

Open Innovation



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A.A. 2018-2019

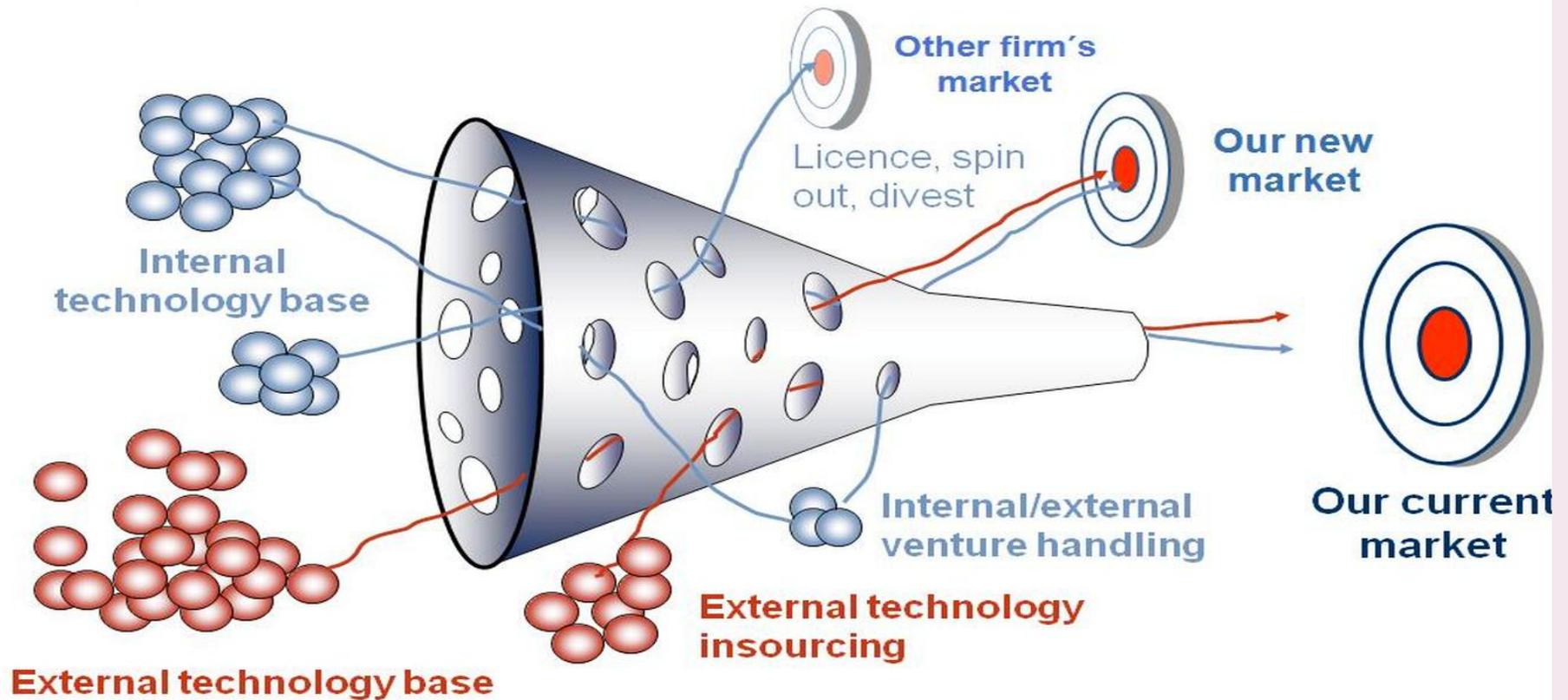
Aquilani B., Abbate T. (2014). Open Innovation through Customers: Collaborative Web-Based Platforms for Ethically and Socially Responsible New Products Part 1. In: (a cura di): Hans Ruediger Kaufmann; Mohammad Fateh Ali Khan Panni, Handbook of Research on Consumerism in Business and Marketing: Concepts and Practices. ADVANCES IN MARKETING, CUSTOMER RELATIONSHIP MANAGEMENT, AND E-SERVICES BOOK SERIES, p. 335-374, HERSHEY PA:IGI Global

Open Innovation - definition



- The term “Open Innovation” was first introduced by Chesbrough in 2003.
- Chesbrough (2003a, p.24) highlight that “open innovation is a paradigm that assume that firms can and should use external ideas as well as internal ideas, and internal and external path to market, as firms look to advance their technology” (p. 24).
- The definition of open innovation has recently been quite refined; it can be understood “*as a distributed innovation process based on purposively managed knowledge flows across organizational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organization’s business model*” (Chesbrough and Bogers, 2014).

Open innovation *versus* closed innovation



Fonte: Chesbrough H. (2004), «Open Innovation: Renewing Growth from Industrial R&D», *10th Annual Innovation Convergence*, Minneapolis 27 september.

Factors explaining the emergence of Open Innovation



- Among all factors the following ones can be considered as the most important:
 - short innovation cycles with substantial financial risks;
 - industrial research and development's escalating costs;
 - globalization that extends the boundaries of markets;
 - increased availability and mobility of skilled workers;
 - scarcity of resources and social, cultural and economic changes in working patterns which require new ways to access talents;
 - role of knowledge economy; emergent market institutions (business angels, venture capitalists, IPR, technology standards) which allow organizations to activate appropriate mechanisms for exploiting new ideas;
 - generation of new and complex technologies, such as Information and Communication Technology (ICT), that have stimulated complex network structures, with relevant impacts on organizational culture and performance (Ahuja, 2000; Gulati, Nohria & Zaheer, 2000), and different ways to collaborate across diverse geographical areas.

Closed innovation failure



- Firms that are ‘too focused internally’ are “prone to miss a number of opportunities because many will fall outside the organization’s current business or will need to be combined with external technologies to unlock their potential” (Chesbrough, 2003b, p. 37).
- The “*do all it yourself*” mentality in innovation management is not longer effective for all innovation projects (Gassmann, 2006).
- Organizational boundaries have become extremely porous, weak and permeable (Chesbrough, 2003a).

Factors affecting OI adoption



- **Internal context characteristics:**
 - number of employees, size, profits, age, market share, location, sales volume and ownership type, while the second considers aspects such as market orientation, resource orientation, goals of innovation strategy, internal R&D capacity, organizational and managerial culture (Huizingh, 2010).
- **External context characteristics:**
 - industry type, globalization, technology intensity, relevance of forms of intellectual property protection, market turbulence, socio-economic factors, competitive intensity, technological turbulence and innovation risk patterns (Huizingh, 2010).

These factors are responsible for the adoption level of OI, the openness degree, the application of specific OI practises and the relationships between OI and performance (Huizing, 2010).

Open Innovation processes



Open Innovation processes have already been divided into three different types: outside-in, inside-out and coupled (Enkel et al., 2009):

- **Outside-in processes**, the most used by firms and studied by scholars, are aimed at finding and integrating external sources, knowledge and ideas to develop R&D initiatives (Enkel et al., 2009);
- **Inside-out processes**: the aim is to externally market ideas, resources, intellectual property rights (IPR), patents and to commercialize them or to develop joint initiatives with other partners (Enkel et al., 2009);
- **Coupled processes** are realized when partners actively collaborate and cooperate (Enkel et al., 2009) and therefore when outside-in and inside-out processes are run simultaneously (i.e., Ramaswamy, 2009b), leading to “value co-creation”; each individual co-creates value and captures it continuously in different forms and ways over time.

Risks, limitations and barriers of OI



- Risks are related to the high coordination costs, the loss of some firm knowledge and control, the loss of core competences and the higher complexity of the innovation processes created (Enkel, Gassmann and Chesborgh, 2009).
- These risks can reduce the companies' profits which are investing in OI activities and, as a consequence, can influence their evaluation of closed *versus* OI approaches.
- Internal barriers, related to important difficulties in finding the right partners to collaborate in number and type, imbalance between OI activities and business, rigidity of internal resources and organizational inertia, insufficiency of financial resources and time for OI activities (Laursen & Salter, 2006; Pisano & Verganti, 2008; Keupp & Gassmann, 2009).
- Firms have to take into account and balance the cause-effect relationships of the two innovation approaches and, then, identify the appropriate integration mechanisms of them to create successful innovations faster than their competitors without incurring the limitations of the two innovation paradigms (Enkel, Gassmann & Chesborgh 2009).
- open and closed innovation are not “mutually exclusive” (Boscherini et al., 2010, p. 1068; Trott & Hartmann, 2009).

Firm benefits from OI with customers



Firm benefits from OI with customers:

- identification of new product lines and distribution strategies (Antorini and Muñiz, 2013);
- reduced risks associated with the success of new products (Ogawa and Piller, 2006) which are more coherent with market demand (Ogawa and Piller, 2006; Antorini and Muñiz, 2013);
- re-focalisation of the proposal to satisfy targets' emerging needs (Antorini and Muñiz, 2013);
- reduction of firm costs for R&D and/or of the entire innovation phase outside firm boundaries.

A model of OI with customers

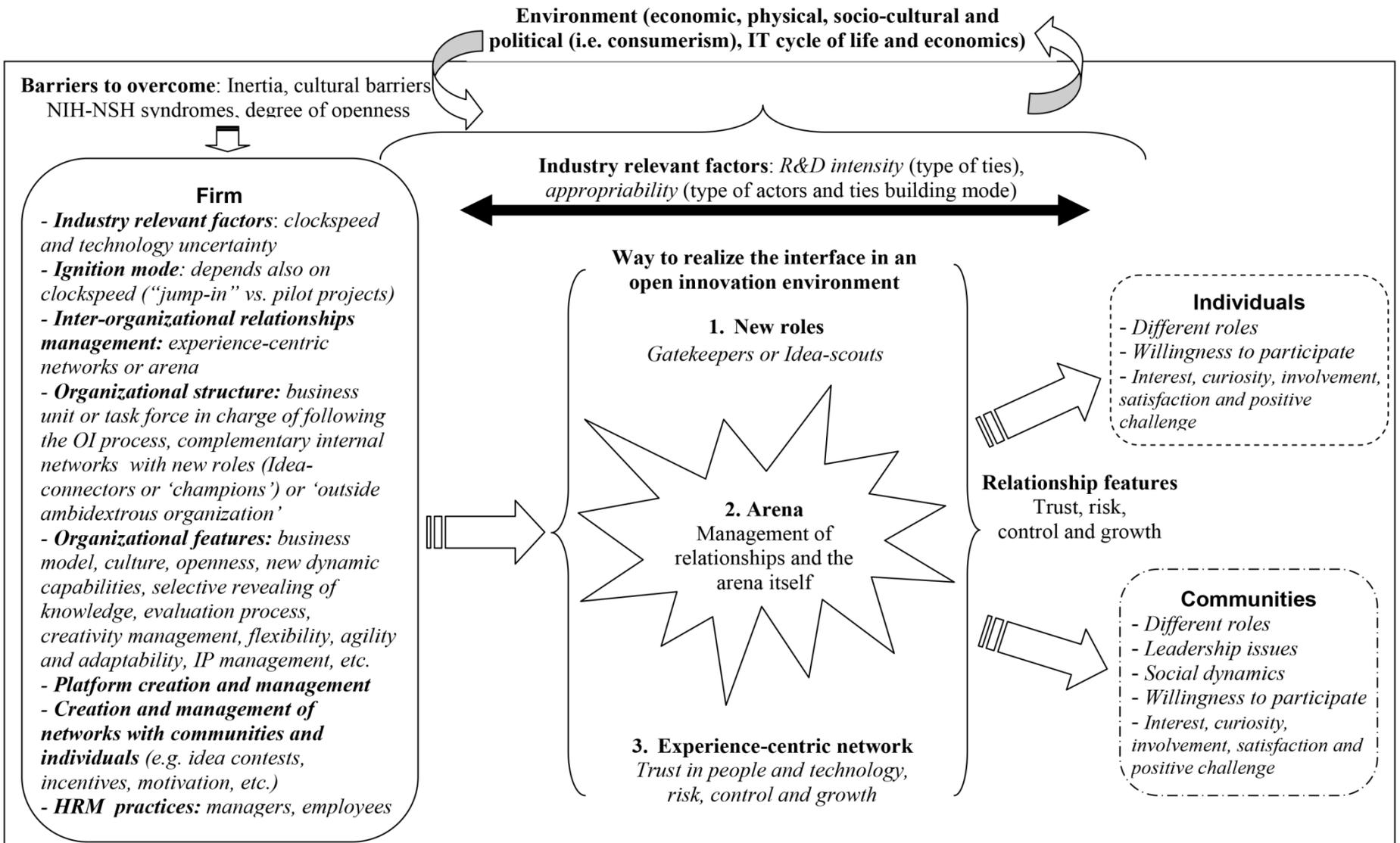


Figure 2. Firm direct open innovation process through customer framework

OI syndromes



- Not-invented-here syndrome: *“the tendency of a project group of stable composition to believe that it possesses a monopoly of knowledge in its field, which leads it to reject new ideas from outsiders to the detriment of its performance”* (Katz e Allen, 1982, p. 7) – Outside-in processes.
- Not-sold-here syndrome: “Not-sold-here” tendencies, the instinct to not want to give away a company’s “crown jewels” through strategic licensing, are an impediment for companies looking to pursue open innovation practices. Monetary and non-monetary incentive mechanisms in support of technology transfer, such as an open innovation award, can help break this instinct (<https://sloanreview.mit.edu/article/fighting-not-sold-here-tendencies/> - November the 27th 2018).

Openness



- Openness can be defined as “*the way firms go about organizing search for new ideas that have commercial potential*” (Laursen and Salter, 2006, p. 131).
- Openness depends on two different dimensions (Laursen and Salter , 2006, p. 134):
 - *search breadth: the number of external resources o search channels which firm can use for its innovation activities*
 - *search depth: “the extent to which firms draw deeply from the different external sources or search channels”.*

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Selective revealing



- Selective revealing can be defined “as the voluntary, purposeful, and irrevocable disclosure of specifically selected resources, usually knowledge-based, that the firm could have otherwise kept proprietary so that it becomes available to a large share or even all of the general public, including the competition of the firm” (Henkel, 2006 in Alexy, George and Salter, 2013, p. 8).
 - Source:
https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=5627&context=lkcsb_research

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