

### Contrasting principles of Closed Innovation (CI) and Open Innovation (OI) expanded with Community Innovation Principles (CIP)

CLOSED INNOVATION	OPEN INNOVATION	COMMUNITY INNOVATION
The smart people in our field, work for us.	"Not all of the smart people work for us" so we must find and tap into the knowledge and expertise of bright individuals outside our company.	Not all our people are smart, however they are connected in interesting ways. They are enthusiastic and their contributions are valuable for us.
To profit from R&D, we must discover, develop and ship it ourselves	External R&D can create significant value; internal R&D is needed to claim some portion of that value.	The whole R&D is distributed by nature. Value is made from services and other offerings.
If we discover it ourselves, we will get it to market first.	We don't have to originate the research in order to profit from it.	Solving existing problems eventually benefits everybody. We can also do it just for fun!
If we are the first to commercialize an innovation, we will win.	Building a better business model is better than getting to market first.	We utilize existing business models and develop new ones so that everybody can make a profit (what is meant by profit is also very wide).
If we create the most and best ideas in the industry, we will win.	If we make the best use of internal and external ideas, we will win.	It is fun and easy to try out crazy ideas and see if they lead to success.
We should control our intellectual property (IP) so that our competitors don't profit from our ideas.	We should profit from others' use of our IP, and we should buy others' IP whenever it advances our own business model.	We should openly share all of our IP, utilize existing open works, and not waste our resources on IP management.

Table 1. Closed, Open and Community Innovation Principles (adapted and expanded from Chesborough, H.W., 2003. The era of open innovation. MIT Sloan. *Management Review*, 44(3), 35-41).

#### CLOSED AND OPEN INNOVATION

Classical, manufacturer centric models of innovation have assumed that an innovation starts –usually– from insights created in a research and development unit or its equivalent. Those are then developed into a product (offering) by a company or manufacturer, and then marketed and further ‘diffused’ to end-users (Rogers 1995). One of the most salient practical implications, from the management point of view in new product and service development, has been to keep the process strictly controlled between the boundaries of the firm (closed). In his insightful analysis of the situation Chesborough (2003) condensed this view in 6 principles that implicitly have guided this “closed” mode of innovation. In contrast he developed 6 new principles that showed a new attitude and approach to innovation that seem to be yielding interesting results. He termed this new emerging distributed mode of innovation “Open Innovation” and characterized it largely in relationship to the principles and attitudes in terms of business models and IPR management.

vation has for a particular way of organizing productive activities and leaves unquestioned some important assumptions on the locus of the innovations. Conversely User Innovation research strand (Von Hippel 1987, 2005) which has been empirically demonstrating that end users are an important source of innovation has left the role of user communities largely underdeveloped. Except for some recent work where empirical material shows how under certain conditions, innovation activities within user communities can act as the “functional equivalent of the multi-person innovation project team” inside an organization (e.g Frank, Shah 2003). In our understanding some of the examples we reviewed do not only point out users’ involvement or ability to innovate by themselves. It also draws our attention to new forms of collective organization and collaborative practices that make possible collective and distributed innovation, beyond firms.

#### COMMUNITY INNOVATION PRINCIPLES

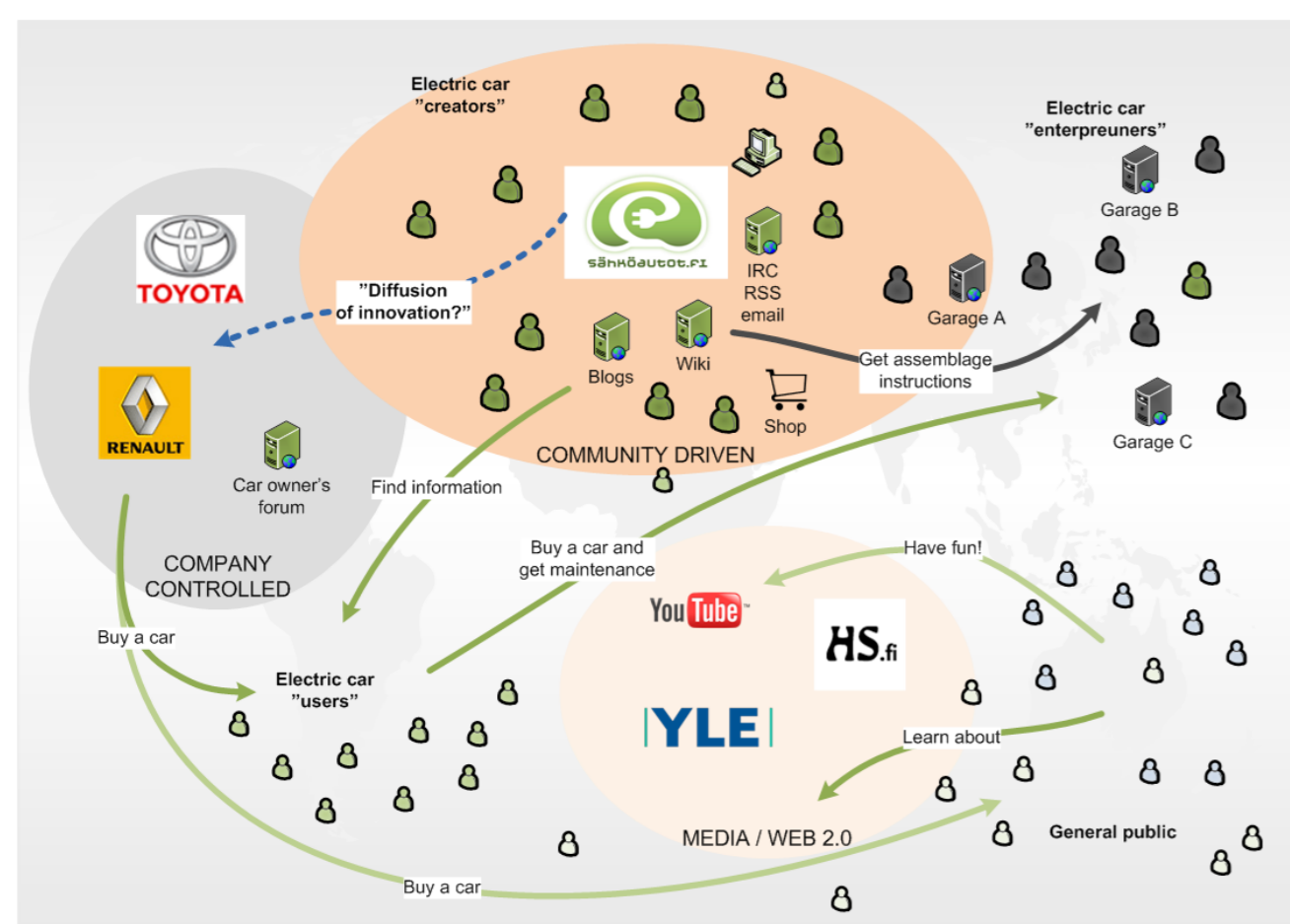
As a starting point, we have worked on extending Chesborough’s principles to account for the types of innovation that happen in a distributed or networked manner. In this sense, information inflows and outflows are not determined by a-priori ideas of what counts as the “boundary” of a firm and narrow conceptualizations of profit and motivations (Botero, Vihavainen, Karhu 2009). The insights of this work are summarized in a set of Community Innovation Principles that are listed in Table 1.

The principles are described from the point of view of communities, so in our case the “we” is not necessarily a company. As an example we can see that when a principle of Open Innovation is: “not all of the smart people work for us so we must find and tap into the knowledge and expertise of bright individuals outside our company”, our principles suggest that: “Not all our people are “smart”, but they are connected, enthusiastic and their contributions are valuable for us”.

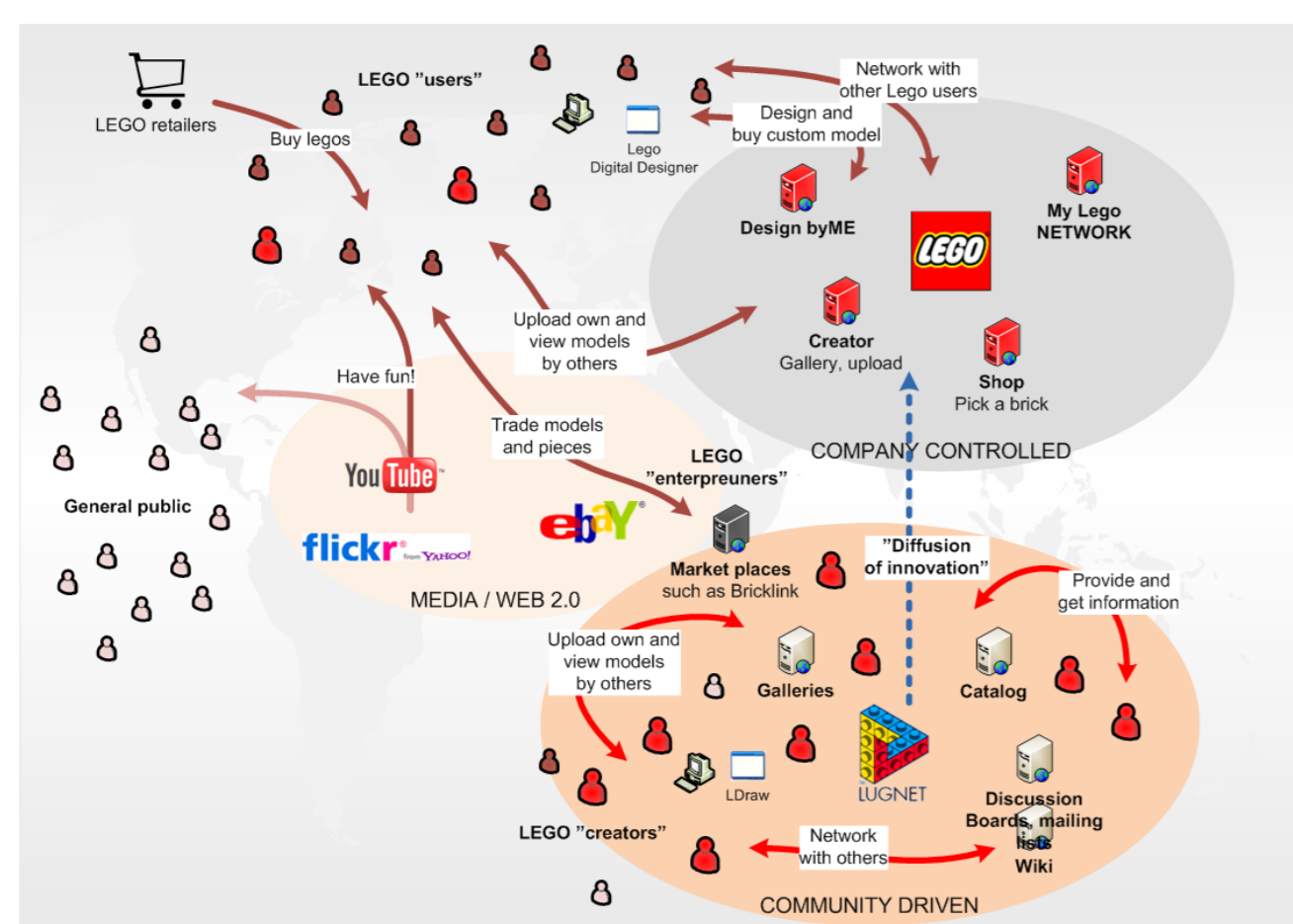
#### EXPLORING DISTRIBUTED INNOVATION AND USER COMMUNITIES

In order to explore more thoroughly the role of distributed innovation where user communities seem to be playing a bigger role, we decided to articulate emerging principles related to this area (Botero, Vihavainen, Karhu 2009) in order to probe and compare to the UDOI cases. It seemed to us that the belief in the position of companies as the legitimate places for innovation is so pervasive that even research that advocates more distributed processes of innovation, seems to contain an inherent bias towards the role of tightly organized firms as the only legitimate articulators of innovation and that this bias needed to be understood more from the perspective of projects.

**FOR EXAMPLE:** most of the Open Innovation research (Chesborough 2003, 2006) concentrates their analysis on the implication and benefits that distributed inno-



“Everyone is invited to take part in the future”: eCars - Now! Digital ecosystem and communication tools for community innovation.



There is more to LEGO than bricks: LEGO user communities. Digital ecosystem and communication tools for community innovation.

Botero, A., Vihavainen, S., & Karku, K. (2009). From closed to open to what? An exploration on community innovation principles. In *Proceedings of the 13th International MindTrek Conference: Everyday Life in the Ubiquitous Era* (pp. 198-202). Presented at the Mindtrek, Tampere, Finland: ACM / MindTrek.

Botero A., Karhu K., & Vihavainen S. (forthcoming 2010) Exploring the Ecosystems and Principles of Community Innovation. In *Media in the Ubiquitous Era: Ambient, Social, and Gaming Media*. Ed Lugmayr A, Franssila H, Näränen P, Sotamaa O, and Vanhala Y. IGI Global