

Measuring the Business Value of Innovation: Survey Results

Henry Chesbrough¹, Faculty Director of the Garwood Center, UC Berkeley, and Maire Tecnimont Professor of Open Innovation, Luiss University

August 12, 2020

Executive Summary

Innovative organizations seek to measure the effectiveness and performance of their innovative activities. These measures help executives manage their innovations and ensure that the innovation work is closely connected to the strategy of the organization. These measures often provide the basis for incentive compensation for innovation managers as well.

This White Paper reports the results of the innovation activity measurements survey conducted by Professor Henry Chesbrough among members of the Berkeley Innovation Forum at the Garwood Center at UC Berkeley and the European Innovation Forum at Luiss University.

The first result is that there was no single methodology or Best Practice for measuring innovation across all of the 19 responding companies. Second, points out the percentage of sales from new products as the most commonly reported innovation metric (used by 6 of the 19 respondents). The third result highlights no agreement on what counts as an “innovation” across the respondents. Last, but not least financial metrics like ROI were frequently reported as innovation-related metrics.

Open Innovation thinking would suggest using additional (new) measures of tracking external participation and validation in projects. These would be particularly helpful in measuring the adjacent businesses (Horizon 2) and transformational businesses (Horizon 3) activities. As companies are not satisfied with their measures of innovation results, this suggests that there is a need for more work to address this.

Please reach out to Henry Chesbrough chesbrou@berkeley.edu or Solomon Darwin sdarwin@berkeley.edu if you would like to explore how these results might apply to your own organization.

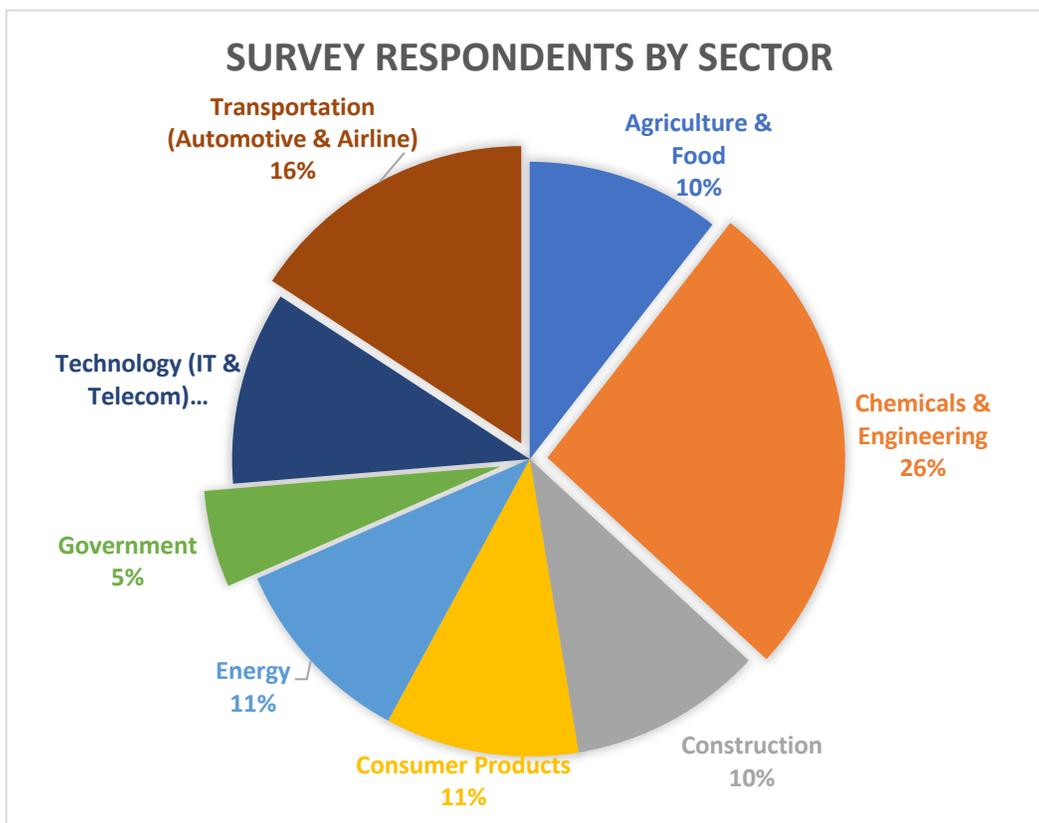
¹ Special thanks to Dr. Agnieszka Radziwon, Post-doctoral scholar at the Garwood Center at UC Berkeley, for her help in reviewing and producing this white paper.

Survey Participants

15 of the 32 members of the Berkeley Innovation Forum responded to the survey, with a response rate of 47%. This was considered a good response rate, due to the length of the survey conducted among elite thus busy respondents. 5 of the 16 European Innovation Forum members responded, with a 32% response rate. This lower rate was attributed to the start of the summer holidays (the survey was sent out in early July). One respondent was in both groups, hence the total responses received amounted to 19.

All respondents were promised confidentiality in their answers, as well as a copy of this report, as a thank you for their participation.

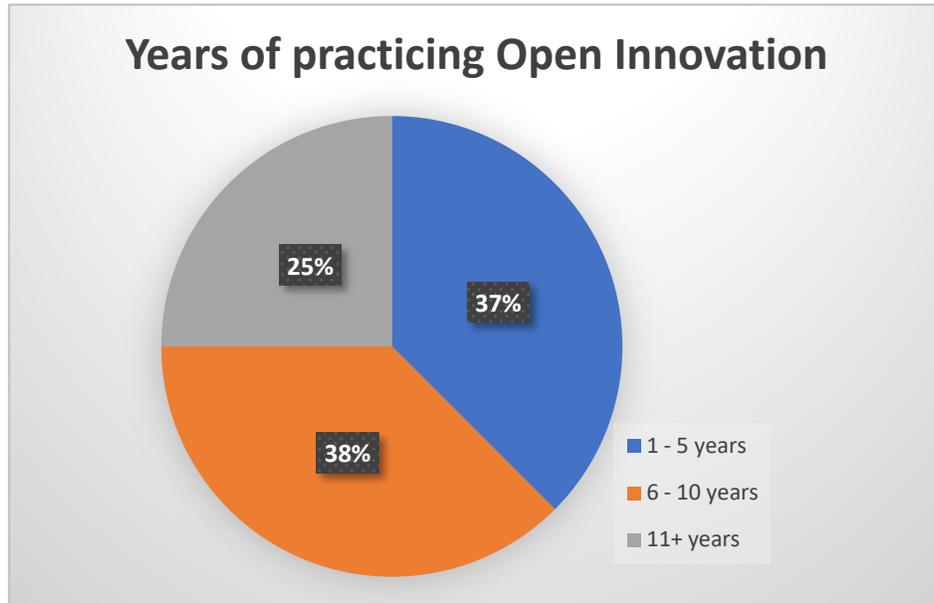
Reflecting on the diversity of the membership, responses were received from companies in 8 sectors outlined on the chart below.



Individual Survey Results

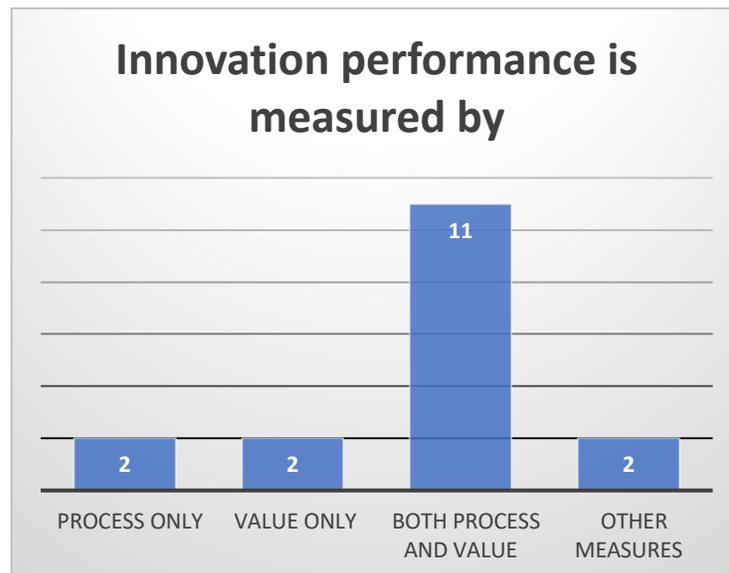
Do you practice Open Innovation? When did you start?

Implementing OI?	Freq.	Percent
No	3	15.79
Yes	16	84.21
Total	19	100.00

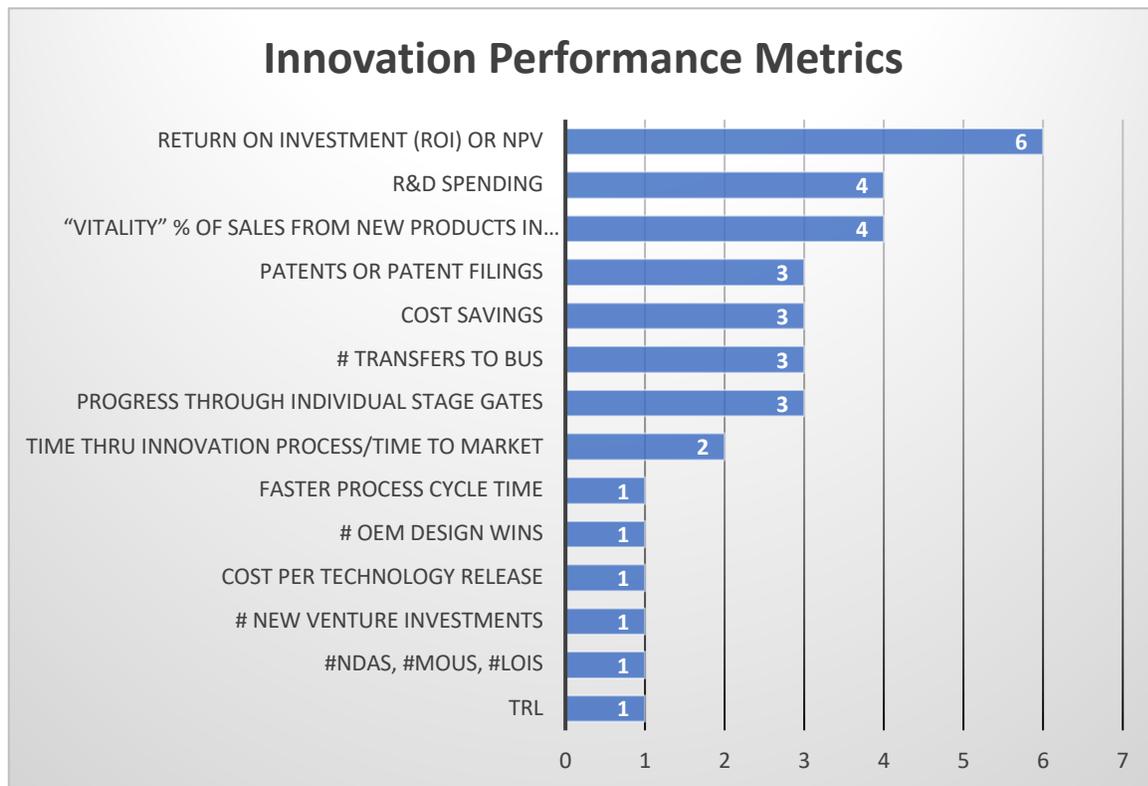


Do you measure your innovation performance? If so, how?

Measure OI Performance?	Freq.	Percent
No	5	26.32
Yes	14	73.68
Total	19	100.00



What metrics do you use to measure innovation performance (multiple answers possible)



What is your measured value for your innovation activities for 2019?

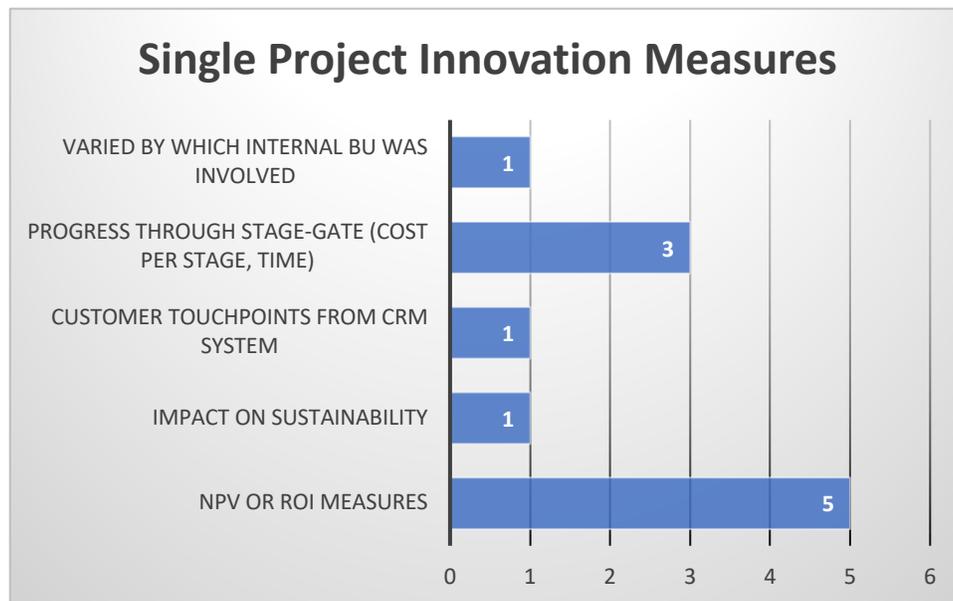
What is measured value for 2019?	Freq.
#actions, #projects, IDEA mgmt platf.	1
\$\$ amount	2
6 networking, 15 new oppys	1
R&D Spend vs Annual Sales	1
Vitality measure	1
new patents	2
new process, no data yet	1
no answer	6
not measured yet	1
value creation to customers and company	1
vitality measure	3

How do you decide whether an activity counts as an innovation?

- “If it helps our sustainability, cost, or impact”
- “If it provides a novel chemistry, market, or application, or biz model”
- New product, new service, new feature, new system
- “Does it solve a business problem?”
- Core/Adjacent/Transformational
 - all innov is outside Core
 - Innov inside core is part of org. culture
- If it’s in the R&D portfolio, it’s counted as innovation
- If it is “business as usual”, it is not counted as innovation

Measure innov returns for single project?	Freq.	Percent
N/A	3	15.79
No	6	31.58
Yes	10	52.63
Total	19	100.00

Do you measure innovation returns for a single project? If so, how?



What was the amount you spent on innovation in 2019?

- Range of amounts from \$150K to \$450M, median is \$10M
- 7 respondents did not answer

How satisfied are you with your method for measuring the business value of innovation?

- 1-7 scale
- 4.1 average rating
- 16 of 19 willing to talk further about this (this is also a sign of dissatisfaction)

Other topics to survey in the future?

- Digitalization
- AI
- Blockchain
- Diversity
- Sustainability
- Internal rejection of innovations
- Effectiveness of CVC
- How OI adds value
- Organizing for OI

Concluding Observations

Due to lack of a single methodology or Best Practice for measuring innovation across all of the 19 responding companies there are several lessons that can be learned from the way that companies are measuring innovation. These concern currently-used sales and financial measures, as well as open innovation-inspired new metrics.

The most common innovation performance measure was the “vitality” measure, namely the percentage of sales from new products that came to market in the recent past (usually three years, though this interval will be smaller for B2C and larger for B2B companies). This measure is useful because it outlines a clear business outcome, new sales. Many measures, such as the number of new patents, are measuring an input, or at best an intermediate outcome, rather than a final business outcome.

It is also quite common to construct financial measures of innovation performance, such as the return on investment (ROI) realized from the innovation spending. There is value to these measures as well, but they must be balanced with other measures. Financial metrics work best for Horizon 1 innovation activities, namely those in support of the current core business. Activities in adjacent businesses (Horizon 2) or transformational businesses (Horizon 3) inevitably suffer when exclusively financial measures are used.

Open innovation works differently in different companies. There are no Best Practices to measure its use that will apply across all sectors. This means that companies cannot simply benchmark others’ measures; instead, they must develop and track their own. As there is no consensus on what counts as an “innovation” across the respondents. The starting point would be to reach an agreement on what constitutes innovation and what does not.

In order to measure Horizon 2 and Horizon 3 activities, new metrics are needed. Open Innovation thinking suggests two kinds of measures. The first is, how many other external participants are collaborating within this innovation activity? The willingness of others to invest their time and resources alongside you is a useful signal of the potential value of the activity. A second measure is one of leverage: what percentage of the activity is funded by you, and what percentage is

funded by others? While companies might prefer to have complete control, it may be wiser for Horizon 2 and 3 projects to leverage external resources more, since the risks of failure are higher and the final result is more unclear.² The willingness of others to provide their own resources to the project is again a positive signal that they too see the business value of the activity, and are willing to bear some of its risks.

Finally, the measures used for innovation performance should support the overall company strategy. If the strategy is to use innovation as a key mechanism to improve environmental sustainability, for example, then the measures for innovation performance should explicitly include environmental outcomes, as well as financial ones.

² If one examines how startup companies are valued at early stages of their existence, there are no financial revenues or profits to measure. ROI is meaningless at this stage. Yet the VC industry has developed considerable sophistication in measuring the potential value of its portfolio companies. Established companies need to embrace such thinking for measuring Horizon 2 and 3 projects.