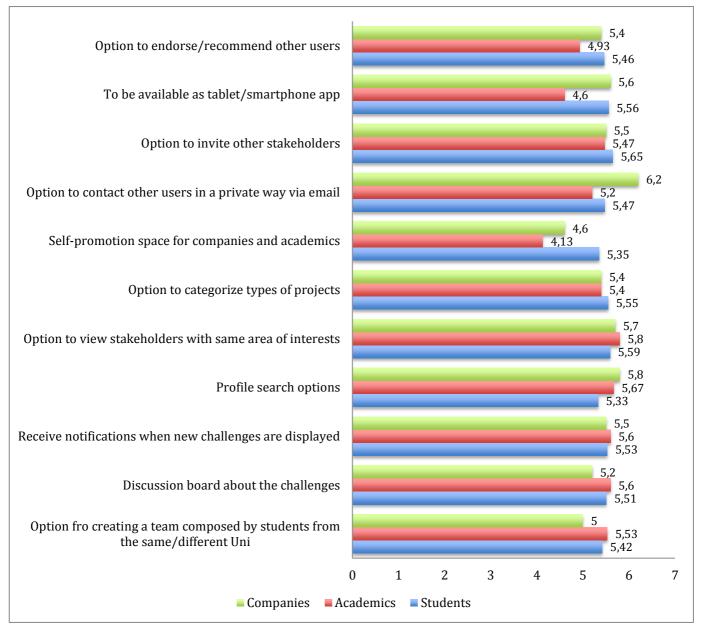


Figure 6, crowdsourcing platform functionality



The most important crowdsourcing platform functionality most preferred by students are:

- 1. Option to invite other stakeholders e.g. students, universities, companies, professors and research centres (score 5,65)
- 2. Option to view stakeholders (universities/companies) with the same area of interests (score 5,59)
- 3. To be available as an app in order to be used on tablets and smartphone devices (score 5,56)
- 4. Option to categorize types of projects e.g. students, research centres, professors and people in general (score 5,55)
- 5. Receive notifications when new problems are displayed (score 5,53)

The most important crowdsourcing platform functionality most preferred by companies are:

- 1. Option to contact other users in a private way using the email (score 6,2)
- 2. Profile search option (score 5,8)
- 3. Option to view stakeholders with the same area of interests (score 5,7)
- 4. To be available as an app in order to be used on tablets and smartphone devices (score 5,6)
- 5. Receive notifications when new problems are displayed (score 5,5)

The most important crowdsourcing platform functionality most preferred by academics are:

- 1. Option to view stakeholders with the same area of interests (score 5,8)
- 2. Profile search options (score 5,67)
- 3. Receive notifications when new problems are displayed (score 5,6)
- 4. Discussion board about the challenges (score 5,6)
- 5. Option for creating a team composed by students from the same/different universities (5,53)

Figure 6 illustrates all stakeholders have agreed on the importance of such crowdsourcing platform functions as option to view stakeholders (universities/companies) with the same area of interests and function to receive notifications when new problems are displayed. Apart from that, most of the other possible CS functions were evaluated accordingly to needs and demands of each stakeholder group for instance, students suggested creation of mobile/tablet app to be very important function as they are using those devices on the daily basis, on the other hand this function was not highly evaluated among academics/professors, who are not so active users of the mentioned devices.



#### 5.0 Conclusion

The concept of crowdsourcing seems to be at the very early stage in the UK, with a very limited amount of respondents were familiar with this new concept, let alone participating in a similar type of crowdsourcing platform.

Nevertheless, all of the potential stakeholders were really enthusiastic about this concept and have highly evaluated the possibility of participating in the platform. Through their perception on opportunities, challenges and functionality of an effective crowdsourcing platform, the project may be able to develop a better piece of programme. The interest of mutual collaboration across stakeholders (ie: students, academics and companies) can be seen through the survey, and this showcase a good opportunity for the platform to be well received when it is launched.

In order to develop the platform, care needs to be taken into account on the filtering system in order to make sure that the quality of the ideas suggested and developed through the platform are of good quality. This is crucial in order to encourage more companies to participate in the crowdsourcing platform.

The findings illustrates in the report have a number of important implications for future practice, which are rather promising. However, a lot of work and efforts will be required in order to achieve the demanded outcome.