This paper is a proposal of an architecture on how to build a knowledge base by mass collaboration.

**Purpose**
This paper presents a methodology for building large knowledge bases through mass collaboration.

**Methodology**
- Theoretical approach and pilot study on a suggested model
- Empirical analysis

**Findings**
- Acquiring knowledge has long been a bottleneck preventing the rapid spread of various systems.
- The spread of the internet has made possible the building of knowledge bases by mass collaboration with thousands of volunteers contributing simultaneously.
- There are three issues that should be taken into account: (a) quality, (b) relevance, and (c) consistency of knowledge.
- Moreover, the issue of suitable motivation of the contributors is under serious consideration.
- Another issue is scalability.
- Such a model, though reducing time and cost while multiplying the results, which are then leveraged and scrutinised through a value-of-information process.

Governance is a means of conceiving the building of politics based on a network of organisations and actors who move into various political arenas, be they local, central, or intermediate.

Governance implies that someone plays the role of the regulator in the network of participants, which most of the times is the State.

In addition, the central player usually manages according to market principles.

A good governance is expected to redistribute power in the region and integrate excluded groups. Moreover, it may empower various actors and increase the institutional and political power.

Such governance enhances the building of compromises and local consensus.

Governance concerns structuring the market, the State, and the community.
Governance concerns the capacity of the State or any other central player, to coordinate interdependent activities and to make change without the legal authority to order the change, while seeking to increase the decision making circle to include other actors, sectors or organisations in order to increase its legitimacy of decisions and the efficacy and efficiency involved in applying those decisions.
**LIVING LABS**

<table>
<thead>
<tr>
<th>Living labs fostering open innovation and rural development: methodology and results</th>
<th>A Milieu for innovation - Defining Living labs</th>
<th>Leading Change: The role of the principles for responsible management education</th>
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<tr>
<td>Guzman, Javier Garcia et al</td>
<td>Bergvall-Kareborn, Birgitta et al</td>
<td>Rasche, Andreas and Escudero, Manuel</td>
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<tr>
<td>Santoro, R and Conte, M</td>
<td>White paper</td>
<td>2009</td>
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<td>Jifwu</td>
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<td>10(2), p. 244-250</td>
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This paper discusses methodologies and strategies for developing, launching and operating living labs for innovative collaborative working environments and presents initial results of a specific project run under the auspices of European Union.

This paper discusses and defines the concept of living lab and proposes five key components and five key principles. It aims to help in the clarification between living lab and open innovation in the existing literature.

This paper presents the conceptual framework for living labs implementation within Open Innovation Functional Regions highlighting the various different phases of the implementation cycle as well as the expected benefits and impact for industry and society.

Present the model of PRME, Principles for Responsible Management Education, an innovative initiative for leading the change by academic institutes.

#### Cases analysis and presentation (3 cases)

- **Empirical analysis based on over 30 development and research projects within two living labs.**
- **Empirical analysis based on 129 living labs network in Europe.**
- **Literature review and survey**

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<th>Living labs can be seen as user-driven open innovation environments.</th>
<th>The use of external as well as internal resources increases company's ability to innovate. Open innovation is a paradigm that transcends the boundaries of the firm in creating customer value.</th>
<th>Living labs are open innovation environments in real-life settings, in which user-driven innovation is fully integrated within the co-creation process of new services, products and societal infrastructures in a regional harmonised context.</th>
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<td>Moreover, these can be defined as user driven ICT-based innovation initiatives geared towards economic and social development.</td>
<td>There is a trend to involve end-users in the innovation processes. Two well-known approaches are (a) the lead user and (b) the crowdsourcing.</td>
<td>This is a public, private, people partnership.</td>
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<td>The paper proposes several methodologies and tools to facilitate the launch, development and innovation practice of such labs.</td>
<td>Living labs draw on the notion of external ideas as a resource in innovation. There are three differences though between living lab and open innovation.</td>
<td>Living labs provide a new model for regional development, beyond clusters and incubation approaches. This is based in the integration of the revolutionary potential of individuals powered by ICT.</td>
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<td>The key conclusion of this paper is that living labs methodologies and strategies must be tailored to the local situation.</td>
<td>The 5 living lab key components: (a) ICT and infrastructure, (b) Management, © Partners and Users, (d) Research, (e) Approach.</td>
<td>This is mostly an issue sources from the management education.</td>
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<td>The crucial challenge is to intelligently adapt such methods and strategies to local context and make them work in complex and even conflict-rich situations.</td>
<td>The 5 living lab key principles: (1) Openness, (2) Influence, (3) Realism, (4) Value, (5) Sustainability.</td>
<td>Schools are responsible for educating people that contributed to the current crisis.</td>
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<td>The capability to orchestrate change in the local systems seem to be the most difficult but critical success factor.</td>
<td>Living lab is a new alternative source for innovating through the interaction with external people further to lead user and crowdsourcing.</td>
<td>Academic institutes should interact and learn with regard to responsible management education.</td>
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<td>Living labs, require strong partnership and commitment in regional level.</td>
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<td>Achievements and failures could give a lesson and prepare them to lead the change instead of following it.</td>
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<td>The adoption of PRME as a creative initiative will integrate aspects of corporate responsibility and help in leading the necessary change.</td>
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Living labs strategies: (a) building local user communities composed of local stakeholders; (1) companies, (2) policy makers, (3) research organisations, (4) end-users, (b) user involvement; (1) strategic stakeholders, (2) different partners among which single users, (c) phasing, cyclic and spiral development, (d) networks and synergy creation, (e) action research.

Living labs generic practices: (a) stakeholder platform creation, (b) implication of end-users in specific experimentation activities, © utilization of methods and tools enabling action research, (d) focus on value creation for end-users and rural environment, (e) pursuing openness strategies of the innovation environment.

Schools need to refocus their agendas and practices.
This paper proposes that entrepreneurial education demands entrepreneurial educators.

Literature review, critical review

It is a challenge for an institute to keep a reality-based focus and an entrepreneurial climate in the learning experience environment.

The interaction with the creative industry, creates a business acumen to the institute.

This in addition help the institute internally and cultivate a thinking outside the box mentality, since educators are incorporated in this philosophy.

Such institutes develop an enthusiasm among their staff and this affects their curriculum.