Technological Spin-outs: Best practices and key success factors

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How many promising R&D projects are going nowhere at your company?
The decline of many firms is caused by failure to renew their market domain and to innovate continuously in a changing world.

Many organizations sit on a plethora of potentially valuable projects that languish because they do not fit into current strategies or operations.

Non-core projects become obvious candidates for spinout in niche markets, were they provide little value to the parent firm.

Are corporate spinouts a missed opportunity for the parent organization?
What Do I Mean by ‘Corporate Spinout’?

My research focuses on **corporate spinouts** as strategy for **product-market renewal** at the parent organization.

- Spinouts are new **independent organizations** composed by former employees, units, or divisions of the parent firm
  - Spinouts **create new markets** for corporate incubated knowledge that does not fit with the parent core business model.
  - Spinouts are either part of the parent holding or licensees

**Field research:**
- Inventions and innovations at 114 firms and their spinouts in ICTs
- Interviews at Xerox Corporation, Alcatel-Lucent, Philips Electronics
- Case studies (e.g. ARECO)
'Periodically utilizing spin-outs keeps our research system flexible... It breaks down the idea that you can inventory technology and hold it on the shelf until it’s ready to go... It expands opportunities for our researchers, it makes us think harder about how to get the most out of our ideas, and it helps us guard against complacency’*

Mark Myers, former senior vice president
Corporate Research & Technology, Xerox

*Chesbrough 1998
“Cypress planned to grow by funding new ventures (i.e., spinouts). The idea was that when we reached $1 billion in revenue, Cypress would have avoided becoming a big, bureaucratic company, evolving instead into a “federation of entrepreneurs” that still had the just-do-it startup attitude.”*

T.J. Rodgers, CEO of Cypress Semiconductors

* from Cypress Semiconductors Corporation
Corporate spinouts overcome inertia plaguing corporations

Spinouts create new open domains to reduce costs and expand participation

Nurturing ecosystems of spinouts sustains corporate growth

- The rejuvenation of inventors through corporate spinouts
  jointly with S. Brusoni (ETH Zurich) and G. Valentini (IESE Business School)
  *Organization Science*, 2014, 25(6) 1764–1784

- ARECO: A Full Steam Ahead
  jointly with P. Chereau (SKEMA Business School)
  *The Case Center*, 2015, case #815-040-1

- Divide to Connect: Corporate Spinouts as Linking Contexts of Intra-Organizational Clusters
  jointly with S. Breschi (Bocconi University) and A. Prencipe (LUISS University)

- When are scientists more likely to spin-out a new venture?
  jointly with S. Breschi (Bocconi), D. Park and D. Tzabbar (Drexel University)

- Non-Compete Agreements and Corporate Spinouts in the ICT Industry, 1975-2014
  jointly with R. Conti (Catolica Lisbon)

- Beware of Greeks bearing gifts: Spinouts as means to capture competitors’ knowledge
  jointly with G. Giustiziero (SKEMA)

- Technological Search through Corporate Spinouts in the ICT Industry, 2000-2009
Spinouts as a possible solution to firm inertia in a core business

Spinouts as a less risky strategy for exploration

Best practices in the management of spinouts to maximize value creation and capturing

Managerial recommendations on the use of spinouts for the renewal of the parent core business
Remainder of the Talk

- Spinouts as a possible solution to firm inertia in a core business
- Spinouts as a less risky strategy for exploration
- Best practices in the management of spinouts to maximize value creation and capturing
- Managerial recommendations on the use of spinouts for the renewal of the parent core business
Xerox Lab in Palo Alto: PARC
What you are seeing is mostly the graphics and linguistics crowd. ... And interestingly also, people on the left were on the south side of the building and people on the right were on the north side of the building.*

*Interview with John Lamping, ex scientist at Xerox (now at Google)
Corporate workers do not perceive the right market at the right time, for two main reasons:
– Compliance with the established rules of the organization
– Where does complementary knowledge reside inside the firm?

"The two technologies were complementary in the sense that they really adjust the problem and of course that led to a commercial opportunity." *

A few researchers spun out the two teams to join Inxight, which proved to be a suitable solution for exploiting complementarities among the two technologies for commercial ends.

* Interview with a former executive of Inxight
Breaking inertia

Members of an organization over time grow more alike and align with the *prevailing procedures* and *culture* of the organization, which hinders their ability to seize opportunities in other domains than the *core business* of the organization.

- The greater the experience with the core business by managers and employees of an organization, the faster the inertial forces.

*One of the biggest surprises is how different the cultures within the spinouts are from the typical Xerox culture. In these spin-outs, the culture is to set up the charter and ground rules. Corporate ‘help’ is something you generally want to avoid.*

Andrew Garman
Former vice president of Xerox New Enterprises
Xerox Corporation

*Chesbrough 1998*
Employees’ Inventive Performance

from Cirillo et al. 2014
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Information asymmetry and moral hazard

- Knowledge search beyond the firm’s boundaries and expertise, or distant search, is essential for firm survival.

- The problem with external search/collaborations:
  - Information asymmetries
  - Moral hazard
  - Uncertainty and variance in outcomes (risk)

- I find that the experience of spun out employees with their parent’s core processes allows parents use spinouts’ knowledge better than those of other firms.

Technological search though spinouts increases the benefits and it decreases the risk.

In parent innovation activities (higher mean and lower variance in invention value)
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How can a firm maximize value creation in spinout organizations and then benefit from it?

- Anecdotal evidence shows that value creation is maximized by those projects that can exploit one or more complementarities with the parent’s assets.
- Critical decisions to maximize access to complementary assets:
  
  - **(A) Monitoring & Control**
  - **(B) Team and Career Management**
  - **(C) Geographical Location**
(A) Monitoring: Seats in Spinout Board

- One board member from the parent
  - +15% market capitalization in the mean*
  - +23% collaborations with other research teams in the corporation in the mean**

- More than one board member from parent
  - -13% market capitalization in the mean*
  - Spinout employees do not look for complementarities among their parents’ assets**

- Oversight by the parent is positively interpreted by external investors as the desire of the parent to see the child succeed as an independent entity, and hence yield higher market performance*

- It reduces the information asymmetry in the access to complementary assets

- Excessive monitoring and parent ownership concentrates control into the hands of the parent firm. This control constrains the spinout from adapting to its new independent status (procedures and culture).

*Semadeni and Cannella 2011  **Cirillo et al. 2015
Spinouts are an incentive contract*
- Personal reward (e.g., equity, options)
- Management by control => Management by incentive

Spinouts are a risky career choice**
- Lucent employees had the ability to rejoin the parent in case of spinout failure

Long tenured employees of the parent (oldtimers) increase their creativity in spinouts 3 times more than other employees.***
- Oldtimers are expert in the parent’s procedures, hence they have a higher ability to revise and adapt them in the spinout

*Ferrary 2008  **Chesbrough 2000  ***Cirillo et al. 2014
I think the biggest disruption in terms of culture was when we moved to a different place, even if it was like five kilometers away from where we were before. Not a lot of distance, but it took us out of the Philips’ environment. That’s where I think the culture really started to change.*

founder of a spinout of Philips Electronics

- A new physical location helps to make the spinout independent from the normal decision making criteria in resource allocation processes.

- But, the spinout needs to access the requisite complementary assets on an arms-length basis.

- Research collaborations with the parent gradually dissolve from more than 25kms away (Cirillo et al. 2015)
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Managerial recommendations on the use of spinouts for the renewal of the parent core business
1. Grow your ecosystem of spinouts

- Placing projects outside the firm’s walls can preserve opportunities for future growth while taking time to support the cash cow business.
- Spinouts guarantee the **continuity of the innovation cycle**.
- Spinouts help researchers in the **creation phase**.

Managerial recommendations

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Adapted from Garman and Chesbrough 2008
2. Let spinout develop your nonstrategic initiatives

- Killing projects with a low potential helps reducing costs, but it diminishes chances for long term growth
- Spinouts source **external capitals**, recruit **new talents**, attract **new customers**, nurture **new supplier** and **partnerships**, generate **high-margin licensing** income from parent’s knowledge

In sum, spinouts create **new markets** for corporate knowledge

Adapted from Garman and Chesbrough 2008
Managerial recommendations

3. Become the first customer of your former projects

- Spinouts will bear the risk in exploring new product/market solutions
- With a small role in a project (board membership, minor investment) you may reduce costs and risks in exploring a new market
- Get an option on future spinout developments (e.g. exclusive licensing on future patents)

Once such markets become mature enough, you may appropriate value potentially created by spinout ventures and/or exploit them to renew a declining core business

Adapted from Garman and Chesbrough 2008
Xerox’s missed opportunity

from Chesbrough 2002