# Generational Differences in R&D Leadership Expectations

**3-Hour ROR Report out to Meeting Participants**
**IRI 75th Anniversary, Diamond Jubilee**
**May 21 – 23, 2013**

The first ever Industrial Research Institute 3-hour Research on Research project (ROR) was completed at the Diamond Jubilee Annual Meeting in Washington, DC in May 2013. The purpose of this ROR was to identify the differences in leadership expectations that exist between established leaders and emerging leaders. The specific dimension of leadership investigated was the perceived skillset necessary for leading technical teams and leading a research and development organization in 2028.

The purpose of this gap analysis was to bring to light any differences in expectations with regard to leadership competencies and philosophies across generations. This report out contains the results of this study, and is meant to be used as a conversation starter between established and emerging leaders. Leaders can discuss these findings with their supervisors and direct reports and identify how these differences could potentially manifest themselves in their own careers and companies. Our expectation is that these conversations will enable established and emerging leaders to better understand each other's visions, align those visions and expectations, engage in more fruitful professional development activities, and better position their R&D organizations for leadership transitions.

For the purpose of this study, established leaders were defined as those who reported that they would be retired or semi-retired fifteen years from today, in 2028. Those leaders who expected to be employed full-time in a senior leadership role (technical or managerial) in 2028 are considered to be emerging leaders. The lack of participants under age 40 precluded the exploration of true generational differences (e.g., Boomers vs. Gen X vs. Gen Y, etc.).

## ROR Participants

The goal of a 3-hour ROR is to scratch the surface of a complex topic in an attempt to gain modest value from the minimal effort expended. The opinions of over one hundred people were captured in this study: a pre-meeting survey garnered 113 usable responses, and the two live 90-minute sessions drew from the largest attendance in IRI history for an ROR event, and had 39 and 44 participants, respectively. These live-session participants represented over 50 unique companies, and consisted of a balanced mix of established and emerging leaders.

| Session Number | Attendees | Females | Emerging Leaders |
|---|---|---|---|
| 1 | 39 | 9 | 19 |
| 2 | 44 | 13 | 20 |

| Group | n | Average Age | Mean Industry Tenure | Mean Org. Tenure | With PhD | With MBA | Women |
|---|---|---|---|---|---|---|---|
| Emerging Leaders | 40 | 45 yrs | 16 yrs | 12 yrs | 55% | 23% | 17% |
| Established Leaders | 73 | 56 yrs | 25 yrs | 20 yrs | 53% | 19% | 24% |
| Entire Sample | 113 | 53 yrs | 21 yrs | 16 yrs | 53% | 21% | 21% |

## Organizational Leadership

The areas of technical, managerial, and corporate leadership comprised the broad topic of organizational leadership. Established and emerging leaders formed separate groups and were asked to answer the following three questions, first as their group would respond, and then as they believe the other group would respond.

1. *Technical: What is your group's (other group's) criteria for advancement/funding of early-stage R&D?*
2. *Managerial: How does your group (the other group) handle employee development?*
3. *Corporate: What does your group (the other group) believe is the role/purpose of an R&D organization?*

*Technical:* Emerging leaders self-reported that they focus on the strategic fit of technology and earnings potential, while established leaders self-reported that they focus on strategic fit, meeting unmet customer needs, and innovativeness of the technology. Emerging leaders reported that they believe established leaders are risk-averse and seek mostly incremental technologies that can rapidly be brought to market – all of which was

**ROR Project Leaders**
Sam Deutsch, *ExxonMobil*
Christopher Wieczorek, *FM Global*
Dawn Mason, *Eastman Chemical*
Corinne Post, *Lehigh University* (SME)
Alan Fusfeld, *The Fusfeld Group* (SME)

contrary to what established leaders reported. Established leaders reported that they believe emerging leaders desire to advance pet projects and those that lead to personal advancement and global/social impact. None of these perspectives were reflected in the comments of the participating emerging leaders.

*Managerial:* Emerging leaders self-reported that they prefer developing employees via rotations, formalized training (internal and university), and formal feedback. Established leaders self-reported that they prefer developing employees via informal mentoring and formal internal training. They focus their efforts more on high potentials and have a "sink or swim" philosophy for others. There was no gap between the established leaders' responses and the way emerging leaders believe established leaders would respond, suggesting that emerging leaders understand well current leader development methods. Established leaders reported that they believe emerging leaders are self-promoters and want everything very fast, including training, job rotation, and career advancement. It should be noted that the established leaders did not answer the question of "how do emerging leaders develop employees?" but instead answered "how do emerging leaders want to be developed?" There was no mention of these desires by emerging leaders at this session.

*Corporate:* Emerging leaders self-reported that an R&D organization's role is to create value and be a key partner to other organizations for maintaining competitiveness and business continuity. One group of emerging leaders said that R&D was the "inspirational/dreaming function." Established leaders reported that R&D's role is to innovate, create differentiated offerings, drive earnings, and act as an insurance policy or early warning system for the company. There was not enough data to discern what emerging leaders believe established leaders consider to be the primary roles of an R&D organization. However, established leaders reported that emerging leaders see the R&D organization as a platform for personal growth, global betterment, and as a vehicle to advance their own ideas (rather than focus on business need). This is contrary to what was reported by emerging leaders.

**Project Team Leadership/Management**

The research team also explored the tactical leadership styles that are most common for leading technical project teams. Vignettes describing hypothetical scenarios and leaders' actions were distributed to IRI members via an online survey prior to the Jubilee. Participants were asked to rate on a seven-point scale the potential for leader promotion, leader effectiveness, team effectiveness, and collaborative learning in each scenario. The first vignette was focused on how a leader led his/her team through an open innovation process. In one survey, the leader used a *transformational leadership* style, while in another survey with the same vignette the leader used a *shared leadership* style. The same was done with a "change of plans" vignette: one leader used a *directive leadership* style and the other used a *relational leadership* style to respond to redirecting research project focus after a "sure thing" failed.

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|---|
| ***Transformational Leadership:*** Leader shares his/her vision and is driven by, and is dedicated to, ideals |
| ***Shared Leadership:*** Members of the team spend time discussing team vision, and share their drive and dedication towards higher ideals |
| ***Directive Leadership:*** Leader establishes performance goals and gives directions on how to get work done |
| ***Relational Leadership:*** Leader encourages collaboration, a trustful work environment, and open communication |

*Transformational vs. Shared Leadership:* Both the established and emerging leader groups rated transformational leaders as slightly less promotable and less effective compared to leaders that exhibit shared leadership. It was also found that both groups saw higher potential for team effectiveness under shared leadership compared to transformational leadership. This was more pronounced for established leaders than for emerging leaders. An established leader at the live-session commented that this scenario suggests those who promote are more impressed when things go right, but in real life, people are more impressed with good leadership after things go wrong. This sentiment may account for the ambivalence to promotability that was observed for this data set. Another established leader commented that established leaders choose shared leadership because they know it leads to better results, especially in an R&D setting. This leader further opined that emerging leaders choose shared leadership because emerging leaders want to contribute to the vision as opposed to having someone else's vision imposed on them.

*Directive vs. Relational Leadership:* Both established and emerging leaders distinctly see the relational leadership style as more beneficial to team effectiveness and collaborative learning compared with the directive style, but only the established leaders reported with certainty that the relational style is more promotable. In other words, while emerging

leaders are sure that the relational style leads to better team outcomes, there is less certainty whether or not this same style will lead to their promotion. An established leader attending the live session responded to this observation by saying, "the importance of using a relational leadership style will become clearer to emerging leaders with experience." Another established leader replied by saying that emerging leaders likely are more involved in the day-to-day, tactical aspects of the business rather than the strategic activities taken on by more of the established leaders, suggesting that the closer a leader is to R&D operations, the more likely that leader will be to use a directive style. An emerging leader commented, "Perhaps the established leaders forgot how they got to where they are."

The discussion at this session was dominated by the contributions of established leaders despite the fact that approximately half of the participants in the room associated themselves with the emerging leader group. The tenor in the room could be characterized as a combination of irritated skepticism on the part of some established leaders and muted frustration on the part of emerging leaders (many emerging leaders approached the co-chairs after the meeting and conveyed this sentiment). Established leaders made comments such as "emerging leaders need to realize that they don't know everything - don't be afraid to talk to someone else." At no point was it voiced that established leaders may have something to gain from emerging leaders. On the topic of leadership vs. management, an established leader commented that "leadership is not a team sport – the leader points in a direction, and the manager executes that direction." With regard to promotability, established leaders said that promotion is not based on one success – it is based on sustained performance in multiple functions, as well as how someone performs after experiencing a failure.

## Closing

The project team would like to thank the participants of this ROR for their insights, as well as the ROR leadership team for allowing us to explore this new format for creating a work product that is of immediate value to the IRI Membership. In this regard, the team has proposed some questions that can help leaders take action based on these findings. We encourage our industry peers to consider who they can share this information with in order to start a meaningful discussion about leader development.

1. Which findings discussed in this report are consistent with your experiences? Which are not?

2. Can you or a colleague use your own experiences to reconcile the differences in perspectives between the established and emerging leaders sampled in this study?

3. What can *you* do with these findings to better develop the leadership skills and shape the leadership philosophies of emerging *and* established leaders within your organization?

*For study information, or to share your comments and opinions, please contact Sam Deutsch ([sam.deutsch@exxonmobil.com](mailto:sam.deutsch@exxonmobil.com))*

*If you are interested in exploring this topic in more detail, please contact*
*Lee Green, IRI's Senior Director for Research and Thought Leadership ([green@iriweb.org](mailto:green@iriweb.org))*