



How to Increase Innovation through Management and Measurement

IMA Research Foundation

About IMA®

IMA®, the association of accountants and financial professionals in business, is one of the largest and most respected associations focused exclusively on advancing the management accounting profession.

Globally, IMA supports the profession through research, the CMA® (Certified Management Accountant) program, continuing education, networking and advocacy of the highest ethical business practices. IMA has a global network of more than 75,000 members in 140 countries and 300 professional and student chapters. Headquartered in Montvale, N.J., USA, IMA provides localized services through its four global regions: The Americas, Asia/Pacific, Europe, and Middle East/Africa. For more information about IMA, please visit www.imanet.org.



About the Author

Kip Krumwiede, CMA, CPA, Ph.D., is the director of research for IMA® (Institute of Management Accountants). Kip received his Masters of Accounting degree from Brigham Young University and his Ph.D. from the University Of Tennessee. Prior to joining IMA, Kip spent 18 years as a management accounting professor at universities, including Brigham Young University, Boise State University, and the University of Richmond, and worked for two Fortune 500 companies in a variety of positions. In addition, Kip has published more than 20 articles in both practice and academic journals. He can be reached at (201) 474-1732 or kkrumwiede@imanet.org.



© January 2016 Institute of Management Accountants 10 Paragon Drive, Suite 1 Montvale, NJ, 07645 www.imanet.org/thought_leadership

IMA Research

IMA Research Foundation

The IMA Research Foundation funds timely research in accounting and financial management subjects.

Research Topical Area

Operations, Process Management & Innovation

Research focusing on best practices in finance and accounting processes used by organization to meet the needs of their customers through the delivery of goods or services.

How to Increase Innovation through Management and Measurement

Table of Contents

Introduction	5
Executive Summary	6
Key Findings	
Conclusions	
Appendix 1	14
Appendix 2	15



Introduction

Innovation is a hot topic in the business world. There has been a lot written about the importance of innovation and role of the CFO in creating a culture that encourages innovation rather than squelching it. What does not get discussed much is how to increase innovation through management and measurement. As the old saying goes, "You get what you measure." So if you don't measure innovation, you don't get it! Yet nearly every leader, customer, client, or other constituent demands or expects the companies they work with to be innovative.

There is a strong need for more innovation governance, including the leadership, measurement, tracking, and CFO competency needed to improve the level of innovation in organizations. In an IMA® (Institute of Management Accountants) research survey of 271 accounting and finance leaders around the world, more than half of the respondents said their firms don't measure innovation at all. Yet almost all felt their organizations should measure innovation success.² Furthermore, three-fourths said their organizations must significantly evolve or reinvent their business value propositions at least every five years. For these reasons and others, most organizations need to make innovation governance a bigger part of their strategic management. The CFO is well positioned to lead and support this activity.

This report presents the survey results and takeaways on how accounting and finance leaders can take an active role to increase innovation in their organizations. It also highlights ways to build a supportive culture, implement processes, and measure activities and outcomes that will help continually generate new ideas and create new value propositions that lead to increased profitability.

¹ See Mark L. Frigo, "Reverse Innovation: A New Pathway for Growth," *Strategic Finance*, May 2013, pp. 23-25; C. Busco, E. Giovannoni, and M. P. Maraghini, "Control vs. Creativity," *Strategic Finance*, August 2012, pp. 29-36; Mark L. Frigo,

[&]quot;How CFOs Can Drive Innovation," Strategic Finance, July 2010, pp. 19-21, 61; Joanna Barsh and Marla M Capozzi,

[&]quot;Managing Innovation Risk," *Strategic Finance*, Apr 2008, pp. 13-16; Andrew Spanyi, Katalin Eibel-Spanyi, "Nurturing Innovation," *Strategic Finance*, August 2004, pp. 25-29; and James P. Andrew and Harold L. Sirkin, "Making Innovation Pay, *Strategic Finance*, July 2004, pp.7-8.

² In June and July 2015, IMA received a total of 271 survey responses from professional members with a job titles including CFOs, Corporate officers, Controllers, Directors, and accounting managers in the US, Canada, Europe, Middle East, Africa, and Asia/Pacific. See the Appendix for a summary of respondent demographic data.



Executive Summary

- Senior finance and accounting leaders are increasingly being asked to lead, support, or measure innovation efforts in their organizations. The more importance placed on innovation in the organization, the more comfortable the accounting and finance leaders will feel leading innovation efforts.
- The great majority of respondents said that innovation is a key focus in their organization's
 overall strategy, that their organization should measure and govern innovation regularly,
 and that it must significantly evolve or reinvent its business value proposition at least every
 five years. In spite of all this, more than half of the respondents' firms do not formally
 measure innovation success or value.
- Innovation governance is an area where CFOs can add value. Opportunities include
 making innovation part of strategic planning and budgeting, establishing processes for
 generating and pursuing innovation ideas, developing leading and lagging measures for
 innovation success, and ensuring that innovation governance is a strategic priority for
 executive management.
- When innovation is critical to success, it's essential that the company culture is focused on it. Ways to "galvanize" the culture toward innovation include training and education to achieve cultural readiness, developing innovation language, establishing leadership responsibilities, and fostering an excitement to innovate.
- Enabling innovation governance includes implementing multiple innovation channels to solicit, capture, provide funding for, evaluate, execute, and report on innovation projects and ideas. Suppliers, customers, employees (including but not limited to those directly assigned to create new ideas), competitors, consultants, crowdsourcing, and internal competitions are all potential sources new ideas.
- Management control systems can support innovation through performance goals, funding in the budget and capital plan, operational reviews, and even in-house tournaments or competitions.
- For those firms that do measure innovation success or value, the most common measures
 that firms use to gauge innovation success or value are the number of new products,
 services, and/or patents, and the percentage of sales revenue from new products.
 - o The Innovation Value Score® (IVS) is a set of metrics in a balanced scorecard measurement framework that calculate innovation drivers of achievement and comparability plus actionable reporting for improvement targets. Organizations that may benefit most from innovation governance frameworks like the IVS use innovation measures in performance reviews, have accounting and finance leaders comfortable with providing innovation governance leadership, and place greater emphasis on and devote resources to "breakthrough" innovation ideas.

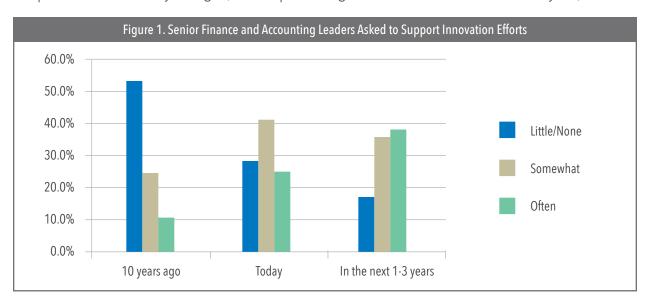
6



Key Findings

Take an Active Role

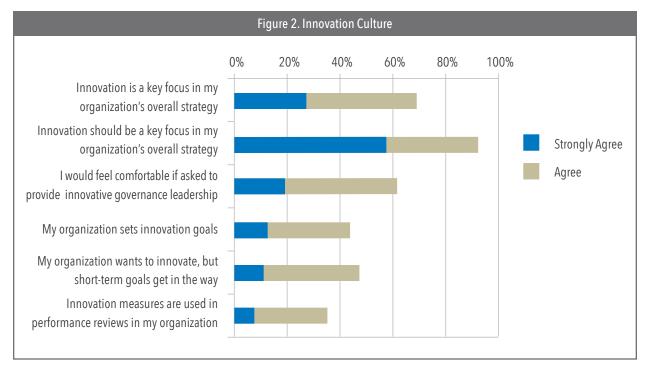
Senior finance and accounting leaders are increasingly being asked to lead, support, or measure innovation efforts in their organizations. As depicted in Figure 1, the percentage of those responding who are being asked to support innovation efforts at least somewhat has increased to 70% today compared to 40% from 10 years ago. (This is expected to grow to 81% in the next one to three years).



Traditionally, executives have lacked confidence in their innovation-related decisions. They relied on consensus and the leveraging of data that can be extremely difficult to compile. The survey asked the senior finance and accounting leaders how comfortable and knowledgeable they would feel if asked to provide innovation governance leadership (i.e., support, leadership, direction). Overall, 19% of the respondents strongly agreed (43% agreed) they would feel comfortable and knowledgeable in providing innovation governance leadership (see Figure 2). The percentage of accounting and finance leaders agreeing they would feel comfortable about helping lead innovation efforts increases with the importance placed on innovation in the organization:

Senior finance and accounting leaders are increasingly being asked to help lead, support, or measure innovation efforts in their organizations.

- In firms where senior finance and accounting leaders are often being asked to help support innovation efforts, 29% strongly agreed and 42% agreed.
- In firms where innovation is a key focus in the firm's strategy, 31% strongly agreed and 42% agreed.
- In firms where innovation measures are used in performance reviews, 45% strongly agreed and 25% agreed.



CFOs are in an excellent position to help lead innovation governance in their organizations. They can help make innovation part of the planning and budgeting process, establish processes for pursuing innovation initiatives, develop ways to track and measure innovation activities and success, and keep innovation governance on the agenda for executive management to maintain commitment staffing and funding innovation generation. In an article for *Strategic Finance*, innovation expert Patrick Stroh, former chief strategy and innovation officer at UnitedHealthcare, wrote: "Be analytical and dig into someone's idea, not to say 'No' but to find a way to get to 'Yes.'"³ On the flip side, it's important to keep innovators within relevant boundaries so they remain focused on the ultimate goal of developing an idea into a profitable value proposition.

Develop an Innovation Culture

Stroh says the first step toward building an innovation-oriented culture is "galvanizing" the organization toward innovation success from the top down. Building this kind of environment "includes ensuring your culture is conducive to innovating (such as giving permission to fail) and having buy-in from executive leadership as well as your employees."⁴

Two-thirds of respondents agreed that innovation is a key focus in their organization's overall strategy, and 92% agreed that innovation *should* be a key focus in their organization's overall strategy. Yet, as illustrated in Figure 2, only 44% said their organization sets innovation goals, 47% said their organization generally wants to innovate in spite of short-term financial risks and goals, and only 35% said that innovation measures are used in their performance reviews.

³ Patrick J. Stroh, "Advancing Innovation: What's Your Role?" Strategic Finance, September 2015, pp. 24-31.

⁴ Stroh, September 2015, p. 28.



Those firms that do use innovation measures tend to use very simple metrics. For instance, a plant controller at a large food producer said one of five company-wide goals involved a specific amount of revenues from products developed since 2000.

Clearly, the innovation culture in the majority of organizations is increasing, although there is still a long way to go. Given that over 90% of the senior finance and accounting leaders feel that innovation should be a key focus in their organization, it's likely that the climate for innovation will continue to improve. If innovation should be a key focus in your organization but is not, take steps to "galvanize" the culture for innovation success by training and educating the organization in areas such as cultural readiness, common innovation language, clear leadership expectations, and an overall excitement to innovate.

Enable Innovation Governance

After galvanizing your organization to create an innovative environment, it's time to enable the organization to do so. Enabling refers to how you get employees and other stakeholders to innovate. It includes implementing multiple innovation channels to solicit, capture, provide funding for, evaluate, execute, and report on innovation projects and ideas. A company needs multiple innovation channels. Not only is each industry and business different, but, there are differences within the organization in terms of leaders, employees, levels of business maturity, and challenges. Potential channels include key suppliers, customers, general employee suggestions, key employees charged with innovation and idea creation, competitors, external agencies, consultants, institutions, crowdsourcing, and business challenge events. Stroh says the key is to find channels that will work within your environment and culture.

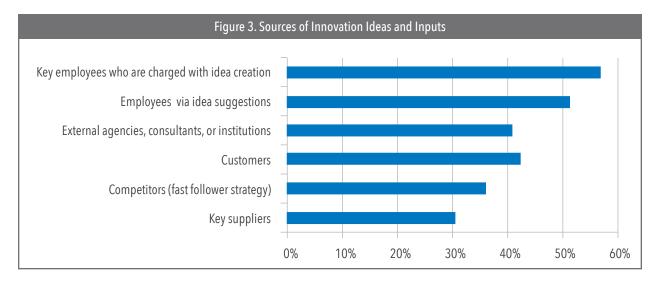
When asked where innovation ideas and inputs generally come from, the top two channels identified by survey respondents were key employees who are charged with idea creation (57%) and employees via idea suggestions (52%). Figure 3 shows that ideas also frequently come

[CFOs] can help make innovation part of the planning and budgeting process, establish processes for pursuing innovation initiatives, develop ways to track and measure innovation activities and success, and keep innovation governance on the agenda for executive management.

from external agencies, consultants, or institutions (41%), customers (43%), and competitors (36%).

There's an opportunity here for many organizations to increase their innovation channels and generate more ideas. If only 52% get ideas from employees, what about the other 48% who do not? Also notice that 57% of the companies aren't getting ideas from customers. Consider tapping more channels like employees, customers, and key supplier partners for new ideas.

Besides idea creation, enabling innovation governance requires other cross-functional practices and processes to structure, organize, and encourage it. There should be innovation goals in



the strategic plan, money set aside in the budget and capital plan for innovation development, a system for identifying and evaluating risks for new product ideas. And all of this should be a part of operational reviews.

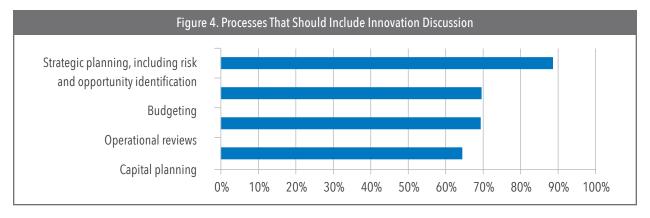
Some companies use in-house tournaments or competitions to encourage and reward innovation. In many cases, it is difficult to measure performance directly. With tournaments, rewards are based on differences in relative performance rather than absolute performance. Examples of "tournament controls" include ancient Roman gladiators, managerial pay, and sporting events. According to tournament theory, a rank-order tournament is an efficient way to determine and reward performance in these situations.⁵

For example, Maryna Dziubynska, a controller for an organization that develops scientific project ideas, said their projects go through a competition to get financing. Her company doesn't select the winning projects, but the external funding agencies only fund scientific work that is deemed innovative. She said her organization was originally intended to exist for only a few years, but it has been successful for 20 years now "because of the quality and innovation of the research projects that are funded through it." The researchers are evaluated primarily based on new projects that are funded by external parties. Other measures include the number of the projects, amounts of grants, quantity of patents and publications resulting

The current state of innovation governance can generally be summarized in one word: cautious.

from scientific projects, and the likelihood of future financing from private companies as a result of the commercialization of the projects. A key leading measure is the number of contracts between the scientific institution and private companies for commercialization of innovative products developed from their projects.

⁵ See Michael Melton and Thomas S. Zorn, "An empirical test of tournament theory: The Senior PGA Tour," *Managerial Finance*, vol. 26, no. 7, 2000, pp. 16-32.



The current state of innovation governance can generally be summarized in one word: cautious. When asked which processes should include innovation discussion in their organization, respondents cited strategic planning, including risk and opportunity identification most often (88%). As shown in Figure 4, respondents also frequently cited budgeting, operational reviews, and capital planning. To gauge how the senior finance and accounting leaders would allocate their innovation resources and time if they had to, they were given three innovation categories:

- Incremental: Continuous improvement efforts driving efficiencies and improvements.
- Distinctive: Innovation projects that will add to your competitive advantage and value proposition (e.g., new products, offerings, etc.).
- Breakthrough: New markets, big bets on new products, investments, etc.

As shown in Table 1, the most resources would go toward incremental continuous improvement efforts (median 40%), followed by distinctive innovation projects (median 30%), and breakthrough projects in new markets (median 20%). These results suggest that accounting and finance leaders would tend to put the most resources toward "safer" innovation projects.

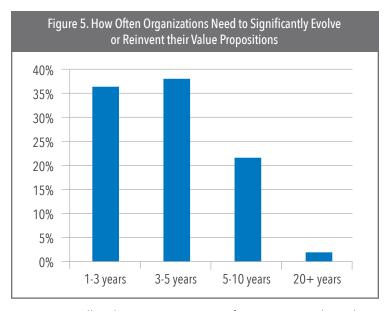
Measure Innovation Success

You get what you measure. Find a way to measure innovation value created and innovation activities on a regular basis. This allows you to compare progress internally or within an industry and to align innovation value creation with business strategies. Respondents were asked where their organizations need the most innovation improvement and support—galvanizing, enabling, or measurement. All three were chosen

Table 1. How Would You Split Your Innovation Resources and Time?

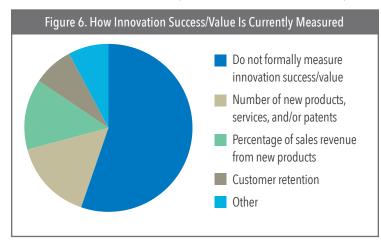
	Range	Mean	Median
Incremental: Continuous improvement efforts driving efficiencies and improvements.	0-100%	42.7%	40%
Distinctive: Innovation projects that will add to your competitive advantage and value proposition (e.g., new products, offerings, etc.).	0-85%	33.6%	30%
Breakthrough: New markets, big bets on new products, investments, etc.	0-80%	23.7%	20%

by more than 59% of respondents. These results show that there is a great need for innovation training, motivation, support, and measurement practices in most organizations.



The need for innovation in today's companies is great. As illustrated in Figure 5, 75% of respondents report that their organizations need to significantly evolve or reinvent their business value propositions (i.e., create significantly new or different products, services, operational models) at least every five years. Considering that more than half the senior finance and accounting leaders' firms do not measure innovation success at all, it's no wonder that 92% feel their organization should be measuring it.

Historically, objective measures of invention, such as the number of patents, have been commonly used as a measure of innovation. But this type of measure doesn't apply evenly across industries and is a very limited lagging measure of innovation. As illustrated in Figure 6, well over half (57%) of the respondents' firms in our study don't formally measure innovation success or value. For those firms that do, the following shows the percent that use different types of measures:



- Number of new products, services, and/or patents (16%)
- Percentage of sales revenue from new products (14%)
- Customer retention (8%)
- Other (4%)

INNOVATION VALUE SCORE®

An example of an innovation governance and measurement framework is the Innovation Value Score (IVS). The IVS is intended to create a

measurement and management system for innovation and to identify action steps that can be taken to drive more innovation value based on a company's strategic intent. The IVS is a set of metrics that together calculate innovation drivers of achievement and comparability plus actionable reporting for improvement targets.

Essentially, it is a balanced scorecard measurement framework and associated technology platform to capture, store, and report on innovation data and benchmarks. Firms enter data for a chosen subset of 24 potential measures in the IVS framework and get overall scores in four categorical areas of innovation: customer value, growth and advancement, operational excellence and people, and financial. The scores



can be benchmarked with desired demographic groups (e.g., industry, strategy, size, etc.), but company names aren't disclosed.⁶

Based on our survey, organizations that may benefit most from innovation governance frameworks like the IVS:

- Use innovation measures in performance reviews,
- Have accounting and finance leaders comfortable with providing innovation governance leadership, and
- Place greater emphasis on and devote resources to "breakthrough" innovation ideas.

Conclusions

Two-thirds of senior finance and accounting leaders believe that innovation is a key focus in their organization's strategy. While an overwhelming majority feel their organization *should* measure and govern innovation regularly as a key business process to sustain growth and value, more than half of the respondents' firms don't. There appears to be a growing need for innovation governance, which encompasses the leadership, measurement, tracking, and competency needed to improve the level of innovation in organizations. With leadership, processes, and measures in place, innovation can become part of company culture and strategic performance management.

CFOs are in an excellent position to lead and support innovation governance in their organizations. They can help make innovation part of the planning and budgeting process, establish processes for pursuing innovation initiatives, develop ways to track and measure innovation activities and success, and keep innovation governance on the agenda for executive management in order to maintain a commitment to staffing and funding innovation generation. To compete in today's world, organizations need to reinvent themselves more frequently than ever before. They simply must make innovation governance part of their overall governance practices. For those concerned with the risks involved with innovation, it is often the lack of innovation and evolution that poses the greatest risk to companies today.

⁶ For more on the IVS and innovation governance and measurement, see Patrick Stroh, Advancing Innovation: Galvanizing, Enabling, & Measuring for Innovation Value!, IMA, 2015."



Appendix 1: Respondent Demographics

In June and July 2015, IMA sent a survey to IMA professional members identified with the following job titles: CFOs, corporate officers, controllers, directors, and accounting managers in the United States, Canada, Europe, Middle East, Africa, and Asia/Pacific. A total of 271 responses were received. The following tables provide some demographic characteristics of the respondents.

Table 2. Job Titles

	No.	%
Controller, financial controller, or comptroller	66	24.4%
Finance or accounting manager	57	21.0%
CFO	50	18.5%
Finance director	28	10.3%
Senior Accountants	25	9.2%
VP	21	7.7%
Owner/partner	13	4.8%
Executive officer	7	2.6%
C00	4	1.5%
Total	271	100.0%

Table 3. Industries

	No.	%
Manufacturing: Aerospace, Automotive, all other Manufacturing	80	29.5%
Business Services: Advertising, Banking, Consulting, Financial Services, Legal, Publishing	46	17.0%
Institutions: Government, Education, Not-for-Profit	32	11.8%
Retail: Apparel, Consumer Packaged Goods (CPG), Wholesale/Retail	26	9.6%
Technology: Biotech, Computer, Software, Technology, Telecom	18	6.6%
Healthcare: Facilities, Payers, Providers, Supporting Products and Services	12	4.4%
Other	55	20.3%
Not answered	2	0.7%
Total	271	100.0%

Table 4. Locations

	No.	%
United States	138	50.9%
Middle East	65	24.0%
Asia/Pacific	45	16.6%
Europe	13	4.8%
Africa	6	2.2%
Canada	3	1.1%
Not answered	1	0.4%
Total	271	100.0%

Table 5. Revenues (U.S. dollars)

	No.	%
\$0 – \$5 million	47	17.5%
\$5 million – \$100 million	104	38.8%
\$100 million – \$1 billion	52	19.4%
\$1 billion – \$5 billion	28	10.4%
\$5 billion+	37	13.8%
Total	268	100.0%



Appendix II: Raw Response Data

1. Please indicate your level of agreement with the following statements:

	SA	А	N	D	SD	Blank	Total
a. Innovation <u>is</u> a key focus in my organization's overall strategy.	26.6%	40.2%	22.9%	9.2%	1.1%	0.0%	100.0%
b. Innovation should be a key focus in my organization's overall strategy.	57.2%	34.7%	6.3%	0.7%	1.1%	0.0%	100.0%
c. If I were asked to provide innovation governance leadership (i.e., support, leadership, direction), I would feel comfortable and knowledgeable in doing so.	19.2%	42.8%	26.6%	10.0%	1.1%	0.4%	100.0%
d. My organization sets innovation goals.	12.9%	30.6%	27.7%	24.0%	3.0%	1.8%	100.0%
e. My organization generally wants to innovate, but short-term financial risks and goals get in the way.	11.4%	35.8%	25.1%	25.1%	2.2%	0.4%	100.0%
f. Innovation measures are used in performance reviews in my organization.	7.4%	27.3%	24.4%	33.6%	5.9%	1.5%	100.0%

2. Where do you need the most innovation improvement and support?

	No.	%
a. Galvanizing: Training and educating the organization for innovation success (e.g., cultural readiness, common innovation language, clear leadership expectations, and an overall excitement to innovate).	36	13.3%
b. Enabling: Implementing multiple innovation channels to solicit, capture, provide funding for, evaluate, execute, and report on innovation projects/ideas.	38	14.0%
c. Measurement: Measuring innovation value created on a regular basis to compare progress internally or within an industry and to identify alignment of innovation value creation to business strategies.	28	10.3%
d. All of the above.	161	59.4%
No Answer	8	3.0%
Total	271	100.0%

3. Where do you currently (or would like to) get innovation ideas and inputs from? (Check all that apply.)

	Currently	Would like to	Blank	Total
a. Employees via idea suggestions.	52.0%	43.2%	4.8%	100.0%
b. Key employees who are charged with innovation and idea creation.	56.5%	39.5%	4.1%	100.0%
c. Key suppliers.	30.6%	55.0%	14.4%	100.0%
d. Customers.	42.8%	50.2%	7.0%	100.0%
e. Competitors (fast follower strategy).	35.8%	47.2%	17.0%	100.0%
f. External agencies/ consultants/institutions .	41.3%	46.9%	11.8%	100.0%



4. How do you currently measure innovation success/value?

	No.	%
a. We don't formally measure innovation success/value.	153	56.5%
b. Number of new products, services, and/or patents.	43	15.9%
c. Percentage of sales revenue from new products.	39	14.4%
d. Customer retention.	22	8.1%
Other	12	4.4%
Blank	2	0.7%
Total	271	100.0%

5. How often are your senior finance and accounting leaders asked to help lead, support, or measure innovation efforts?

	Little/None	Somewhat	Often	Blank	Total
a. 10 years ago	53.1%	24.0%	11.1%	11.8%	100.0%
b.Today	28.4%	41.3%	25.5%	4.8%	100.0%
c. In the next 1-3 years	17.3%	35.8%	38.0%	8.9%	100.0%

6. Which processes do you think should include innovation discussion in your organization? (Select all that apply.)

	Selected	%
a. Budgeting.	188	69.4%
b. Capital planning.	174	64.2%
c. Operational reviews.	187	69.0%
d. Strategic planning, including risk and opportunity identification.	237	87.5%

7. Which of the following dimensions is/are very important when benchmarking your organization's results with other companies and/or best-in-class metrics? (Select all that apply.)

	Selected	%
a. Company size.	153	56.5%
b. Geographical region (U.S., Asia, Europe, etc.).	108	39.9%
c. Industry.	201	74.2%
d. Company type (private, public, etc.).	99	36.5%
e. Type of strategy (low cost leader, product leader, custom solution provider, etc.).	156	57.6%

Even though almost all felt their organization should measure innovation success, over half said their firm does not measure it at all.



8. If you had to split your innovation resources and time among the following three categories, how would you allocate resources at your company? (Allocate 100% between the three.)

	Min.	Max.	Mean	Medium	Std. Deviation
a. Incremental: Continuous improvement efforts driving efficiencies and improvements.	0	100	41.0	40	21.0%
b. <i>Distinctive:</i> Innovation projects that will add to your competitive advantage and value proposition (e.g., new products, offerings, etc.).	0	85	32.2	30	15.4%
c. Breakthrough: New markets, big bets on new products, investments, etc.	0	80	22.8	20	15.1%

9. How often would you say that your organization needs to significantly evolve or reinvent its business value proposition (i.e., create significantly new or different products, services, operational models)?

	No.	%
a. 1-3 years	100	36.9%
b. 3-5 years	103	38.0%
c. 5-10 years	51	18.8%
d. 20+ years	17	6.3%
Total	271	100.0%

10. Do you think that your organization should measure and govern innovation regularly as a key business process to sustain growth and value?

	No.	%
a. Yes	250	92.3%
b. No	20	7.4%
Blank	1	0.4%
Total	271	100.0%