

Transformational Innovation & Corporate Entrepreneurship: Findings from a Pilot Study

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Rick Stachel and Lou Musante

Agenda

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Introductions

- Rick Stachel, Assistant Professor of Healthcare Administration and Director of Master of Healthcare Administration Program, Gannon University.
- Lou Musante, Principal Echo Business, Adjunct Faculty Member, Carnegie Mellon University, Tepper School of Business, Swartz Center for Entrepreneurship, Corporate Startup Lab.

Research Pilot Study Background: Origins

- 2016 book tour “Science of Growth” by Sean Ammirati (CMU Corporate Startup Lab Co-founder and VC).
- Strong interest from market in corporate entrepreneurship catalyzed the launch of CSL.
- 2019 Annual Meeting in Pittsburgh and Echo’s insights from content weaving and insight gathering for IRI.
- IRI interest in corporate entrepreneurship (CE) research literature void in CE relative to enabling transformational (Horizon 3) innovation.

Research Pilot Study Background

- **Research Question:**

- How do organizations practice corporate entrepreneurship (or innovation)?

- **Sub Questions (SQ):**

1. What models or approaches do organizations use for corporate entrepreneurship and catalyzation of disruptive innovation?
2. What is the corporate entrepreneurship strategic profile of organizations ?
3. How are organizations structured in order to stimulate corporate entrepreneurship and catalyze disruptive innovation ?
4. What are the budget parameters for corporate entrepreneurship and innovation?
5. What is the utilization and perceived success of specific corporate venturing and strategic renewal activities?

Research Pilot Study Background

- **Research Process:**

- Initially conducted 60-minute, qualitative interviews (n=5)
 - Through Summer 2020
- Followed-up with in-depth survey (n=9)
 - Launched in October 2020 and closed in January 2021

Key Takeaways

- 1) Organizations aren't using published or academic models for innovation, but they are using their own models.
- 2) The definitions of certain types of innovation, such as "Transformational" are not well understood or agreed upon.
- 3) Resource allocation toward separate types of innovation is dependent upon many things including industry type and corporate culture.
- 4) Business units are more responsible for R&D at the Core level and somewhat Adjacent, where corporate is more responsible for Transformational.
- 5) Innovation funding comes mostly from internal sources but also some federal funding.
- 6) The "average" organization surveyed is more conservative on growth opportunities, takes a slow-and-steady approach, prefers to control its own resources, but it also has many ideas and priorities for growth.
- 7) There is little autonomy for BUs outside of core innovations.
- 8) In Corporate Venturing, M&As, university contracts and JVs are the most utilized but aren't seen as the most effective.
- 9) There's no one place where Corporate Venturing fits within an organization.
- 10) While some organizations are growing ties at the BU level with universities, corporate teams may be stressing more applied research.
- 11) Trends in Corporate Venturing moving toward R&D alliances, consortia, open innovation and crowd sourcing.
- 12) Most sources of funding were expected to remain the same in 2021.

Research Study Findings

- The findings are organized by Research Question and Sub Questions.
- Findings provide quantitative and qualitative analysis
 - Quantitative approaches that provide directional understanding rather than statistically significant findings.
 - Qualitative comments that provide context to quantitative findings...

These are depicted in blue textboxes .

Research Pilot Study Background

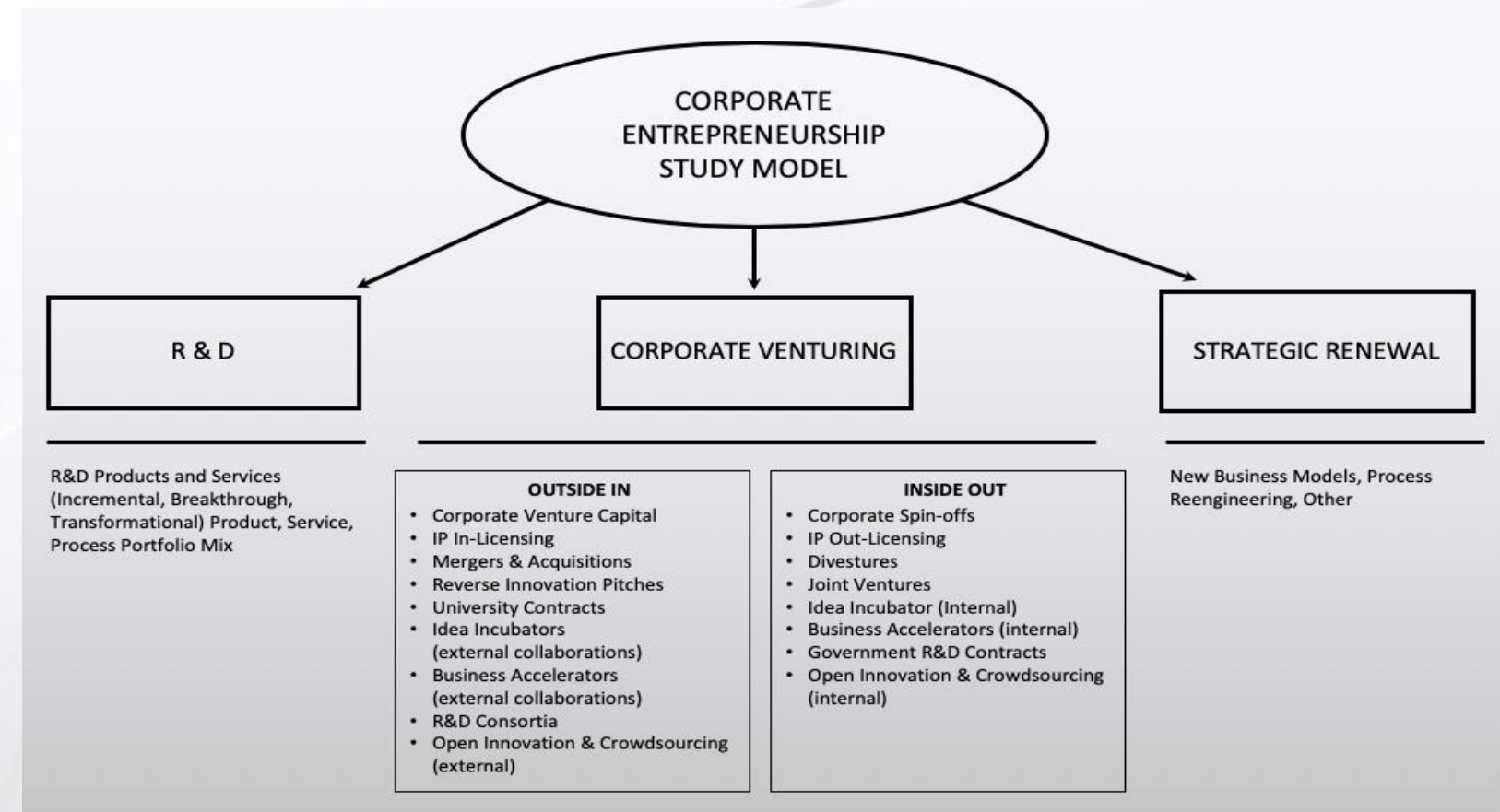
- **SQ1:** What models or approaches do organizations use for corporate entrepreneurship and catalyzation of disruptive innovation?
- Understand resonance of particular models.

Innovation Ambition Matrix



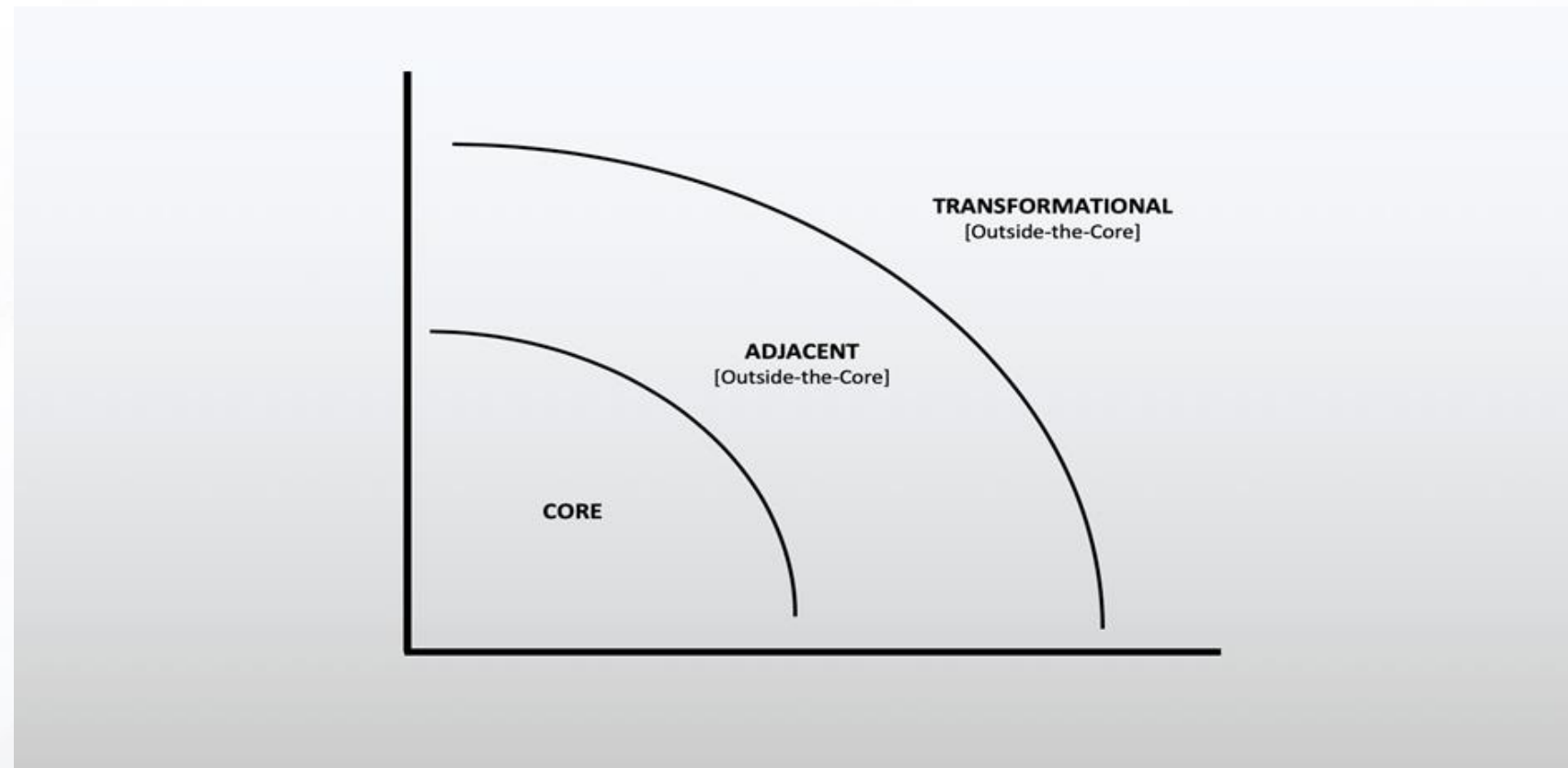
Nagi & Tuff, HBR, 2012

Corporate Entrepreneurship Study Model



Adapted from on Sakhdari, Karmal

SQ1: What models or approaches do organizations use for corporate entrepreneurship and catalyzation of disruptive innovation?



Nagi & Tuff Model (2012)

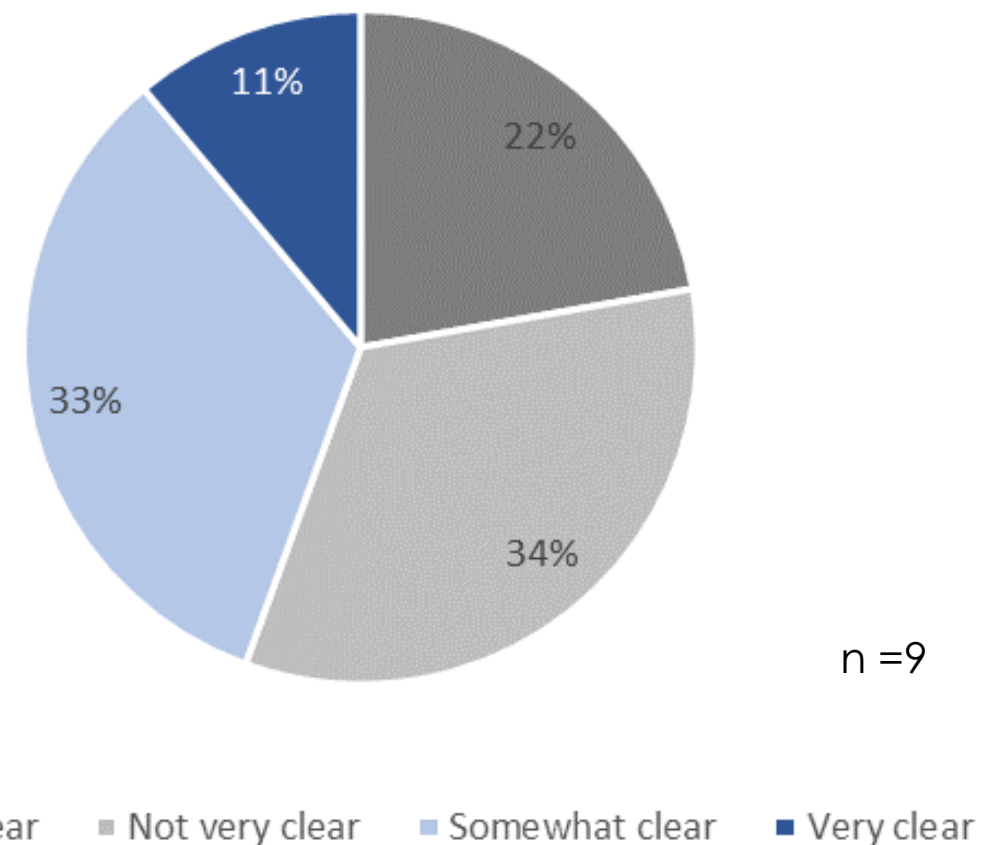
- Nagi & Tuff Model describes innovation in three tiers; Core, Adjacent and Transformational.

Lack of Clarity on What “Transformational” Means

“Transformational has a lot of different meanings to a lot of companies.”

“They keep talking about transformational innovation, but they don’t know what that is.”

Clarity on the Meaning of "Transformational"



- Only 11% of respondents indicated that it was very clear among colleagues and senior leadership what the term “transformational” means.

SQ1: Models Used-Qualitative

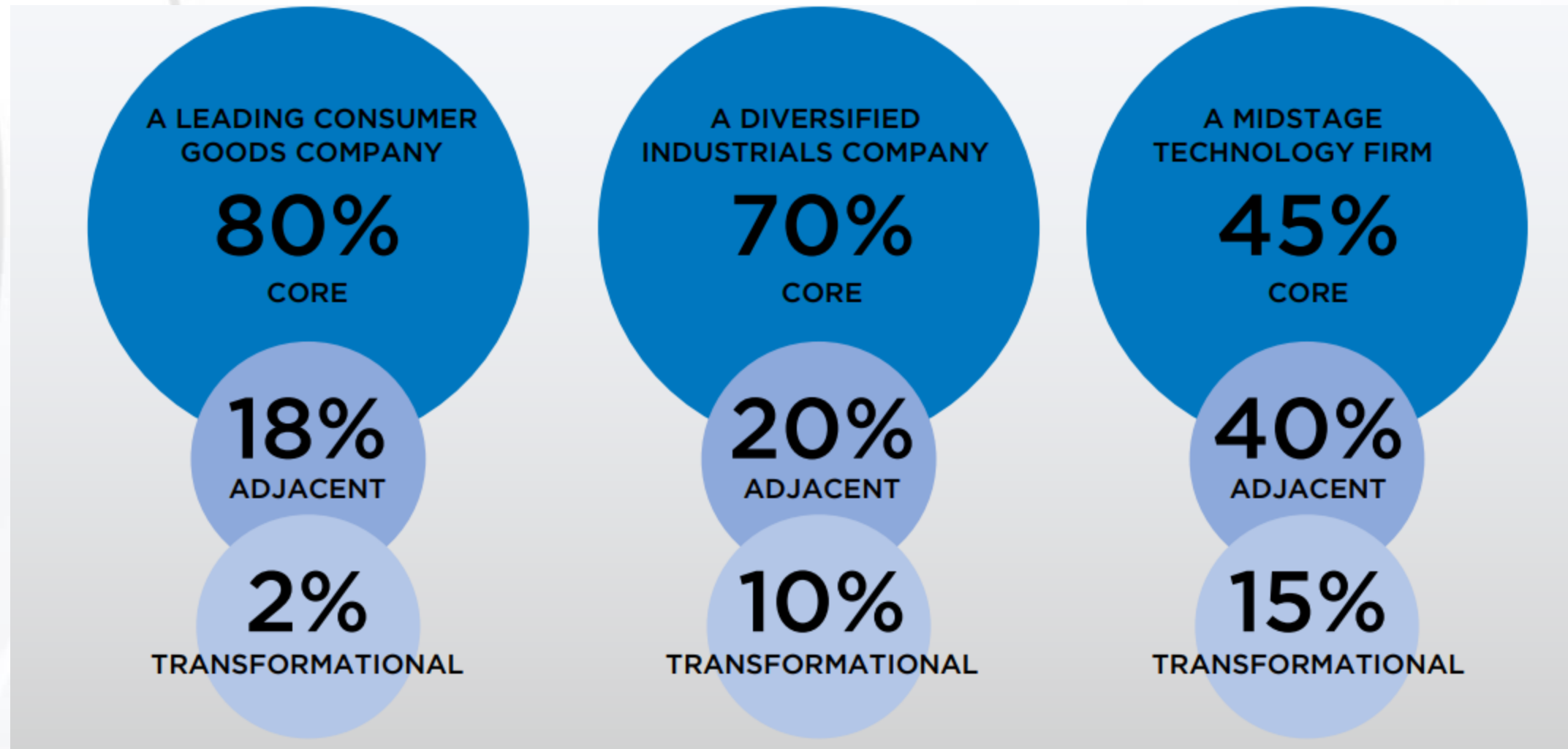
- Organizations aren't typically using published models "as is".

"The academic models didn't have rigor around them, and there was misalignment and an understanding of what works with architecture teams. We understand how to disrupt the business model and technology and those groups are born out of the technology teams."

"Every organization has different tools and nomenclature. I've seen three or four of them. Everybody tries to understand how they can maximize the value of something in a basket that you can offer. You want to stick to the science and expertise that you have developed within an organization and build on it so that you get recognized for that particular offering."

"No matter what you call them, what the innovation model is for, each of those buckets needs to be different. You can recognize it more by new to the company/new to the world."

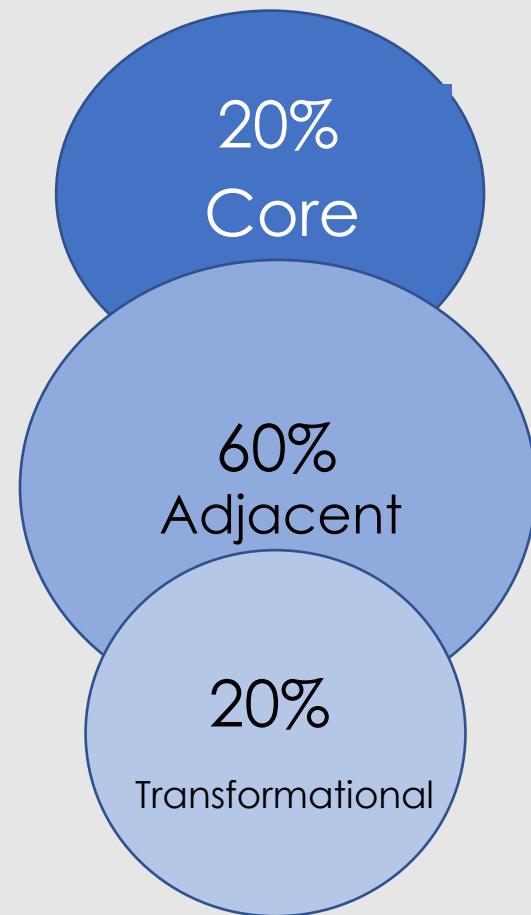
SQ2: What is the corporate entrepreneurship strategic profile of organizations ?



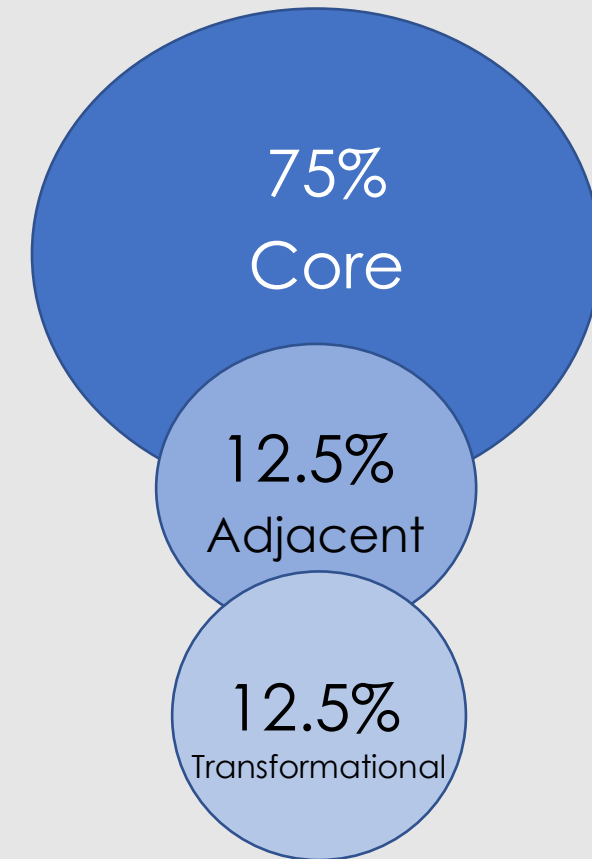
- Nagi & Tuff model distributes innovation differently according to various industry membership.

SQ2: What We Found-Qualitatively

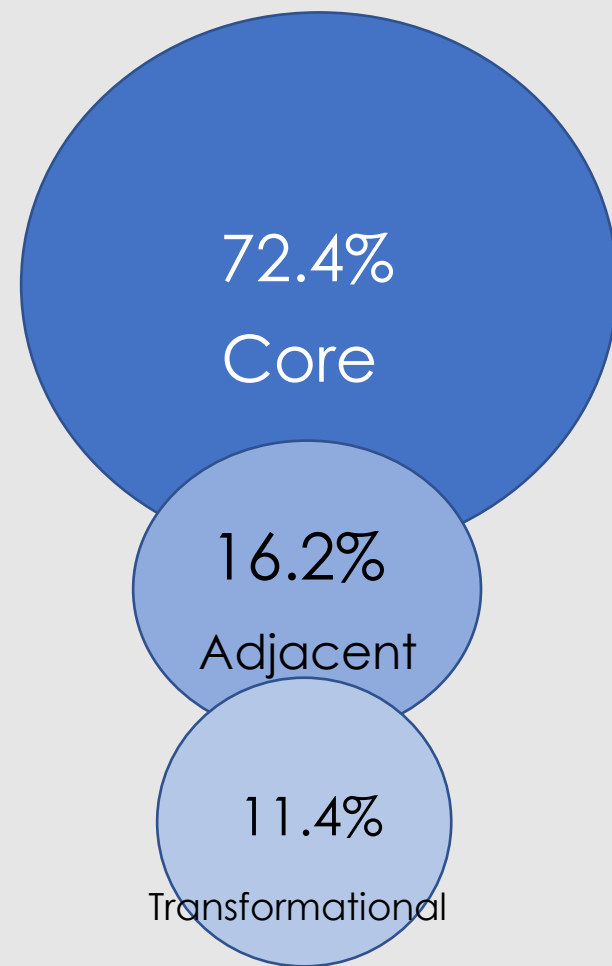
Transformational Healthcare Company



Materials/Chemicals/Gases



SQ2: What We Found-Survey



n=9

Represented Industries

Industry	Percent
Machinery/Industrial Equipment Materials/Chemicals/Gases	43%
Consulting	29%
Paper/Pulp	14%
Other (please specify)	14%

Transformational Innovation High Growth Company Insights (Wellspring 2021)

What percentage of your company's innovation efforts are devoted to each of the following types of innovation?

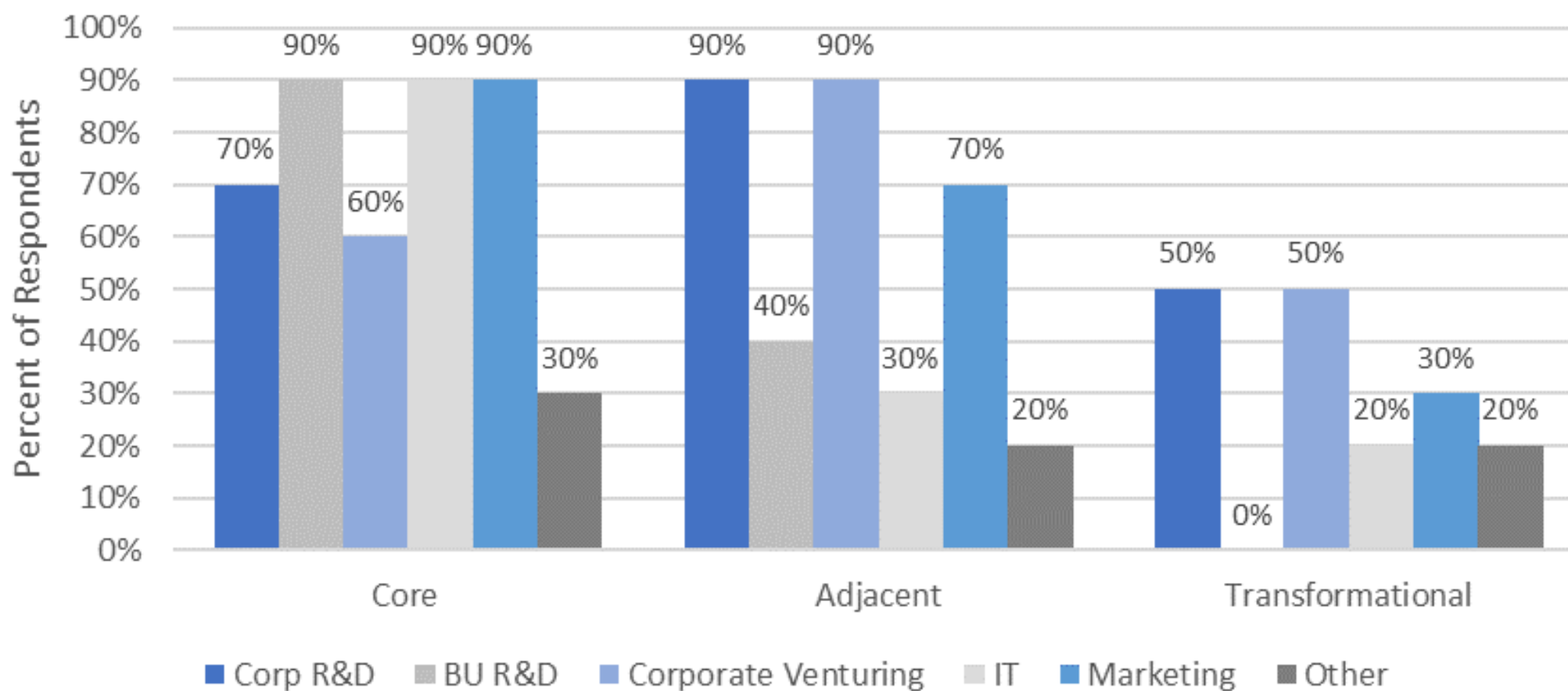
- High-growth companies direct nearly two-thirds of their innovation efforts toward adjacent and breakthrough opportunities – a marked difference from the status quo.
 - Horizon 1 (core) = 1/3
 - Horizon 2 (adjacent) = 2/3
 - Horizon 3 (transformational breakthrough) = 1/3

How often do government agencies (including national labs) contribute as ecosystem partners to your company's innovation efforts?

- Of all the options, the partners that are a distinct hallmark of 48% of the high-growth companies participating are government labs and agencies.

SQ3: How are organizations structured in order to stimulate corporate entrepreneurship and catalyze disruptive innovation ?

Involvement of Internal Groups by Type of Innovation



- Most respondents indicate that Core Innovation has higher participation among BU R&D, IT and Marketing.
- Corporate involvement (R&D and Venturing) is active in most organizations at the Adjacent level.
- No one indicated that BU R&D was involved in transformational innovation, but 50% said that Corp R&D and Corporate Venturing were more involved at this level.

SQ3: R&D for Core Is More Local but Transformational is More Corporate

“The R&D piece was moved closer into the business units.”

“Every business unit has their own R&D structure that supports the core.”

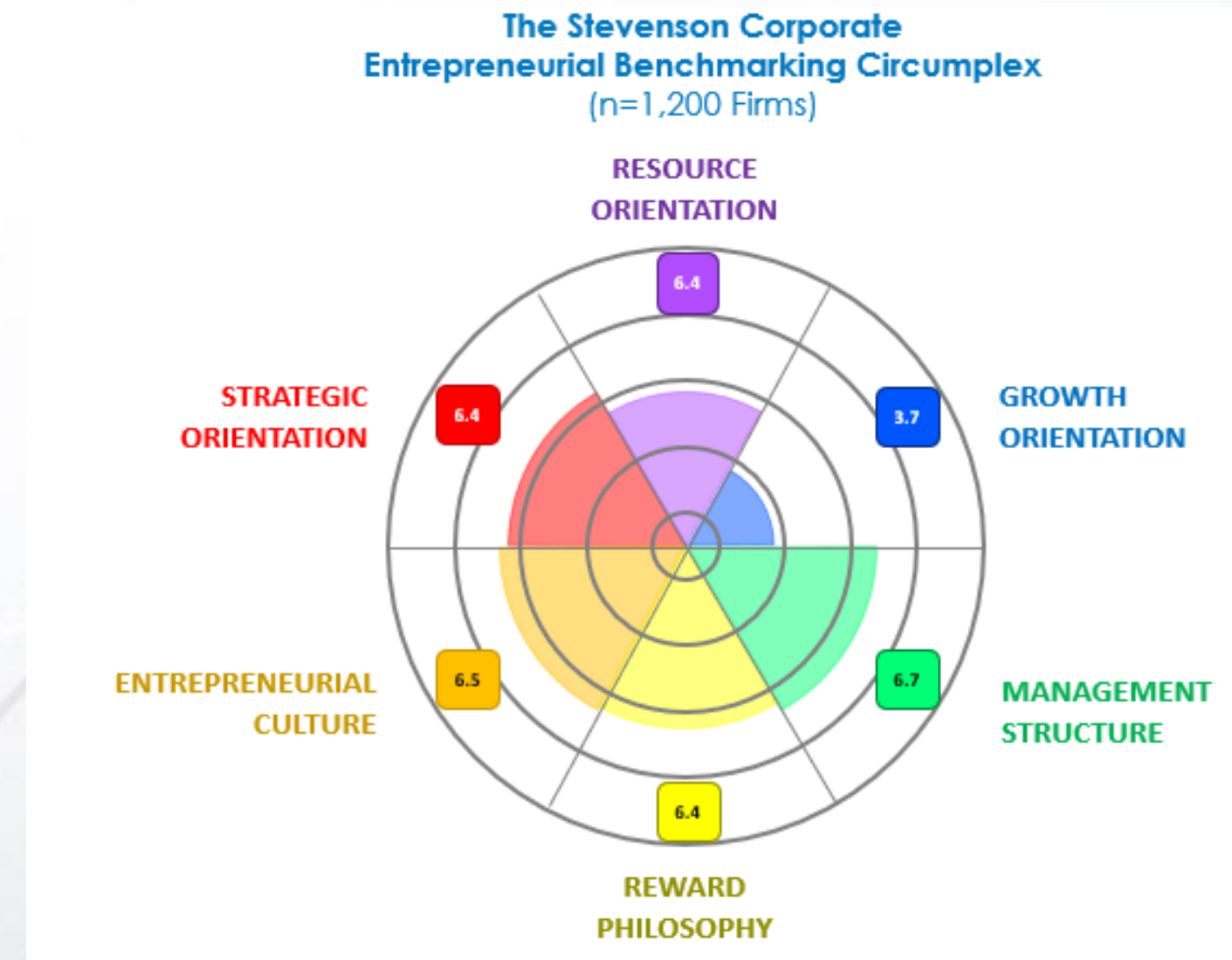
“The regions are doing their own thing and on a global scale and they reduced headcount...in the last two years. Haven't seen much come out of it. Because my focus is mostly on customers.”

“So, transformational is an open question. There is a corporate innovation group. They have a VP of Innovation, and she is chief sustainability officer, so the division she's under is corporate innovation and sustainability. She manages the Corporate Innovation piece, and her colleague manages the sustainability piece. In corporate innovation, they've had a recent change in how that group is organized.”

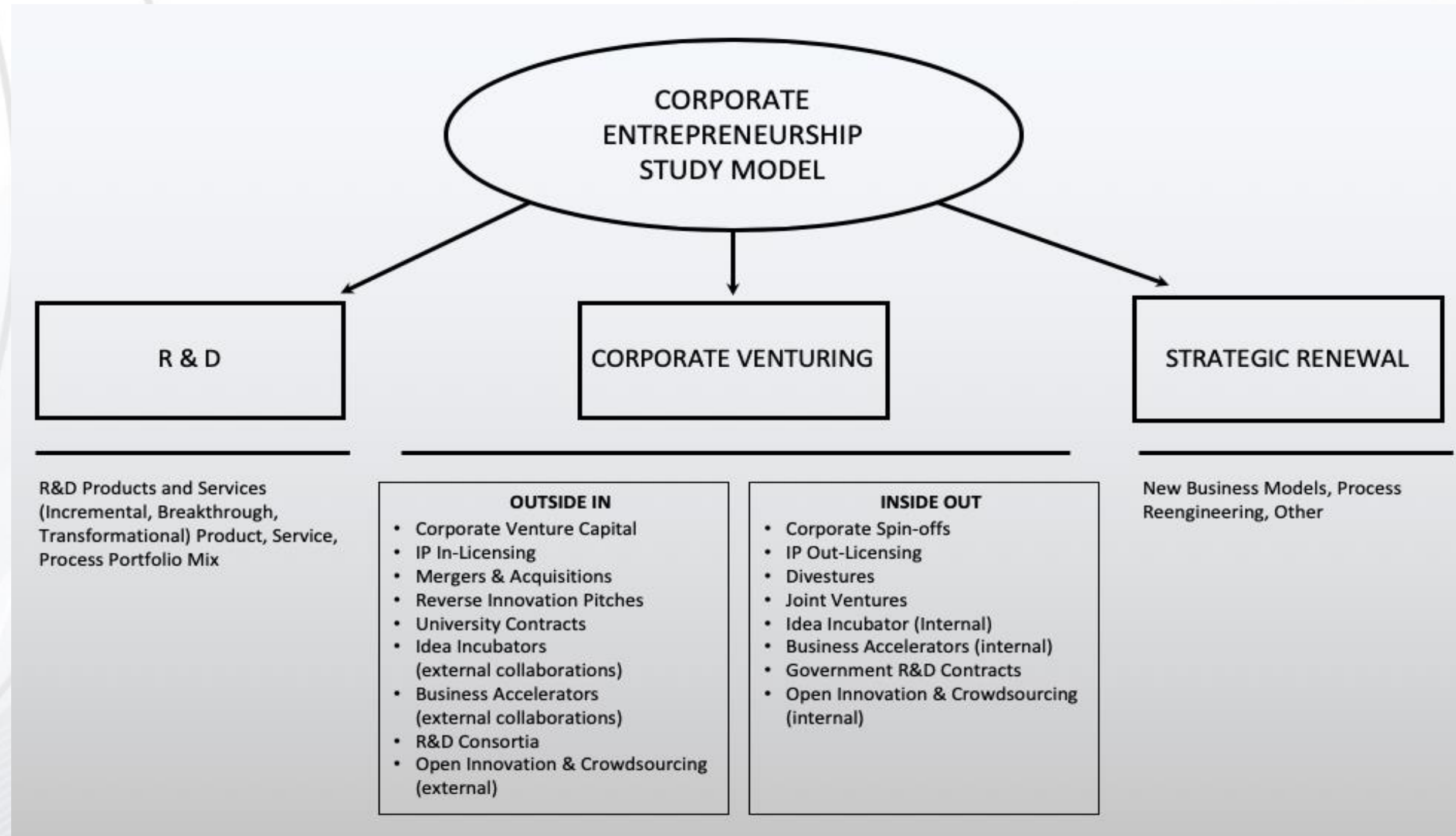
SQ4: What are the budget parameters for corporate entrepreneurship and innovation?

- **SQ4:** What are the budget parameters for corporate entrepreneurship and innovation?

- Developed Questions to Determine Orientation from the following model.
 1. Strategic Orientation
 2. Commitment to Opportunity
 3. Commitment of Resources
 4. Control of Resources and Autonomy
 5. Management Structure
 6. Reward Philosophy
- Stevenson (2006)

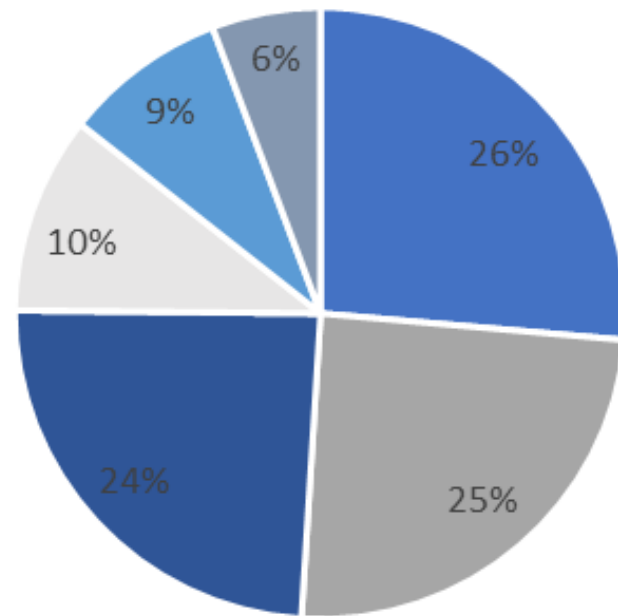


Corporate Venturing and Strategic Renewal



SQ4: What are the budget parameters for corporate entrepreneurship and innovation?

Budgetary Source for Adjacent Innovation

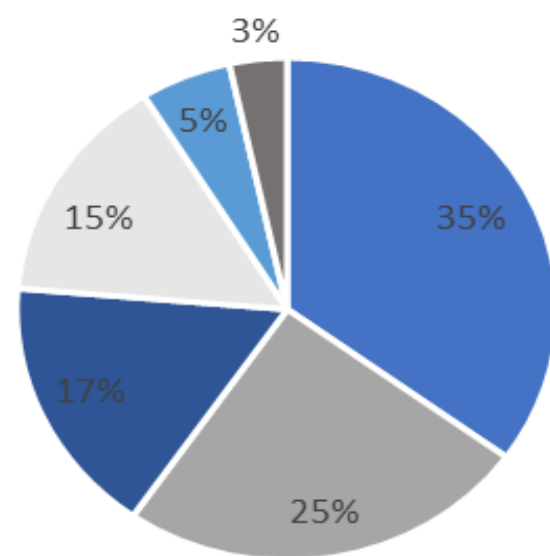


■ Corp R&D ■ Corporate Venturing ■ BU R&D ■ Other ■ Marketing ■ IT

R&D Funding	Percent of Respondents
Internal Sources	100%
Federal Government Grants	29%
Philanthropic Grants	0%
External Contracts	0%
Crowd Sourcing	0%

- Corporate R&D plays a larger budgetary role in Transformational Innovation.
- Corporate Venturing plays an equal role in adjacent and transformational innovation.
- Business Units are more involved in funding Adjacent than Transformational.
- Coordination in large organizations seen as a challenge.

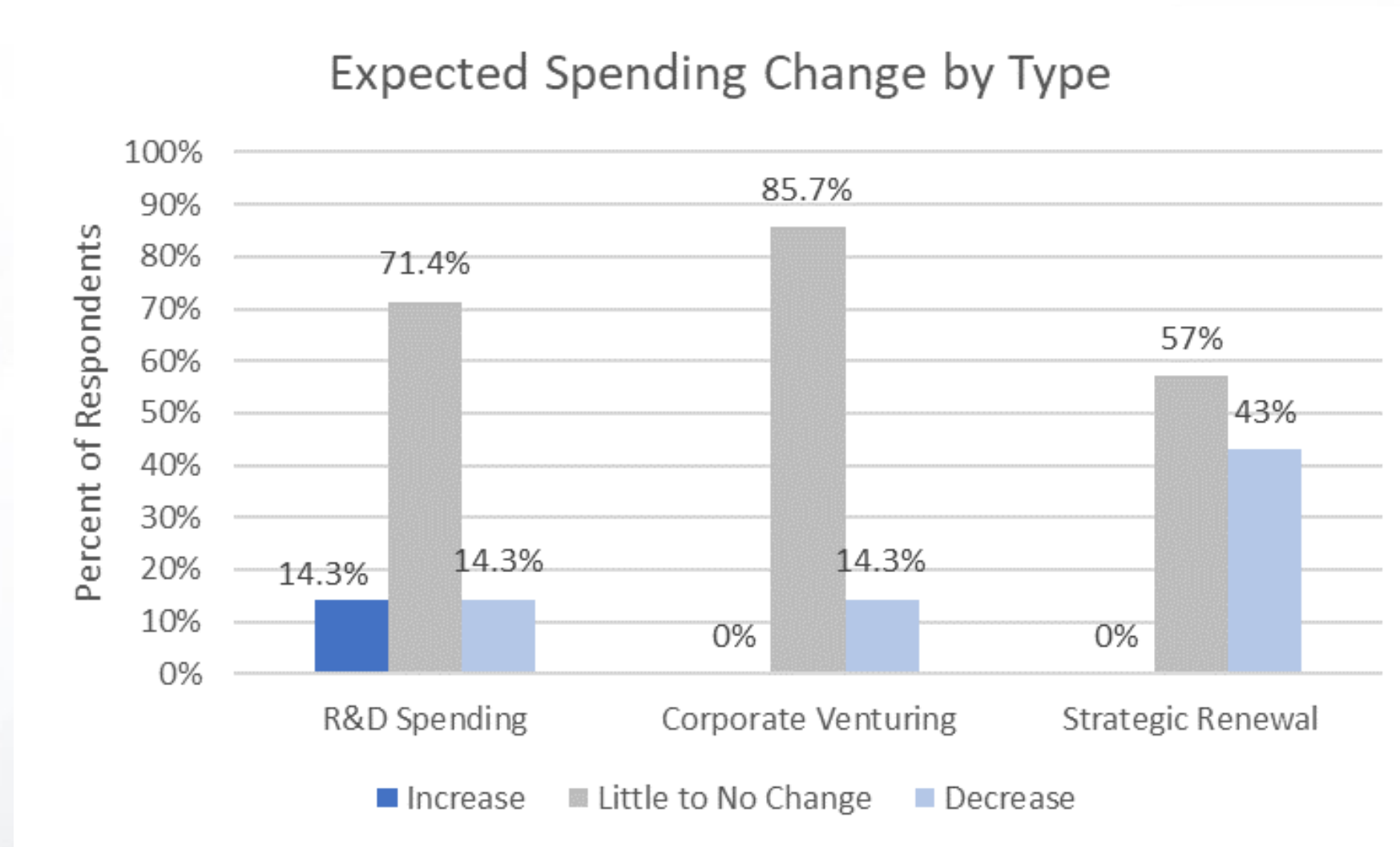
Budgetary Source for Transformational Innovation



n=9

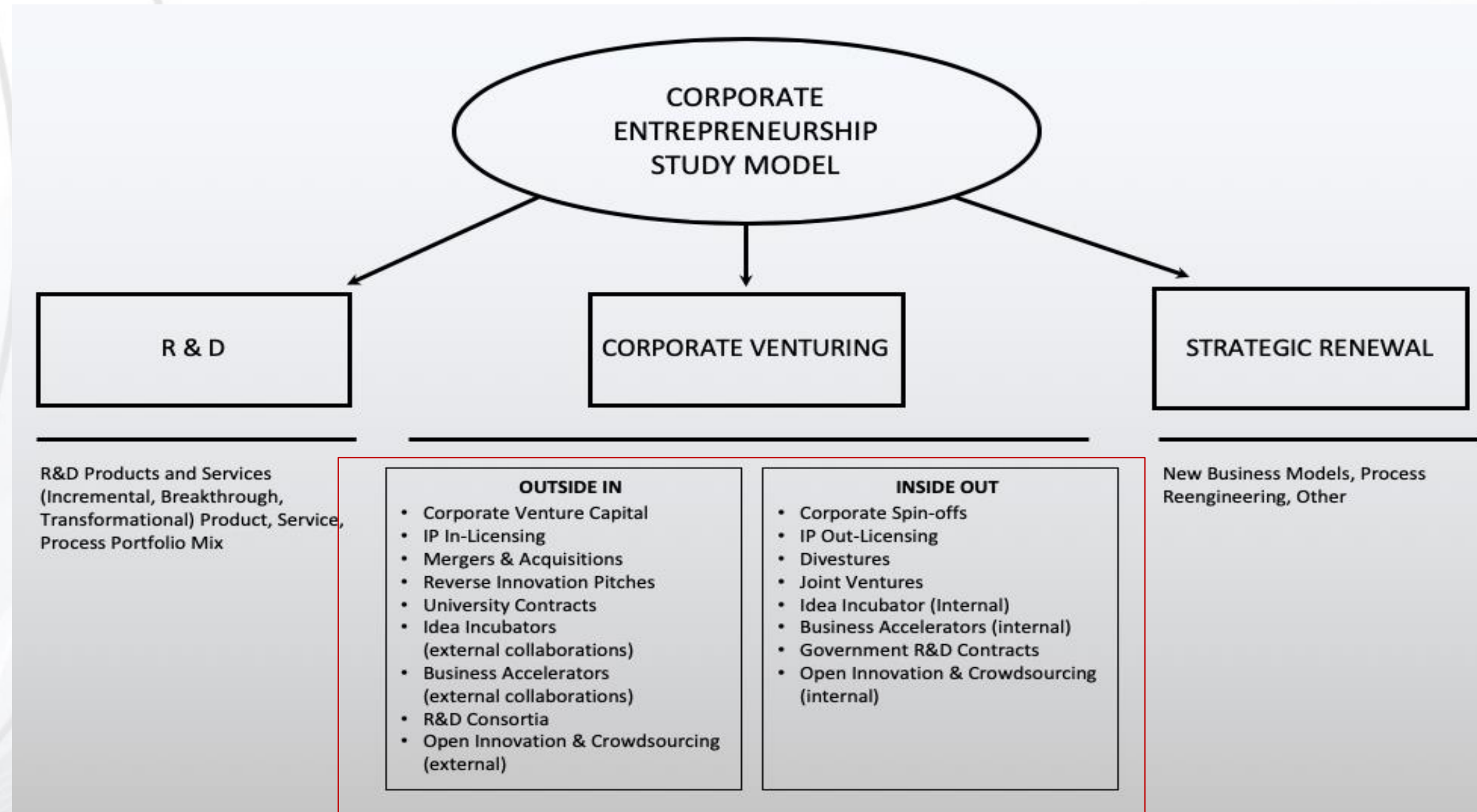
■ Corp R&D ■ Corporate Venturing ■ BU R&D ■ IT ■ Marketing ■ Other

SQ4: Source of R&D Funding and Expected Change in 2021



- 14.3% of respondents indicated there was an expected increase in R&D spending, the same percentage expected a decrease. Most expected no change.
- There was no expectation of increase among Corporate Venturing or Strategic Renewal budgeting.
- 43% of respondents were predicting a decrease in Strategic Renewal budgets.

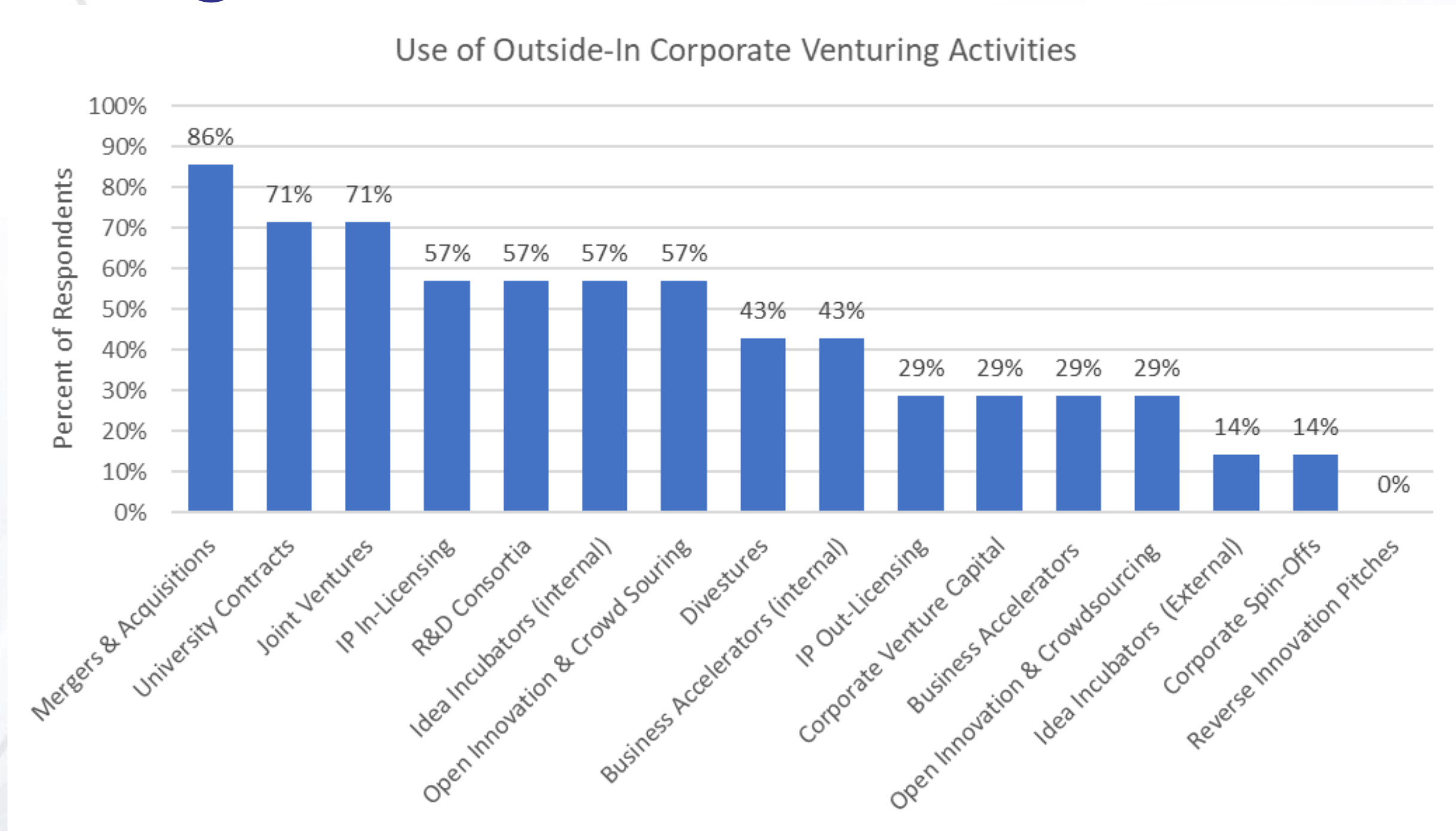
SQ5: What is the utilization and perceived success of specific corporate venturing and strategic renewal activities?



SQ5 Findings

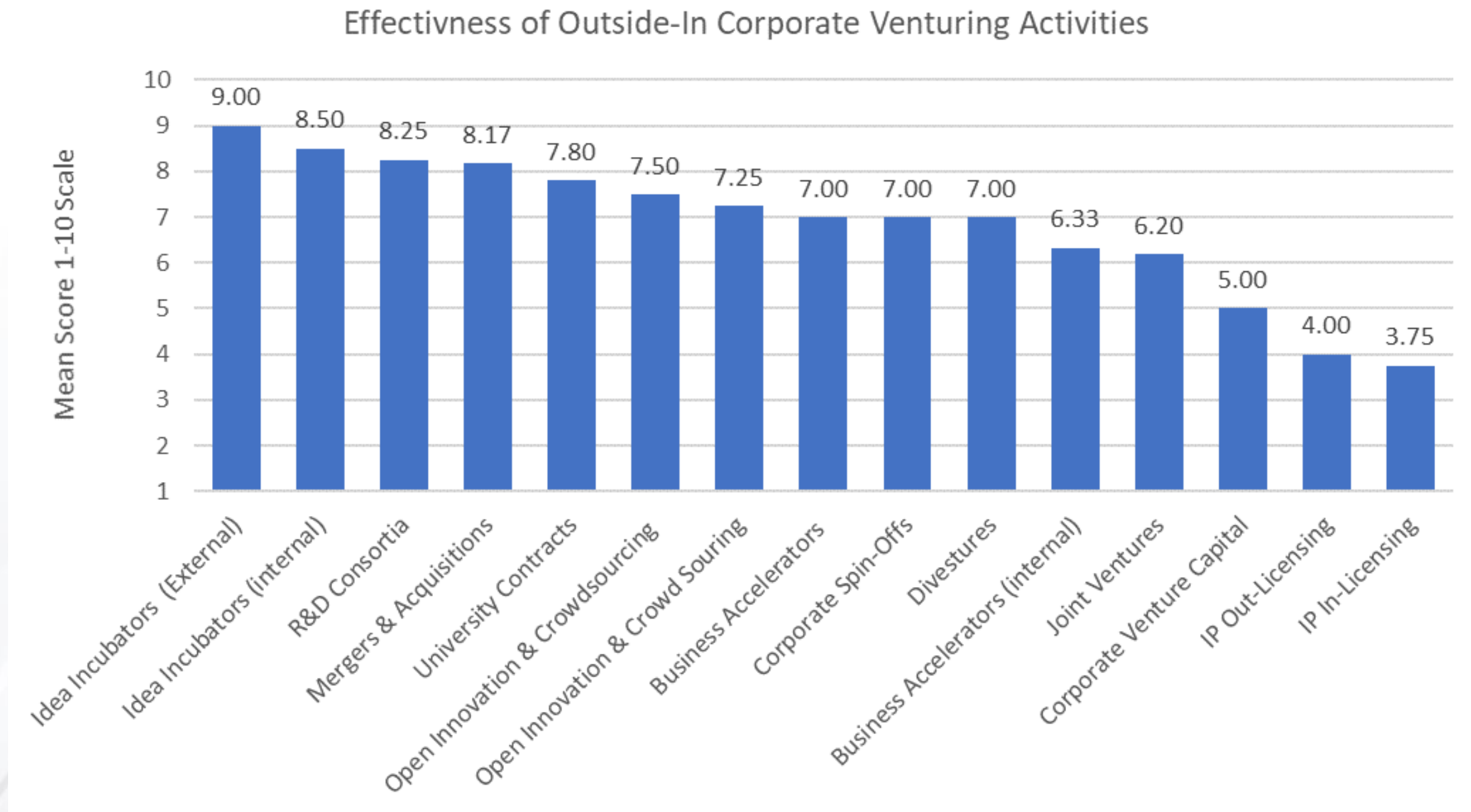
- Outside-In
 - Utilization
 - Perceived Success
- Inside-Out
 - Utilization
 - Perceived Success
- What's changing in Corporate Venturing?

SQ5: Use of Outside-In Corporate Venturing



- M&As, University Contracts and JVs are the most widely used outside-in Corporate Venturing activities.

SQ5: Effectiveness of Outside-In Corporate Venturing



- M&A's, University Contracts and JVs are not seen as the most effective Corporate Venturing activities. Idea incubators are.
- Of the most widely-used Outside-In Corporate Venturing, M&As are seen as the most effective.
- JVs are seen as one of the least effective.

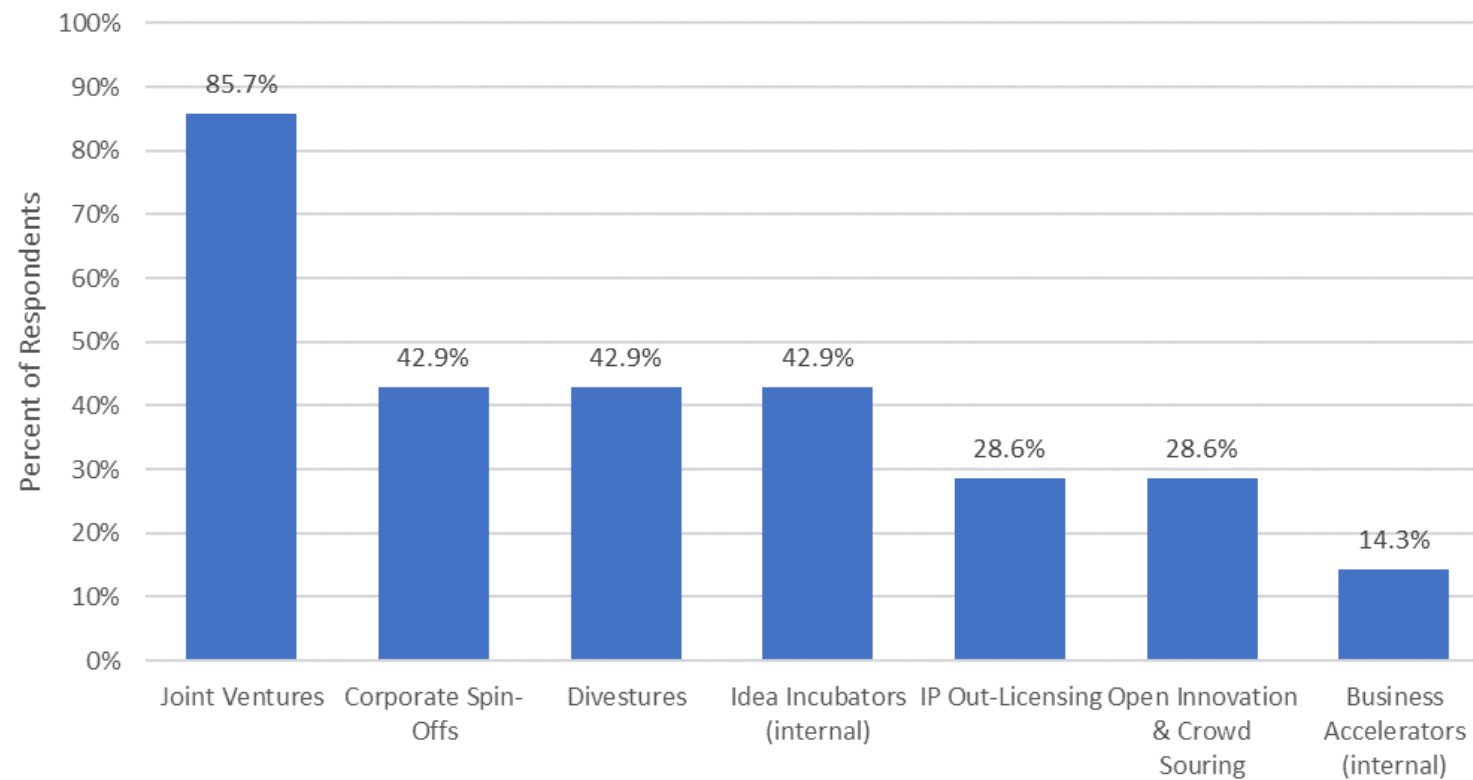
SQ5: There Are Effects of M&As with Innovation

“What was done several years ago, all three research divisions looked at big data, and they pulled those units out and put it into divisional level of R&D and merged the IT staff, and it looks across all of the company IT and that just happened late last year.”

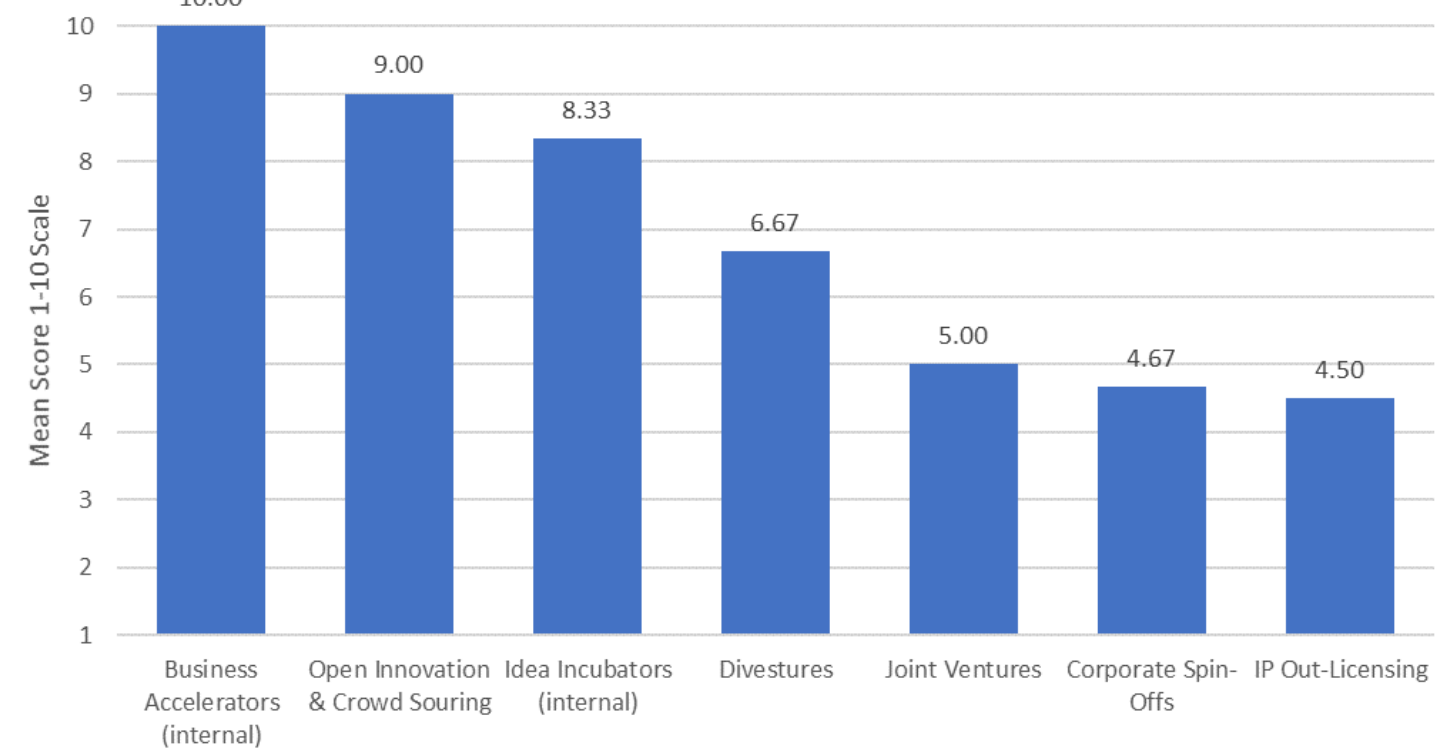
“That organizational structure still had the legacy corporate R&D resources tied into it. Then that piece broke off and formed or aligned more with the acquiror’s strategies.”

SQ5: Use and Effectiveness of Inside-Out Corporate Venturing

Use of Inside-Out Corporate Venturing Activities



Effectiveness of Inside-Out Corporate Venturing Activities



- JVs, are by far the most used Inside-Out Corporate Venturing activity, but again not the most effective.

n=7

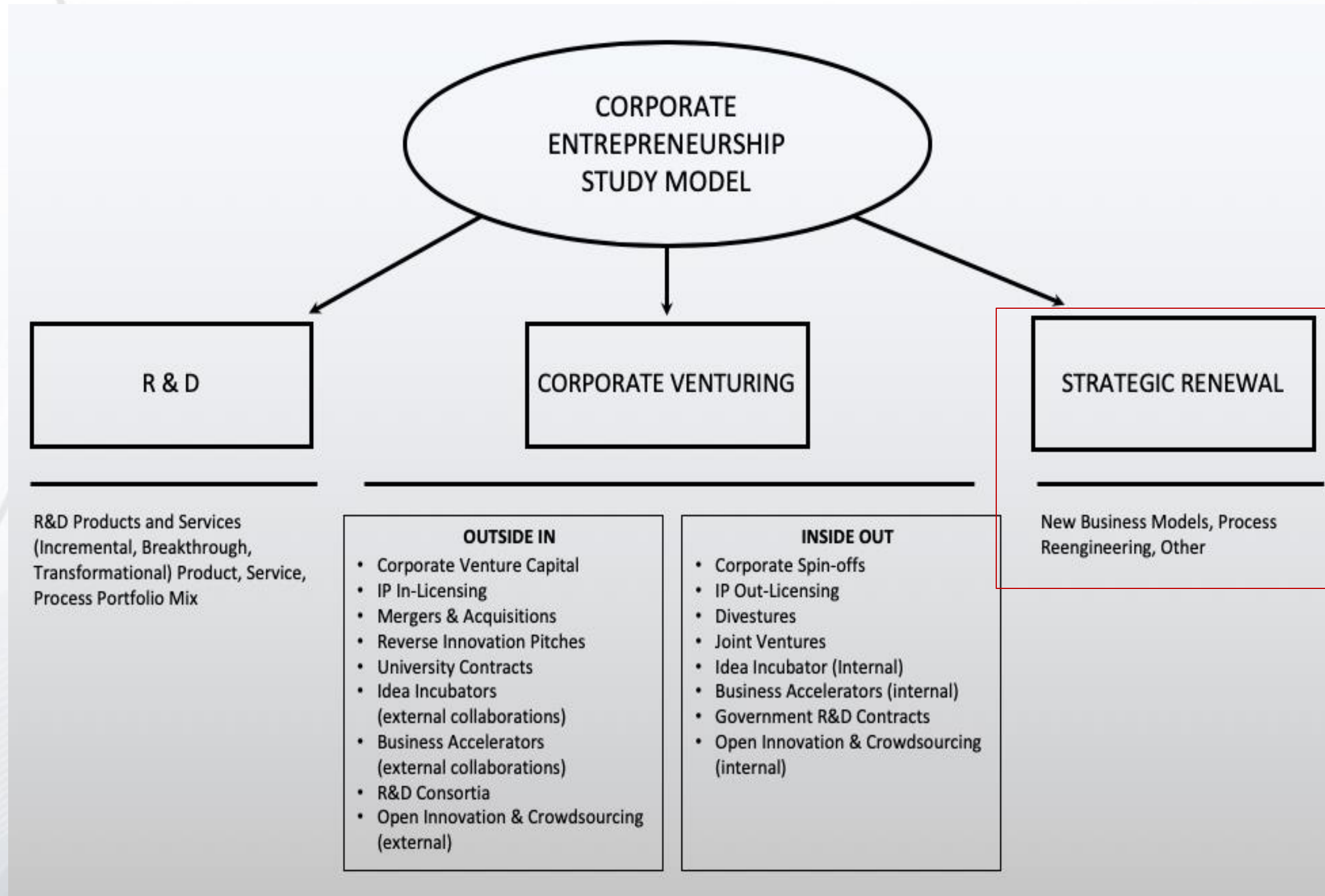
“There is no one place the corporate venturing fits...there are a lot of activities lumped in corporate venturing and some of those fit in other parts of the organization. Until the last couple months the corporate business development and corporate innovation groups were not necessarily collaborating.”

“Everything we have listed under corporate venturing is ...nothing really structured...areas in which people have dabbled but not put a lot of effort into it.”

SQ5: What's Changing in Corporate Venturing?

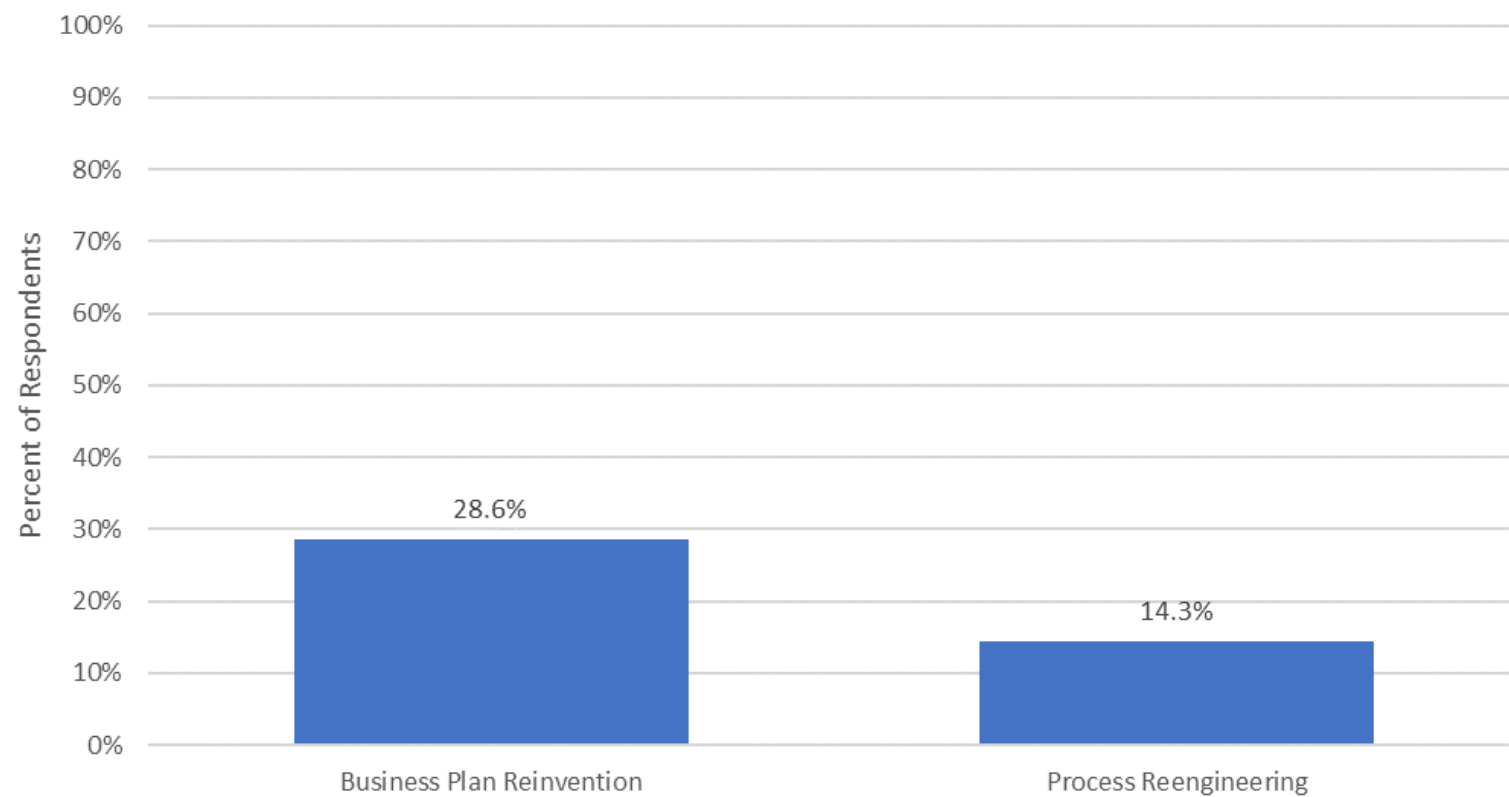
- Local BUs are getting more involved with universities.
- Organizations are taking another look at government funding.
- Corporate innovation does have R&D alliances and consortia.
- Corporate innovation uses crowd sourcing and open innovation.
- Use of Corporate Venture Capital.
- External partnering and open innovation.
- Some movement away at the corporate level from academia-based research toward applied research.

Corporate Venturing and Strategic Renewal

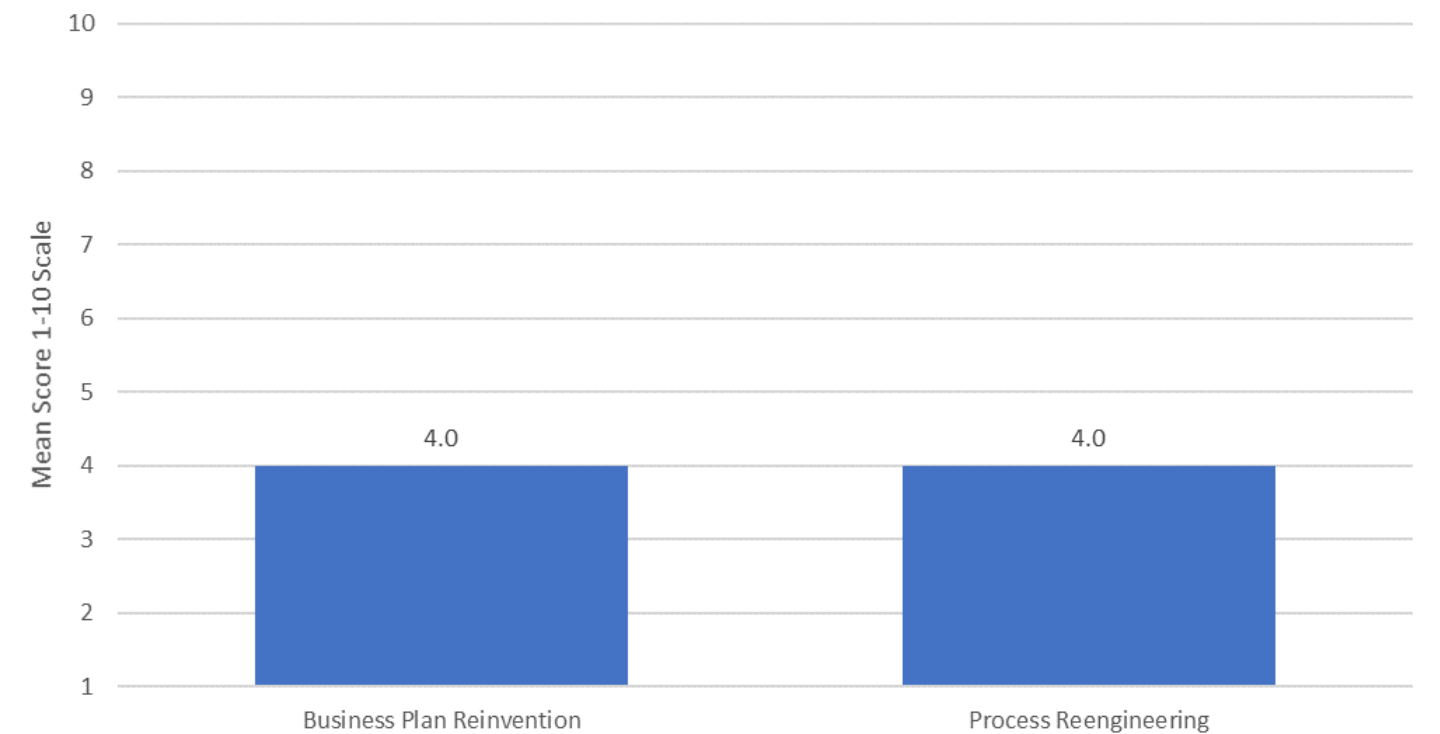


SQ5: Use and Effectiveness Strategic Renewal Activities

Use of Strategic Renewal Activities



Effectiveness of Strategic Renewal Activities



- Strategic Renewal Models, such as Business Plan Reinvention and Process Re-engineering aren't widely utilized, and as such aren't seen as necessarily effective.

n=7

Conclusion-Identified Challenges

- No clear definitions around core or transformational innovation.
- Siloing of activities and few opportunities for collaboration.
- Tech transfer. In the front end they come up with ideas, but you need buyers, and a lot of time. There's a gap between the front end and commercialization, and it's not a linear process. It's a touchy thing where each has its own goals and resources.
- M&A or reorganizations upend processes that might be working.
- Innovation ideas might not fit current business models or markets.
- Processes can create inertia.
- Rewards can be based on short-term return not long-term vision.

Conclusion-Current Efforts

- Innovation doesn't come from R&D and engineering, and it can come from anywhere. It could mean that it lives in a small echo system and not available to a wide area out there. It could be breakthrough. It can be small and large and live in every aspect of the organization.
- Corporate innovation is multifunctional. It's not just R&D and commercial. It could be IT. It could be legal. It's an ecosystem in and of itself, and a new business is part of that, but it isn't a stand-alone kind of thing, and it's everybody's job.
- The best thing is to give teams is clarity. They may be lost but you need to provide the tools and toolbox to help the get through it.
- Some organizations create Cross-BU R&D structures which support both the core and adjacent innovation.
- Others are working with innovation panels which have representation from all business divisions and the research division and are responsible for the functions to meet those unmet needs.
- Partnerships, where you go outside the organization and hire a smaller organization or fund a start up to do what you want. They can work on, and hopefully solve the problem, and then you can decide if you want to buy them.
- This was a pilot study and was designed to test the survey we developed in order to replicate it.

Future Research Efforts

1. Language of Transformational Innovation
2. Innovation Portfolio Management, as distinguished from product portfolio management
3. Internal Corporate Networks
4. Valuing Transformational Innovation
5. Corporate Loneliness and Belonging (Connectedness, DEI, ESG, Brand Loyalty)



Questions?

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