

Motive	Description	Project features to address motive
<b>Contribute to generating scientific knowledge</b>	Crowd members donate effort, time and other resources (AKRD) in order to help advance science.	<ul style="list-style-type: none"> <li>• Explain the scientific background and the need for new research</li> <li>• Involve crowd members broadly enough that they can see the scientific contribution</li> <li>• Share research findings, publish Open Access</li> <li>• Give scientific credit by listing crowd members as contributors or even co-authors</li> </ul>
<b>Help solve specific problems</b>	Crowd members are concerned about issues such as biodiversity, air quality, particular diseases. They contribute to better understand problems and come up with solutions for themselves or others.	<ul style="list-style-type: none"> <li>• Clarify the importance of the problem</li> <li>• Updates on problem solving progress</li> <li>• Ensure diffusion, translation of results and practical impact</li> <li>• Demonstrate how participants or others can or do benefit (e.g., early use cases)</li> <li>• Allow crowd members to participate in decision making on which problems to study</li> </ul>
<b>Interest, enjoyment, curiosity (see focus section 14.1.2).</b>	Crowd members are curious about certain topics and enjoy the research activities themselves.	<ul style="list-style-type: none"> <li>• Provide choice so that contributors can find objects of interest</li> <li>• Engaging and user-friendly interfaces</li> <li>• Offer objects and tasks that are complex, novel, uncertain, and involve cognitive conflict</li> <li>• Tools to enable discovery and preservation of the experience (e.g., an album tool to create personal collection of favorite images)</li> </ul>
<b>Social interactions, being part of a community</b>	Crowd members enjoy the company of others as well as exchanging knowledge and ideas with others as part of a project.	<ul style="list-style-type: none"> <li>• Create places to meet and interact (e.g., discussion forums, social media groups, webinars, joint outdoor activities, workshops)</li> <li>• Assign tasks to teams rather than individuals (see section 13.1)</li> <li>• Mechanisms to match crowd members based on shared interests or geographic location</li> <li>• Ensure that social interactions remain safe and within scope (e.g., have moderators in discussion forums)</li> </ul>
<b>Learning and skill development</b>	Crowd members learn about specific topics and about the research process itself. This may include students who participate as part of school assignments, young adults who prepare for formal science education, others with a desire to learn.	<ul style="list-style-type: none"> <li>• Enable contributors to see general patterns and learn about general mechanisms</li> <li>• Explanations regarding the scientific rationale, or reasoning behind methodological choices</li> <li>• Involve participants in decision making to encourage deeper thinking</li> <li>• Provide feedback, mechanisms to track learning progress (e.g., skill levels)</li> <li>• Certify participation (e.g., certificates, letters of participation for course credit or resumes)</li> </ul>