

# Innovation-Led Growth and Value Creation

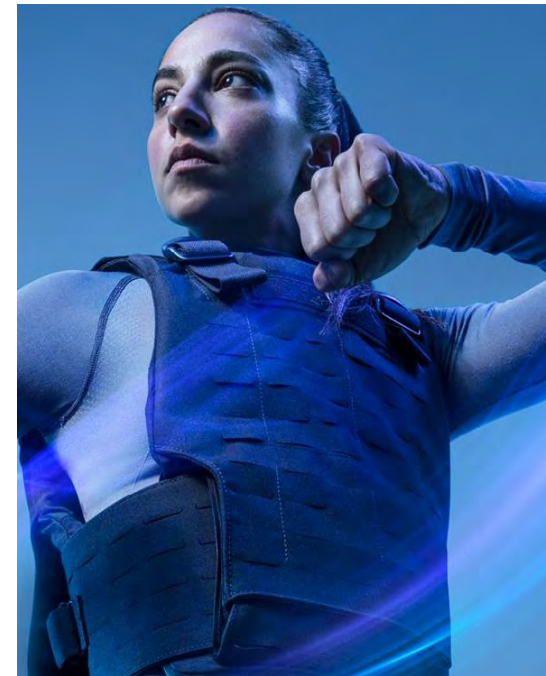
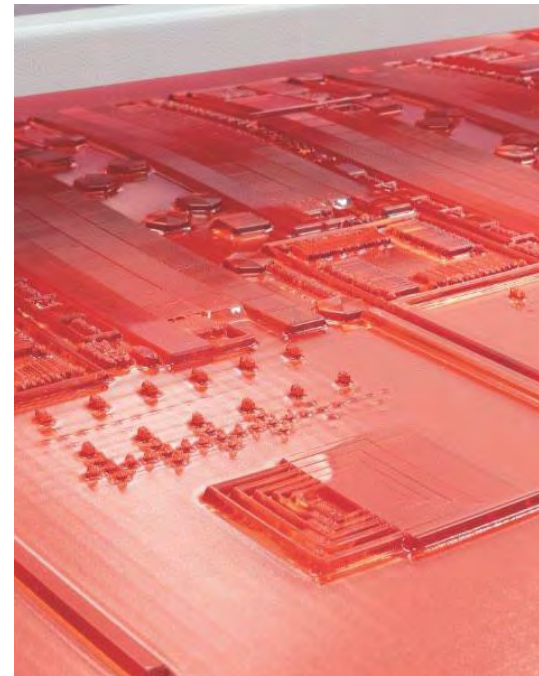
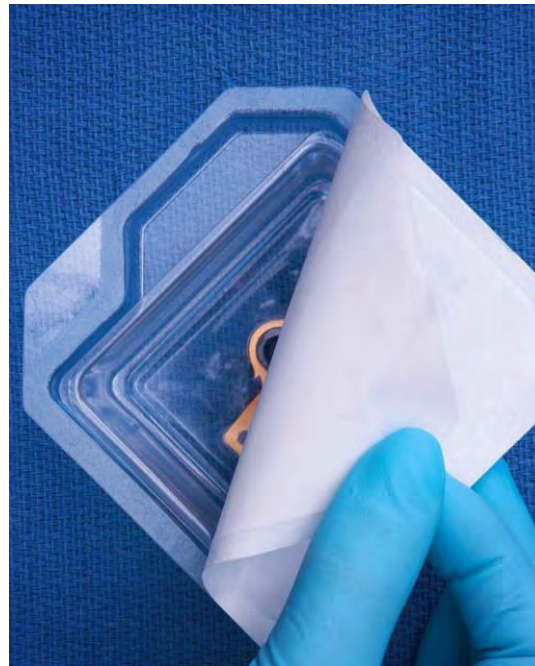
**ISBM Conference  
May 2025**

**Alexa Dembek**

DuPont Chief Technology and  
Sustainability Officer

**Lakshmi Yalamanchili**

DuPont Chief Commercial Officer



# Welcome to the Experimental Station!

Super Tough Nylon  
Super Tough Delrin®  
DuPont's Glass  
Reinforced Nylon  
Zenite® LCP  
Zytel® DMX, Hypalon®  
Elvacite®, Elvamide®  
Butacite®, Selar® RB  
Minlon®

Pet Bottles

Kevlar®  
Nomex®  
Lycra®  
Tyvek®  
Orlon®

Reliance®, Londax®,  
Glean®, Accent®,  
Plenish™, Capstone®

Cozaar®  
Sustiva®

Riston®  
Cyrel®

Solamet® PV17

Nordel®, Hytrel®  
Viton®, Kalrez®  
Vamac®

Nobel Prize Work:  
Charlie Pedersen

Qualicon®  
Bax®, Riboprinter

Nylon and Polyester  
CFC Alternatives

Nylon Intermediates  
TiO<sub>2</sub> Process  
Ink Jet Technology  
H<sub>2</sub>SO<sub>4</sub> Process  
New Harvest™  
Sorona®

Nylon, PVC, PET,  
Neoprene, Dacron®  
Teflon® Dispersion  
2,4-D Herbicides  
Urea Herbicides  
Colloidal Silica, Vazo®

Alkyd Resins  
Kapton®, Surlyn®  
Teflon® FEP  
Elvax®, Elvaloy®  
Nafion®, Vespel





**DUPONT**™

**Delrin**®



**INNOVATION  
SPACE**



**ADESIS**  
A Universal Display Company

**DOW**®

**LANXESS**



**Celanese**



**HD Microsystems**™



**NEMOURS  
CHILDREN'S HEALTH**



**Chemours**™

**iff**



**ROQUETTE**

# Centuries of progress and science-based innovation

1802



1902



2002



# Undeniable mega-trends and astonishing speed of change

Urbanization & Safety



Artificial Intelligence, Machine Learning and Advanced Computing



Sustainability



Connectivity & Electrification & Mobility



Personalized Healthcare



# Global innovation leader with market-leading businesses

Our Purpose:

## To empower the world with essential innovations to thrive

Our Core Values:



Safety & Health



Respect for People

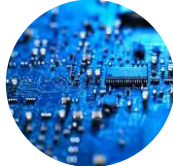


Highest Ethical Behavior



Protect the Planet

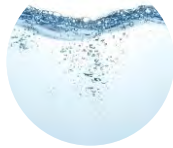
Key Growth Pillars:



Electronics



Protection



Water



Industrial & Medical Technologies



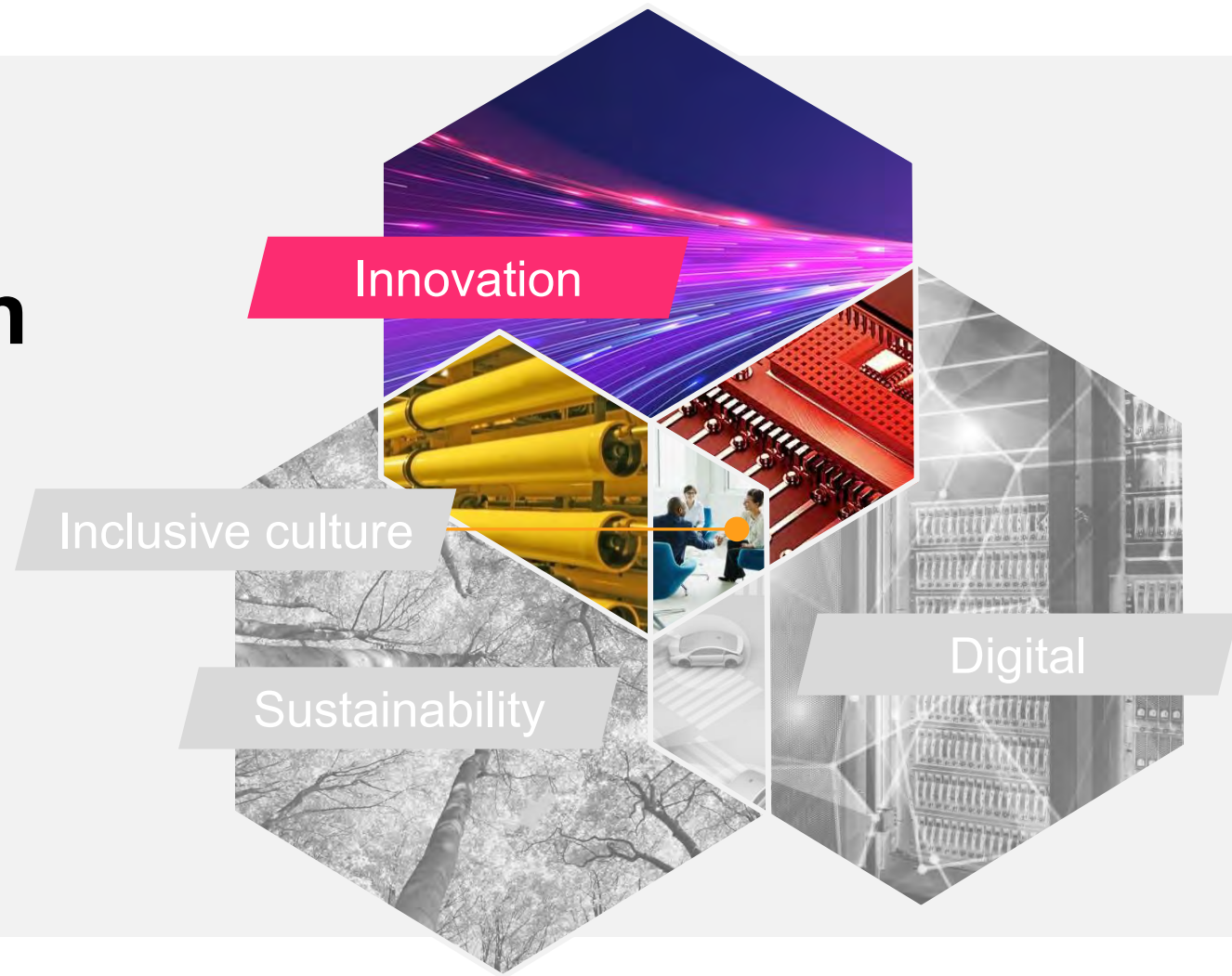
Next Generation Automotive



# Powerful intersections create value



**Innovation** focused on  
important and valuable  
market-back  
challenges



# “Innovation Algorithm”

Address customer needs with differentiated science- and engineering-based solutions



Deep market insights

Dynamically manage our portfolio as the market evolves



Strong customer relationships and brand reputation

Strategic partnerships and collaboration

Highly differentiated technology & application development capabilities

Advocacy and influential relationships

Global reach & local support

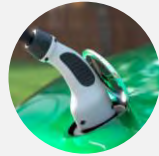
# What does it take to be successful?

Innovation

**Our Differentiation Advantage:**



***New Products***



***New Applications***



***New Manufacturing Processes***



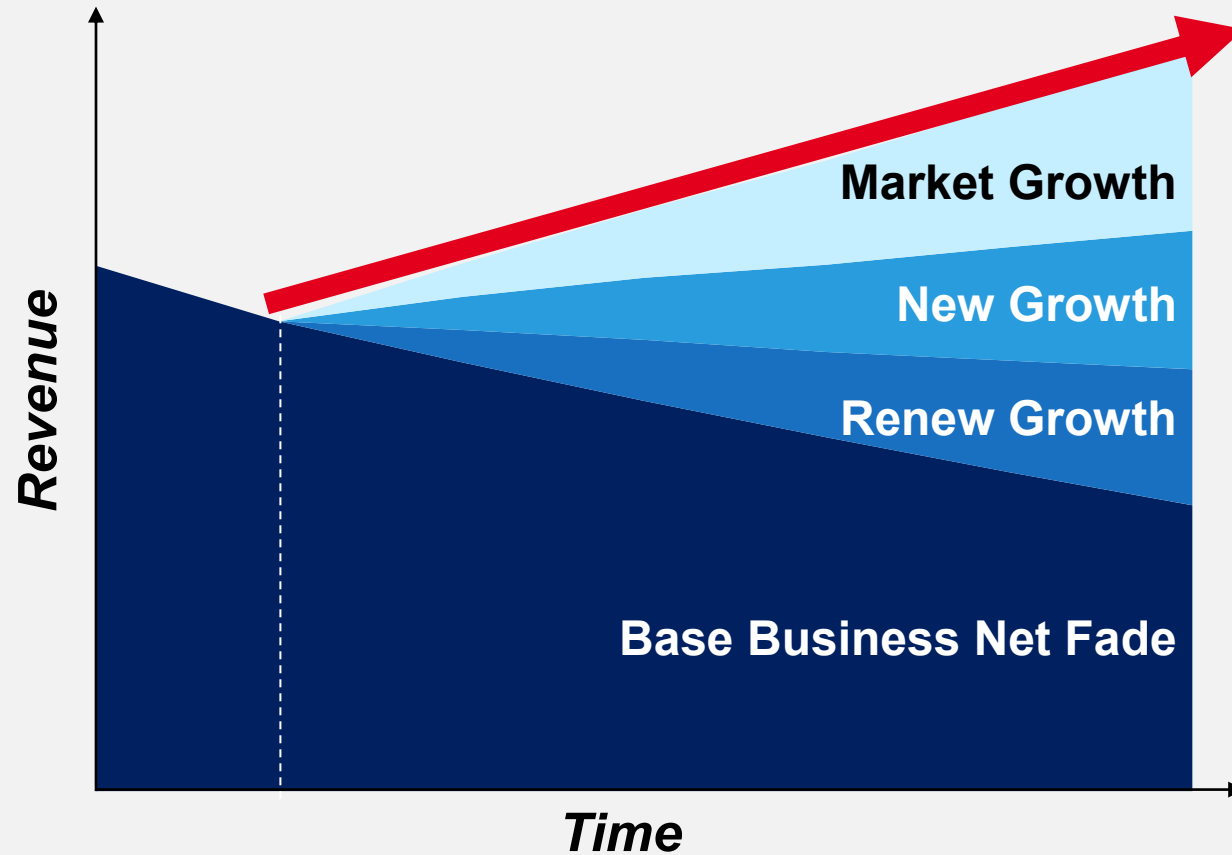
***New Business Models***

**Speed to Market**

**Impact of investment on growth**

# What “Must be True” to deliver real top line growth?

Innovation



# Where is the “Innovation Headroom”?

Innovation

***New***

**Extend into high growth  
adjacencies from a strong  
base to grow above market**


***Renewal***

**Ensure a healthy core business  
and renew differentiation**

# Our innovation focus addresses critical needs of the world

Innovation

Innovation Platforms maximize portfolio potential



Clean  
Water



Sustainable  
& Productive  
Construction



Personal  
Protection



Advanced  
Mobility



Applied  
Healthcare  
Solutions



User  
Interface



High  
Performance  
Computing



High  
Frequency  
Connectivity



DUPONT™

# High value challenges to maximize growth potential

Innovation Focus "Today"

Investment Focus For "Tomorrow"

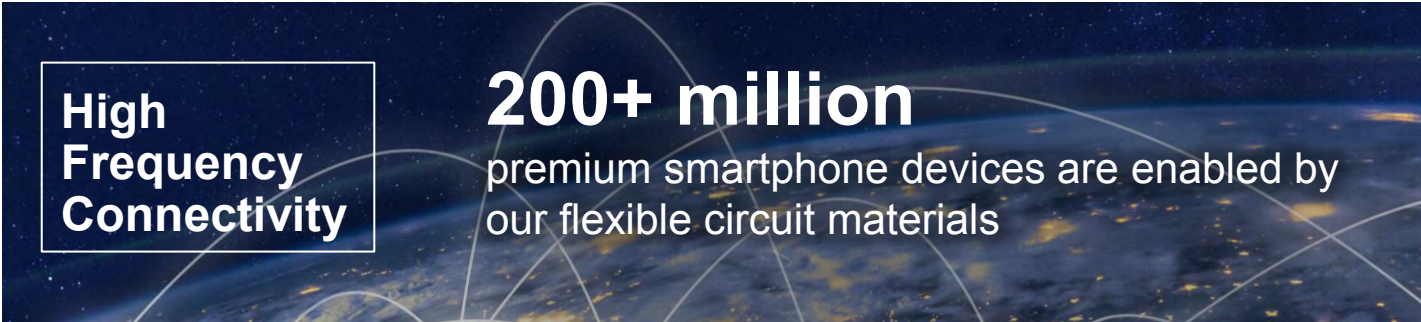


**High  
Performance  
Computing**

**3 nanometer**

process technology is made possible by our semiconductor materials to create the most powerful chips on the market

Enable Artificial Intelligence for **accelerating advanced node growth** in advanced logic and high bandwidth memory, and **advanced packaging applications**



**High  
Frequency  
Connectivity**

**200+ million**

premium smartphone devices are enabled by our flexible circuit materials

Enable **advanced interconnect solutions** and **specialized thermal management solutions** to address signal integrity, power transmission and thermal management challenges



**Clean  
Water**

**99+%**

of salts and other impurities in water are reduced by using our FilmTec™ reverse osmosis membranes

Address "**hardest to treat**" end-use customer water challenges with product, process and application innovation

Enable the **Energy Transition** including Direct Lithium Extraction and Green Hydrogen

# High value challenges to maximize growth potential

## Innovation Focus "Today"

## Investment Focus For "Tomorrow"



**Personal Protection**

**200 million**  
Tyvek® garments protect workers every year across industries

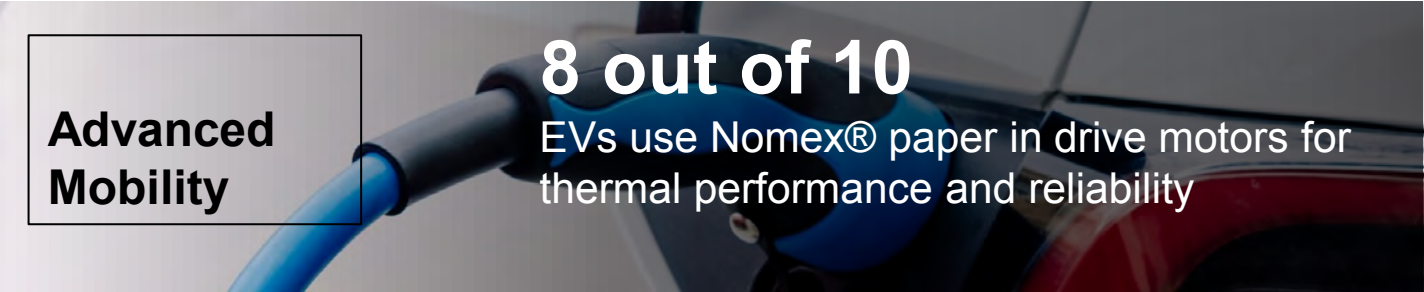
Overcome trade-offs in meeting needs for **multi-threat protection** without sacrificing comfort



**Applied Healthcare Solutions**

**100%**  
of silicone transdermal patches on the market use Liveo™ medical silicone adhesives to improve drug delivery

Address needs for biopharma **advanced fluid handling, medical devices & medical packaging**



**Advanced Mobility**

**8 out of 10**  
EVs use Nomex® paper in drive motors for thermal performance and reliability

Enable **systems integration capabilities** for Advanced Mobility, especially EV powertrain, electronics systems, and aerospace



# External recognition for innovations | 2025 Edison Awards

Delivering solutions and solving some of the world's most complex challenges



**E** EDISON AWARDS  
**Winner**  
Kevlar® EXO™  
Gold: Critical Safety Material Advancements



**E** EDISON AWARDS  
**Winner**  
Tyvek® Trifecta™  
A2 Breather Membrane  
Gold: High-Performance Engineering Materials



**E** EDISON AWARDS  
**Winner**  
DuPont™ AmberLite™ P2X110  
Ion Exchange Resin  
Silver: Energy Storage and Management



**E** EDISON AWARDS  
**Winner**  
Ikonix™ 9000 Polishing Pads  
Bronze: Semiconductor Innovations for AI & HPC



# How to increase speed to market and impact on growth?

Innovation

**Make  
Choices for  
Impact**

*Strategically  
Aligned Choices*

**Execute  
Differentially**

*Balance Time, Risk  
and Reward*

**Enable  
Future  
Capabilities**

*End-to-End Innovation  
Excellence*

# Disciplined execution and investment rigor

## Make Choices for Impact

New

Focus on **Innovation Platforms**

Renew

Drive **incremental differentiation**

## Execute Differentially

New

Use rigorous **learning plans** to de-risk fast and build proprietary differentiation

Renew

Use **productivity** approach to robust competitive position and expand margins

## Enable Future Capabilities

Innovation

- Intensify **strategic market needs** and insights
- Integrate customer-driven **sustainability requirements**
- Accelerate **digital** and **rapid prototyping**
- Drive **cultural transformation**

# Are we growing fast enough?



**Innovation Investment Review to enable business growth strategy**

# Provocation...

Are we intensely  
curious?

And relentlessly  
externally focused?

Are we making  
changes fast  
enough to compete  
effectively?

**We can't choose  
between innovation and  
Sustainability  
– we must have both**



# We are committed to a more sustainable future with bold and ambitious 2030 goals

## Sustainability



**Innovate** for good

**Delivering solutions for global challenges**

**Enabling a circular economy**

**Innovating safer and sustainable by design**



**Protect** people and the planet

**Acting on climate**

**Leading water stewardship**

**Delivering world-class environmental, health & safety**



**Empower** people to thrive

**Accelerating diversity, equity & inclusion**

**Cultivating well-being & fulfillment**

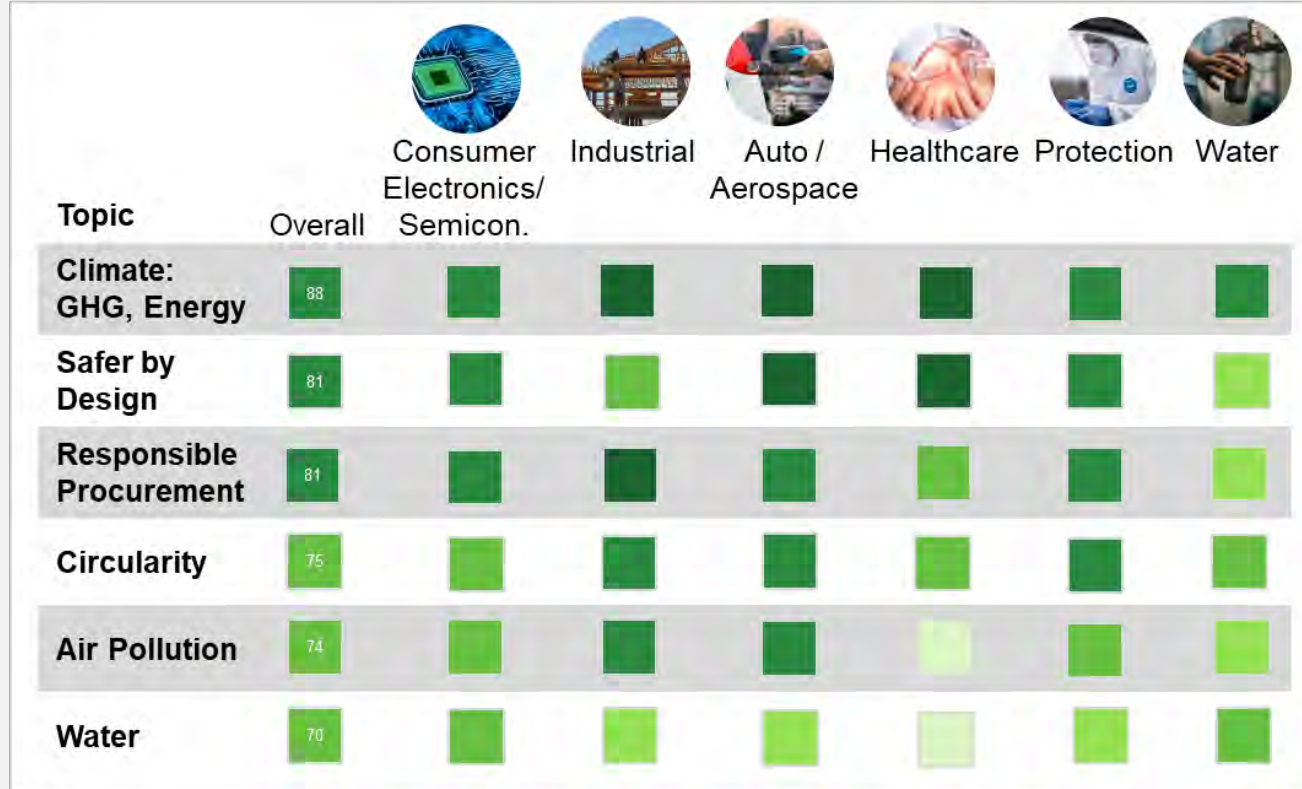
**Building thriving communities**

# Deep customer and external insights shape our priorities and strategic investment decisions

## Sustainability

- ✓ **Value creation** occurs when sustainability is woven into innovation & business strategy
- ✓ **Voices of customers** on their sustainability priorities must be clearly heard
- ✓ **Value chain collaboration** is key to meet sustainability targets and goals

### Importance of sustainability topic to industry segment:



# Translate customer needs into actions

**Engage Strategic Customers**



**Advance Sustainable Innovation Strategies**

**Assess and Develop Sustainable Product Portfolios**

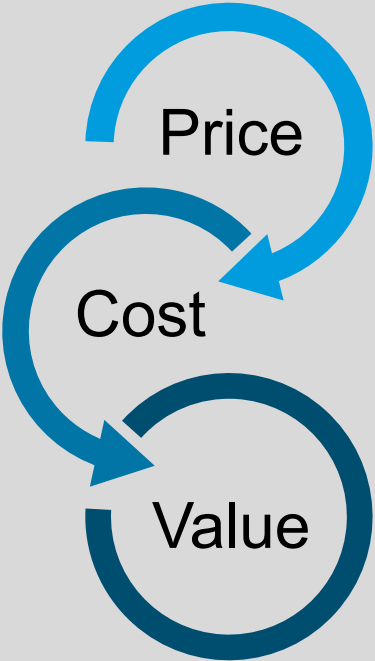
*\*evaluated using DuPont Portfolio Sustainability Assessment (PSA) Methodology, aligned with WBCSD Portfolio Sustainability Assessment framework*

# Need “Carbon Fluency” for value – easy to say and hard to do

## Carbon Fluency

The **footprint** of products and processes and the **handprint** of how your products help your customers versus alternatives

Business **AND** Sustainability



# Quantification of customer value



**Footprint** refers to the negative impact you have on the environment when producing your products...



...while **handprint** refers to the positive benefits your products have during use (i.e. helping others lower their footprint)



Want to **reduce your footprint** (operations) and **increase your handprint** (product innovation)

## DuPont FilmTec™ BW30 PRO-400 Reverse Osmosis Unit



**Embodied Carbon**  
116 MT CO<sub>2</sub>e

**Operational Carbon Savings**  
180 MT CO<sub>2</sub>e

*Versus DuPont FilmTec™ BW30-400 elements (~1050 elements) in a mid-sized reverse osmosis treating facility (750 m<sup>3</sup>/hr capacity)*

### Launched in 2022

- Lower operating pressures / less energy
- Reduced carbon emissions and costs for users
- WBCSD 2025 Avoided Emissions Case Study

## DuPont Water Solutions Sustainability Navigator

Digital tool to compare how different water treatment scenarios impact sustainability indicators:

- Carbon emissions
- Chemicals used
- Wastewater produced
- Solid-waste generated

### Operational Carbon Savings over base case

FilmTec™ Fortilife™	Base
CR50 Element	
FilmTec™ Fortilife™ CR100 Element	0.4 MT CO <sub>2</sub> e <sup>1</sup>
FilmTec™ Fortilife™ CR200 Element	1.0 MT CO <sub>2</sub> e <sup>1</sup>

Notes: 1 – per element reduction over a 5-year lifetime for a mid-sized water reuse system using DuPont Sustainability Navigator Digital Tool (CO<sub>2</sub>e savings are calculated using 3<sup>rd</sup> party validated method)



# A bold and pragmatic vision coupled with expertise to deliver meaningful impact

Sustainability

A collage of circular images showing Dupont employees in various settings, including a factory, a meeting, and a group photo, set against a network diagram background. The collage is framed by a red border. The background of the collage is a white network diagram with grey lines and colorful nodes (red, blue, green, purple, orange). The Dupont logo is visible in the top left corner of the collage. The text '2024 Sustainability Report' is in the bottom right corner of the collage.

**DUPONT**

**2024**  
Sustainability Report

**DUPONT**

**Our strategy is enabled by digital, with meaningful progress and more to come!**



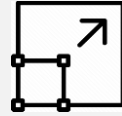
**Building tools to enhance productivity and accelerate new value**

# Driving AI change management and adoption ...



## 1) DEPLOY

... GenAI for **everyday task productivity**



## 2) RESHAPE

... key processes for significant **efficiency/effectiveness**



## 3) INVENT\*

... new **experiences, offerings, and business models**

### USE CASE EXAMPLES

#### 'Generation'

- Generate online meeting notes and action item list
- Multi-language translations of product marketing materials
- Excel formulas and code-creation to organize data for easier analysis

#### 'Summarization'

- Customer interview notes summarization for industry analyses
- Critical points recap from competitors' earnings reports
- Extraction of important topics from long chains of emails or messages

### ADOPTION

**7K+**   
Active users

**28K+**   
Queries submitted weekly

### SUITE OF TOOLS



DuPont  
**SmartChat**

DuPont's secure 'ChatGPT-like' platform to **Create/Interpret** content



Copilot  
**Chat Web**

**Real-time** info **search** with source citations and **image generation**



Copilot  
**M365**

**Embedded** in **Microsoft 365 apps** with access to **internal** documents/info

# ... reshaping processes through DuPont AI/GenAI products

DuPont AI Products



## 'Smart Formulation Modeling'

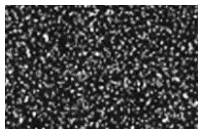
**Speeds and optimizes formulation designs** to customer needs

### Featuring...

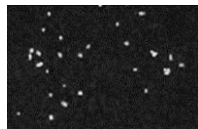
#### 'Semiconductor Cleaner Formulation'

Generates and screens thousands of formulation alternatives 1000x faster than humans, significantly improving product performance

Manual Formulation



Machine Learning Formulation



Pictures show particles remaining after cleaner is applied



## 'Knowledge Finder'

**Responds** to human language queries, searching large document repositories and databases

### Featuring...

#### 'KACIE'

Empowers customer service teams with immediate access to knowledge base, for improved responsiveness and customer satisfaction

>1.5k documents...



... analyzed instantly to provide relevant answers through chatbot interface



## 'Virtual Assistant'

**Automates complex tasks** that require understanding and human-like communication

### Featuring...

#### 'Sustainability Responder'

Streamlines and accelerates responses to customers regarding DuPont's stance on sustainability



**Reads Sustainability Inquiries** from customers



**Interprets question and finds data** in DuPont's **Environmental, Social, and Governance** library



**Drafts response** and sends to human agent for approval



## 'Virtual Advisor'

**Delivers recommendations** based on pre-determined sets of internal or external data and methods

### Featuring...

#### 'SafeSPEC AI Assistant'

Helps customers make informed decisions about using protective apparel through interactive prompting



- Product Selector Tool
- Access chemical permeation data
- Request a sample
- Find product information
- Find a distributor

Examples

# “Growth through AI” for market-driven value creation

## 1) IDENTIFY MARKET OPPORTUNITIES

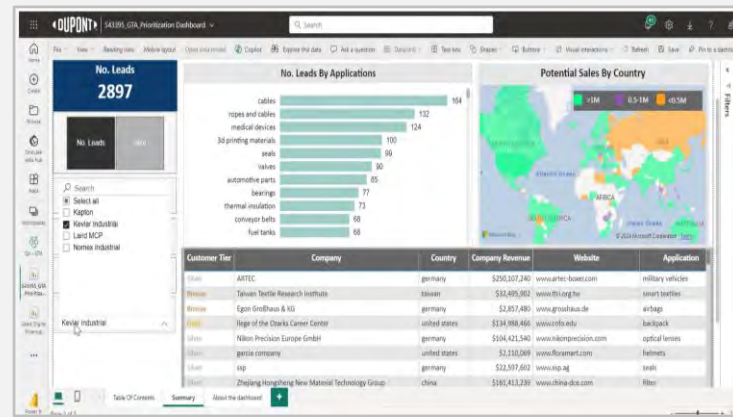
**1,000+** potential applications identified across 8 product lines



Real-time curation of external data assets and broad market insights (e.g., 400B+ web pages, 200MM+ patents & publications, 50K+ news sources) to **accelerate identification of new markets, applications and prospects**

## 2) PRIORITIZE LEADS

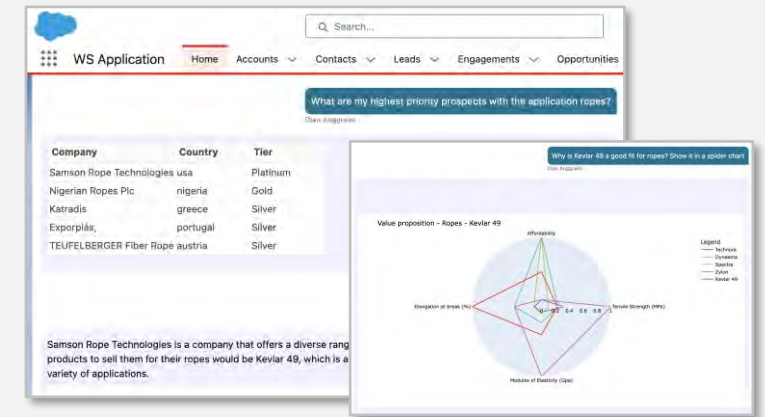
**14,000+** customer prospects prioritized as “**platinum**” and “**gold**”



Marrying curated external data (e.g., *SparkBeyond, Dun&Bradstreet*) and internal product and sales information (e.g., SAP, Salesforce) to **prioritize leads** by opportunity size and effort required

## 3) CONVERT SALES

**17 Win-rooms** now established to qualify prospects and drive conversion



Sales copilot provides **view of customer and product insights** (e.g., product properties, existing sales, sales assistance) to **accelerate conversion** putting automated information at sales professionals' fingertips





Digital

**Efficiencies** enabled by digitalization create more space for high-value work and **insights** to accelerate innovation speed and **GROWTH**

**Enabling essential  
innovations by  
investing in an  
Inclusive culture**



# Deliver Purpose, Experience and Opportunity

Inclusive culture



Business outcome of an inclusive culture is value creation

# A vibrant innovation culture matters

Inclusive culture



# The Hard Truth About Innovative Cultures

Easy-to-like innovative behaviors must be counterbalanced by **tougher behaviors** that provide **discipline and management**



Tolerance for Failure but  
**No tolerance for Incompetence**



Willingness to Experiment but  
**Highly Disciplined**



Psychologically Safe but  
**Brutally Candid**



Collaboration but with  
**Individual Accountability**



Flat but  
**Strong Leadership**

# Making very hard decisions using critical questions

## Inclusive culture



### “Do They Want It?”

- Have customers validated our value proposition?
- Do external voices confirm our internal assumptions?
- *Is the unmet need real?*

**DESIRABILITY**



### “Should We Do It?”

- Is our next step forward justified by the prize in front of us?
- Does the size of the opportunity outweigh future investment?
- *Is the view worth the climb?*

**VIABILITY**



### “Can We Do It?”

- Do we have the right resources, capabilities, and partners?
- Does the evidence confirm the competitive feasibility?
- *Is ours the winning solution?*

**FEASIBILITY**



Partner: *David Bland, Precoil*

# Lean Innovation: Insist on rapid cycles of learning

Inclusive culture



Ensure that *learning* is always the desired outcome

# I love Dead Projects Day!

Inclusive culture



# Projects Day

An Annual Celebration  
of Learning from Failure

## PURPOSE

Shrink the stigma of failure and learn from each other how to make smarter choices for innovation and growth

## PROCESS

- Innovation Graveyard
- Three ghost stories from dead projects
- Panel discussions
- Application of learnings

## PRODUCT

- Identify pitfalls & red flags
- Techniques to facilitate the pivot / pause / persist discussion
- Mindset shift for your team

## A Celebration of Learning from Failure

# Years of successful company-wide events

*Innovating at Speed, Face Your Fears, Killing Your Creation, Ghosts of Projects Past, ...*



**Face Your Fears!**  
**The Tortuous Path to Success...**

Dead Projects Day 2020



**KILLING YOUR CREATION**

Making the tough decisions to pivot, pause, or say goodbye...



**The Ghosts of Projects Past...**

Lessons learned from dead projects to help us succeed in the future



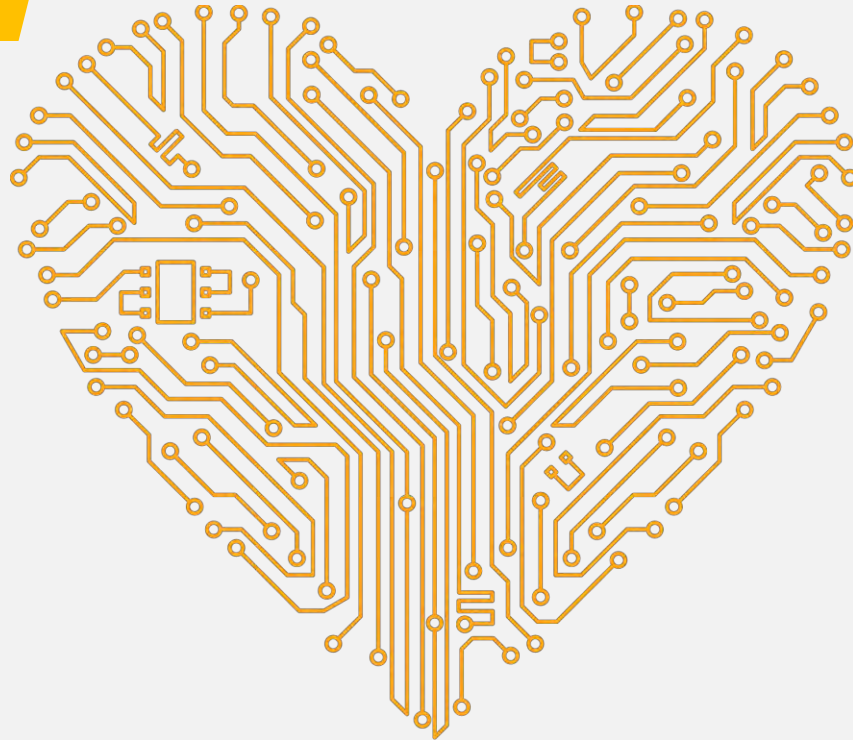
# Face your fear of killing a project

*De-stigmatize failure and have fun, too!*



# What does celebrating failure allow us to do?

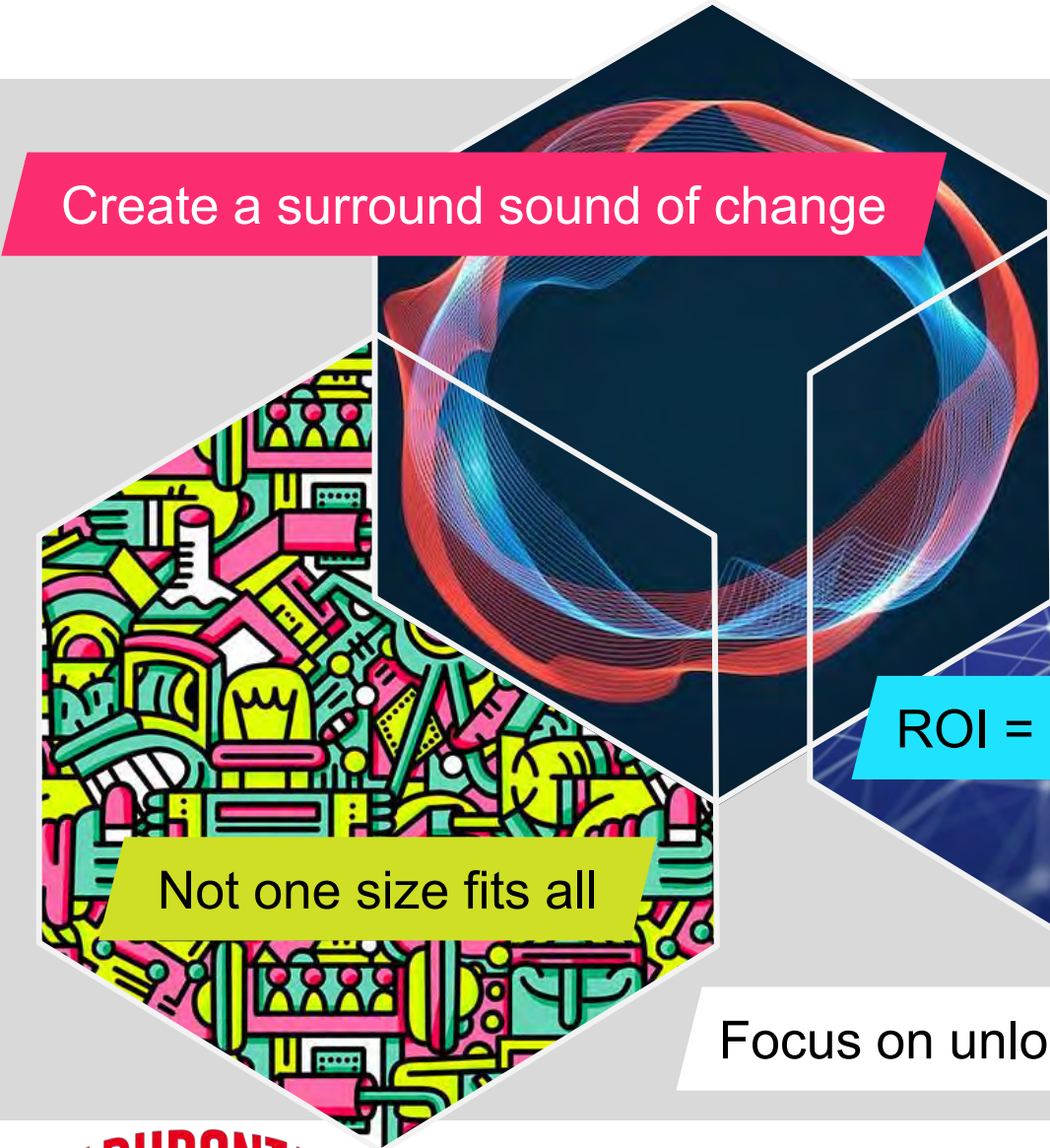
Inclusive culture



FALL IN LOVE  
WITH  
GROWTH,  
NOT PROJECTS

**Embrace Uncertainty,  
Let Go When Needed, Change and Evolve Freely**

# Create business value and growth!

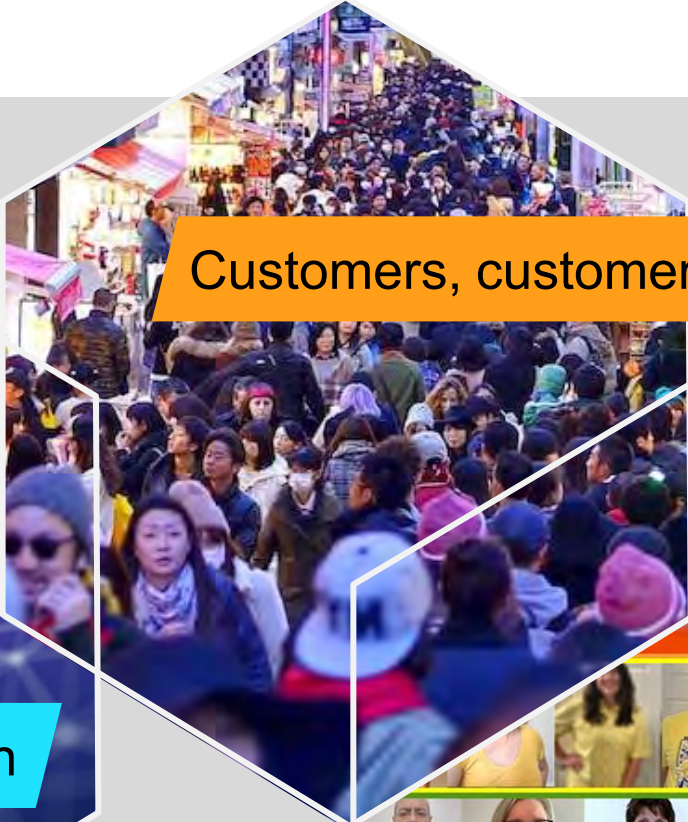


Create a surround sound of change

Not one size fits all



ROI = Risk of Inaction



Customers, customers, customers



Focus on unlocking individual talents inside and outside the company

# Executive leadership commitment | Commercial Excellence



**Lakshmi Yalamanchili**  
Chief Commercial Officer  
**DuPont**

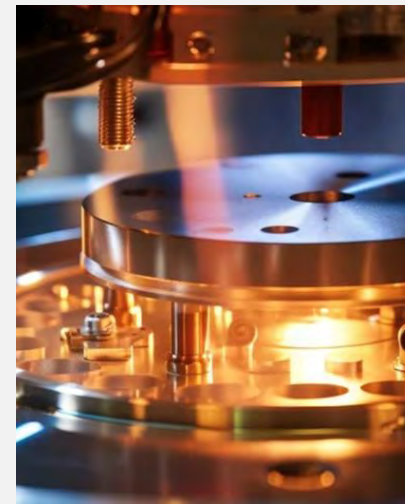
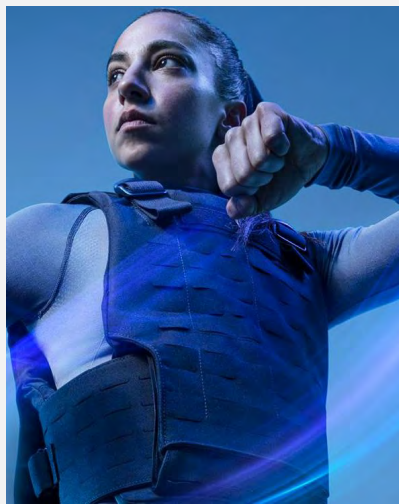
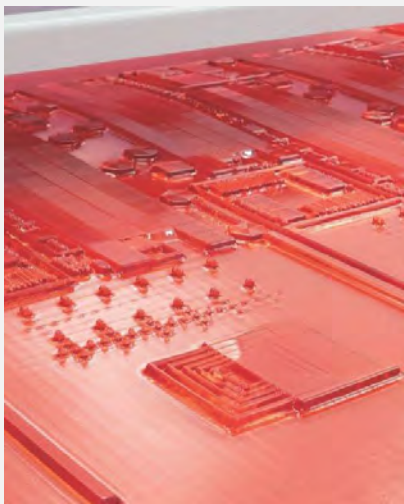


**Sam Ponzo**  
Chief Strategy and Commercial Officer  
**Qnity** (DuPont Electronics Nov 1 Spin-off)

# Thank you, ISBM!

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**Empowering the world with the essential innovations to thrive**



**DUPONT**™