

# Factors for Achieving Top R&D Productivity

Getting the Best out of your R&D Team

Nicholas J. Colella, PhD  
[ncolella@incubic.com](mailto:ncolella@incubic.com)  
[www.incubic.com](http://www.incubic.com)

# Inclusive Strategy

---

- **Promote and communicate a common vision, strategy and sense of shared destiny.**
- **Encourage all employees to be stakeholders in the success of the Company.**
- **Create a globally coherent perspective linking individual and group accomplishments to growing the Company's value.**
- **Make steady investments in independent research and development (IR&D) efforts.**
- **Encourage and support pioneering initiatives.**

# Culture of Excellence & Values of Acceptance

---

- **Create a professional environment where high standards prevail.**
- **Promote a climate where objectivity prevails and where people can be themselves.**
- **Eliminate politics and gamesmanship.**
- **Develop people-oriented managers who fathom employee motivations and aspirations.**

# Communications fostering Cooperation

---

- **Link R&D directly to customers by actively collaborating with Sales & Marketing to generate solutions wanted by customers.**
- **Interface R&D strongly with Engineering and Production to anticipate and facilitate hand-offs.**
- **Communicate and often reaffirm a clearly understandable set of organizational objectives and performance goals.**
- **Provide frequent and specific performance appraisal and feedback.**
- **Make all meetings productive and worthy of each participant's time, energy, and creativity.**
- **Encourage frequent hallway, open area conversations to flow ideas and information, free and verbal, not inhibited or documented.**
- **Develop managers. Promote their strengths. Invest in their growth.**
- **Inspire strong internal communications by leading through examples of openness, respectfulness, honesty, and integrity.**

# Factors for Growing R&D Champions

---

- **Strive for the technology horizon in all aspects of R&D. Encourage bold steps.**
- **Articulate opportunities to make meaningful, valuable contributions.**
- **Foster a healthy psychological environment, one accepting unconventional approaches and “out of box” thinking.**
- **Encourage open-mindedness and acceptance of diverse perspectives.**
- **Create two equitable promotion ladders: technical and managerial.**
- **Match the person to the challenge.**
- **Encourage cross-functional teaming and learning.**
- **Make each failure an opportunity to learn. Rather than defend a choice or decision, stimulate thinking about solutions.**
- **Encourage “broad” thinking as an initial response to an emergency in order to rapidly explore alternatives. Avoid pruning alternatives until brainstorming has run a reasonable course.**

# Flat, Lean and Supportive Operations

---

- **Build a lean, cooperative organization structure where leaders catalyze teaming and synergy.**
- **Operate a lean staff with clearly defined complementary roles, intuitively understandable.**
- **Create effective subcontractor/supplier relationships, interfaces, and controls.**
- **Adopt effective planning, direction, and control; flexible, not constrictive.**
- **Simplify operations. Eliminate procedures and reporting not contributing to value.**
- **Structure each assignment with clear objectives and sensible expectations; emphasize challenges for success; eliminate traps for failure.**
- **Strongly correlate rewards with specific, quantifiable accomplishments.**
- **Identify low producers. Understand contributing factors. Reassign when appropriate, otherwise terminate.**
- **Attend to R&D productivity, and identify and promote productive factors.**
- **Invest in facilities and develop tools and capabilities that shorten development cycles, trigger discoveries, and accelerate solutions desired by the market.**

**Bold advances can happen when learning  
is elemental to your company's culture.**

Nicholas J. Colella, PhD  
Incubic Management LLC

[ncolella@incubic.com](mailto:ncolella@incubic.com)  
[www.incubic.com](http://www.incubic.com)