**WORLD IS EVOLVING**
Innovation imperative to stay ahead of the curve

**The consumer is driving change**
Science & innovation advances unlock new opportunities

**Science evolving rapidly**
Innovation cross-fertilization critical differentiator

**Customers demand access to innovation earlier**
Collaboration and partnerships vital

**Understanding the changing consumer is key**
Broaden capabilities to adapt quickly

**Sustainability is a must**
Product development processes will evolve
VALUE OF INNOVATION
Key driver of incremental revenue & margin contribution

Innovation Value Creation

Why Innovation Is Important

- Differentiation is driver of success
- Increases customer retention & win rates
- Growth and margin accretive
- Transformational research, stronger reinvestment
- Paramount for long term success
IFF PLATFORMS & ENABLING CAPABILITIES
Focused on highest value & highest return platforms

R&D PLATFORMS
- DELIVERY SYSTEMS
- MODULATION
- NATURALS & BEYOND
- INGREDIENTS
- HEALTH & NUTRITION
- ACTIVE COSMETICS

ENABLING CAPABILITIES
- SENSORY
- AI, DATA & ANALYTICS
- NEXT GEN PROCESSING
- ANALYTICAL
- BIOSCIENCES
- APPLICATIONS SCIENCE
- CLINICAL RESEARCH
- CROP SCIENCE

CHEMISTRY & MATERIAL SCIENCE

SUSTAINABILITY
FRUTAROM REINFORCES PLATFORMS & CAPABILITIES

More powerful portfolio to increase differentiation & competitive advantage

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R&D PORTFOLIO ASSESSMENT
Strongest pipeline in company history

Innovation Pipeline: 15-yr NPV EP\(^1\)

- One of the largest naturals extractors worldwide
- Leaders in encapsulation & delivery systems
- Strong new fragrance molecule pipeline
- Broad portfolio of modulators
- Cutting-edge research in white space

\(^1\)NPV = Net Present Value, EP = Economic Profit
PLATFORM VALUATIONS
Emphasizing high-value & high-return platforms

Value of R&D by Platform: 15-yr NPV EP¹

NPV = Net Present Value, EP = Economic Profit

¹
DELIVERY SYSTEMS
Extending leadership through next generation delivery technologies

SUSTAINABLE DELIVERY SYSTEMS

New regulatory guidelines driving demand
Full focus on biodegradable natural polymers
Capitalizing on first-mover advantage to capture growth potential
Commercially viable solution expected by 2020

ADDITIVE ADVANTAGE

Industry-first delivery system printing for taste, scent and nutrition
Cutting-edge delivery system to apply active ingredients onto products and packaging
Benefits include: high-performance, low-cost, natural, and sustainable
MODULATION
Strengthening and expanding our leadership in modulation

CONTINUE TO ADVANCE BREAKTHROUGH INNOVATION

CULINARY TECHNIQUES FOR NOVEL CLEAN LABEL MODULATION

- Savory / Umami
- Richness
- Mouthwatering
- Off-note reduction
- Enables product side-streams repurposing into usable products

LEADER IN MODULATION RESEARCH

SCENT

- Malodor control
- Mood & emotion
- Scent enhancement
- Multi-sensory perception
- Minimizing adaption & suppression

TASTE

DRIVING ADVANTAGE IN WITH SCENT MODULATION TOOLS
DIGITAL SCENT, NUTRITION, AND WELLNESS
Breaking into the IoT market with pioneering digital olfaction technology

CAPTURE
Record sleep data through sensors

ANALYZE
Process sleep cycle data, track sleep quality and stage

TRANSMIT
Emit customized scent to improve sleep quality
SUMMARY

- Innovation is a key driver of incremental revenue & margin

- Frutarom acquisition strengthens platforms and unlocks new capabilities

- Strongest pipeline ever in terms of potential value and number of initiatives

- Focus on building and maintaining our leadership in critical technologies as well as cutting-edge research