# Summary

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| Paper Title | How do large multinational companies implement open innovation? |
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| Tags | Open innovation (OI), Open innovation implementation, Organizational change, Organizational culture, Case studies |
| Summary Conductor | Hannah Schulz |

# Key Takeaways

1. Paper addresses a major gap in reported research on open innovation (OI): how do companies implement open innovation?
2. The way firms adopted OI was found to vary according to (1) their innovation requirements, (2) the timing of the implementation and (3) their organizational culture.
3. Innovation Needs: Difference in OI implementation when firm is looking for ambidexterity (in- and outbound) or only to support its current innovation pipelines (inbound)
4. Timing of Implementation: Clear demarcation between firms that adopted OI as a result of the publication of the model and those who had established OI activities previous to it
5. Organizational Culture: Despite the need for ambidexterity, firms with a strong tradition of closed innovation concentrated on inbound activities only

# Paper Overview

**Abstract and Introduction**

* Paper addresses a major gap in reported research on open innovation (OI): how do companies implement open innovation?
* ‘Open innovation’ (OI) = Organizations make use of internal and external resources to drive their innovation processes
* Method:
	1. Sample of 43 cross-sector firms were reviewed for their OI implementation approaches, using an inductive approach
	2. Following the principles of ‘engaged scholarship’ case studies and focus groups were alternated in which practitioners discussed OI implementation. After that a taxonomical approach was adopted to analyze the path taken by firms as they moved from closed to open innovation practice
* On the basis of evidence from the sample, identification of 4 archetypical approaches to the adoption of OI:
	1. ad-hoc practice
	2. precursor OI adopters
	3. OI conscious adopters
	4. OI communities of practice.
* 2 key drivers for OI implementation:
	1. Firms with less turbulent environments focus primarily on inbound OI activities,
	2. Environmental uncertainty and the need for ambidexterity leads firms to develop both inbound and outbound activities
* Publicity regarding OI (many studies, articles, etc.) drives its implementation in firms

**Literature review & research framework**

2.1. OI is a widespread phenomenon

* 1. There are reasons for and barriers to the adoption of OI
* OI adoption could be a response to innovation impediments, such as lack of capability or information access and risk management
* Main reasons for outsourcing R&D (UK pharmaceutical companies) are accessing expertise not available in-house, reducing development time and cost, accessing technology competence and sharing risks
* NIH syndrome (Not-Invented-Here) most significant challenge for OI implementation
	1. Two directions of knowledge flow: outside-in and inside-out
* For many company functions dealing with innovation (e.g. R&D, supply chain and marketing) OI equates mostly with the ‘outside-in’ process (i.e. exploration activities)
* Research highlights the importance of direct contacts between employees of different organizations as a way to increase the exploitation of internal ideas and technologies, companies typically set up separate functions, teams or individual roles specifically for the ‘inside-out’ process (e.g. ‘Intellectual-asset managers’)
	1. Research framework
* Taxonomy of OI implementation to analyze our case studies, based on two key dimensions:
	+ 1. Organizational coordination of OI activities
		2. Change impetus for the adoption of OI

**Methodology**

* Use of qualitative case study method
* 2 years of research (2007–2008) through three phases (A, B and C)
* This paper describes the integration of the results of the case studies, literature review and focus groups of all 3 stages, giving an overview of how companies currently implement OI
* Phase A—General issues for OI implementation
🡪 Development of appropriate culture and skills to enable the operation of an OI strategy is an area of significant interest
* Phase B—Culture for OI
🡪 Participants were asked to summarize the practices adopted in their organizations to support and enable the implementation of OI
* Phase C—Skills for OI
🡪Theoretical framework was developed from literature to explain the skills required for practicing inbound OI by individuals in R&D and the other innovation functions

**Results**

* Mapped on onto the taxonomy developed in Fig. 1



4.1. Q1: top-down/centralized—OI conscious adopters

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| OI adoption drivers | * Quadrant largely populated by FMCG companies who adopted OI as a result of popularity
* OI as opportunity to accelerate innovation and to promote growth in a sector where revolutionary innovation is very hard to achieve, competition is very high and market very demanding
* Costs have forced many firms to adopt an OI approach
* FMGC’s innovation strongly dominated by brands and adoption of OI contributes to the reinforcement of branding message
* Other examples of OI in this quadrant adopted OI as a result of a technology disruption
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| OI adoption timeframe | Quite tight around the publication of the OI original book (Chesbrough, 2003) |
| OI process | * Companies focused mainly on the inbound OI process
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| OI implementation features | * Small group of managers who were tasked to direct the implementation of OI
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4.2. Q2: top-down/decentralized—OI ad-hoc adopters

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| OI adoption drivers | * Quadrant populated by firms that adopted OI only in certain functions, in part of the company or for specific products/innovation processes
* OI has become an interesting option as costs for R&D increase whilst available funding constantly diminishes
* Organizations in this quadrant aim to identify ways to bring in commercial off-the-shelf technologies (COTS), which could be inserted in open architectures
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| OI adoption timeframe | Varied |
| OI process | The prevailing OI process is ‘inbound’ |
| OI implementation features | For these organizations, OI happens in particular circumstances (e.g. one project or function) but no coherent plan to roll out OI across the firm |

4.3. Q3: bottom-up/decentralized—OI precursors

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| OI adoption drivers | * Adoption of OI progressively
* Firms in this quadrant have a very long history of integrating internal and external resources for innovation
* The transaction has happened in response to changes in their external environment
* In this field, significant innovation is not considered an option in the short term
* Firms are seeking breakthroughs to solve the difficult problems of the future by adopting an OI model
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| OI adoption timeframe | Adopting of OI throughout the business prior to the recent wave of interest in OI by progressively enabling their functions to access external resources |
| OI process | Activities for both inbound and outbound processes were observed |
| OI implementation features | * No central coordination of OI activities
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4.4. Q4: bottom-up/centralized—OI communities of practice

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| OI adoption drivers | Innovation managers from R&D and Procurement functions are considering implementation of OI to meet difficult innovation targets |
| OI adoption timeframe | Recent adoption of OI as a conscious Innovation paradigm, although collaboration with suppliers and universities preceded this decision |
| OI process | * Focus: Inbound activities
* ‘New business’ team looking at niche opportunities, whilst for the outbound process occasional outlicensing of technology and brands are considered
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| OI implementation features | R&D and Procurement in partnership are leading the OI initial thinking  |



4.5. Shift in implementation approaches

**Discussion**

* 1. OI implementation: innovation drivers
* Approaches to implementation of OI activities:
	+ Support current innovation activities aimed at core markets
	+ Implementation as a result of the need for the ambidexterity of the firm
		1. Inbound activities to fuel existing innovation pipelines
* Reasons outsourcing R&D: Reduce costs and increase access to competences and skills, fueling traditional innovation opportunities
* FMCG firms focus: Organizing OI practice to supplement innovation competencies and core innovation program, as discontinuous innovation is rare
	+ 1. In and outbound activities to pursue ambidexterity
* Several firms implementing OI to support innovation in fields beyond the core company business, as a means to achieve ambidexterity
* First adoption of open approaches to innovation several years before OI term was coined
🡪 Progressive transformation
* Changes towards openness often coincided with cost-driven R&D, business model reorganizations and change of management
	1. OI implementation: timing
* ‘Success factors’ previously identified by the innovation implementation literature: communication, training, management buy-in, cross-functional teams and, in particular, reliance on champions and leaders to project and manage OI implementation
* When OI trend has been made explicit, implementation has been ‘perturbed and forced to fit’ the OI model
* Risk: forcing OI could potentially lead to a ‘lock-in’ situation.
	1. Impacts of cultural internal and external contexts

**Conclusion & Limitations**

* The implementation path of OI was found to depend on (1) innovation needs, (2) the timing of the implementation and (3) the organizational culture