

3M Overview & Innovation model

An aerial photograph of a city, likely Seattle, showing a dense urban area with numerous skyscrapers and buildings. A large body of water, possibly a bay or harbor, is visible on the left side, filled with many small boats. The city extends to the horizon under a clear blue sky. The text '3M Overview & Innovation model' is overlaid in large white font on the left side of the image.

3M at a glance



3M Headquarters , St Paul , Minnesota ,USA

- Sales in ~200 countries
- \$32 billion in sales
- Five business groups
- 90,000 3Mers globally
- 115,000 patents
- One of 30 companies on the Dow Jones Industrial Index
- 101 straight years of dividends

Global capabilities

Sales in 200 countries

Operations in 70 countries



Labs in 36 countries

Plants in 37 countries

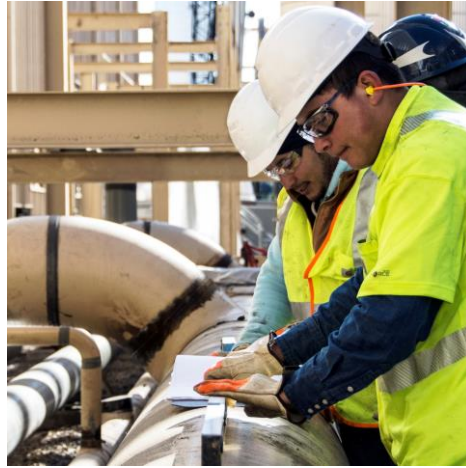
- Key
- Sales & Marketing
 - ◆ Manufacturing/Converting
 - Technical Capabilities

We bring solutions to markets through our business groups



Health Care

\$5.9B



Safety & Graphics

\$6.2B



Industrial

\$11.9B



Electronics & Energy

\$5.5B



Consumer

\$4.7B

Safety & Graphics



From protecting people and improving road safety and mobility to enhancing visual and design communication



Industrial



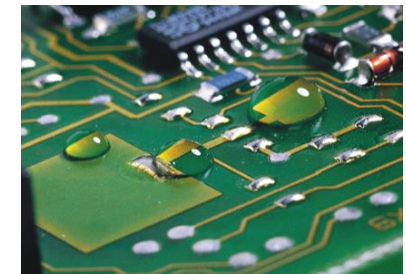
From purification to aerospace, we change how industry works



Electronics & Energy



Advancing a connected world



Consumer



Making life easier and more productive at home and work



3M's fundamental strengths



Technology

Ability to share and combine elements of 3M's broad technology portfolio to produce unique, differentiated products, translating to premium margins



Manufacturing

Utilization of 3M manufacturing footprint and technology, including process trade secrets, leading to higher-performing products and lower unit costs



Global capabilities

Subsidiary front- and back-office footprint that allows for the effective development, adaptation and commercialization of products



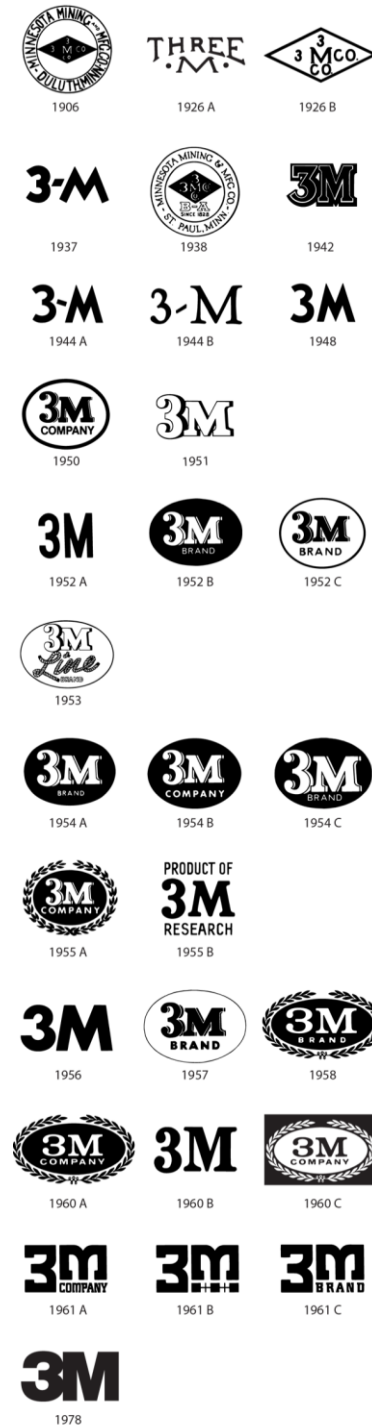
Brand

Brand equity in the 3M brand and in strategic brands that are shared across business groups

100+ years of Innovation



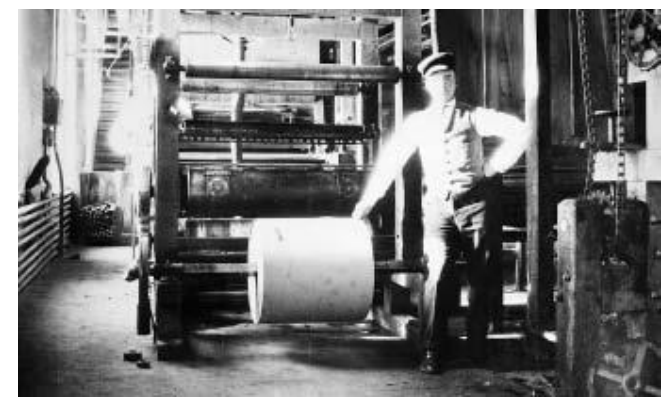
115 years of 3M (Minnesota Mining & Manufacturing)
..from a mining hiccup to a technological marvel.....



100+ years of Innovation



Changed the market from dry sanding to wet sanding with invention of waterproof sandpaper



100+ years of Innovation



Invention of masking tape.

Made two tone painting possible

Masking tape is widely used commodity now



100+ years of Innovation



Created the market for reflective road signs.
Making roads & people safer with reflective materials

100+ years of Innovation



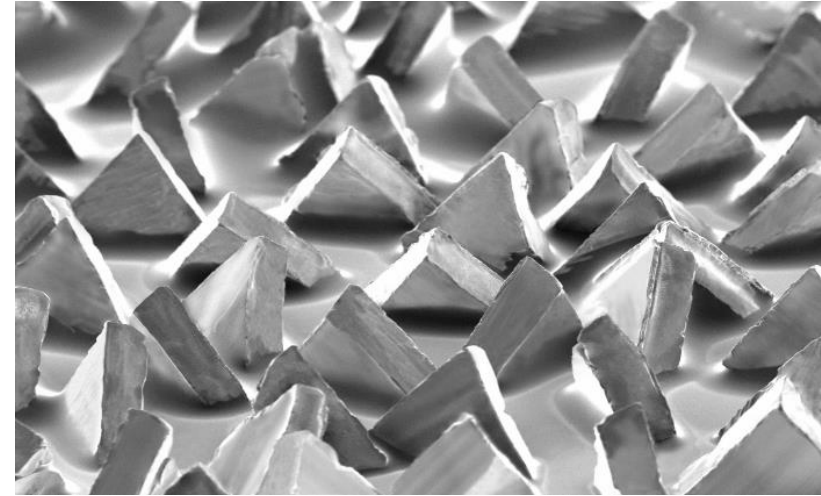
Using a “weak” adhesive on bookmarks for improving productivity at office & home



100+ years of Innovation

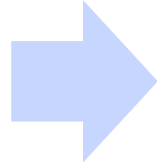


Precision-shaped grain abrasives



Elements of Innovation at 3M

Structural



**46
Technology
Platforms**

**Technology
Market
Matrix**

**Dual Ladder
Career**

Cultural



**Boundary-less
behavior**

**15%
Culture**

**Global
Networking**

Metrics Driven



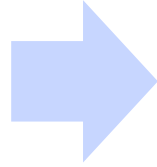
**30%
New Product
Rule**

**R&D
investment
6%**

**Evaluation
on
Leadership
Behaviors**

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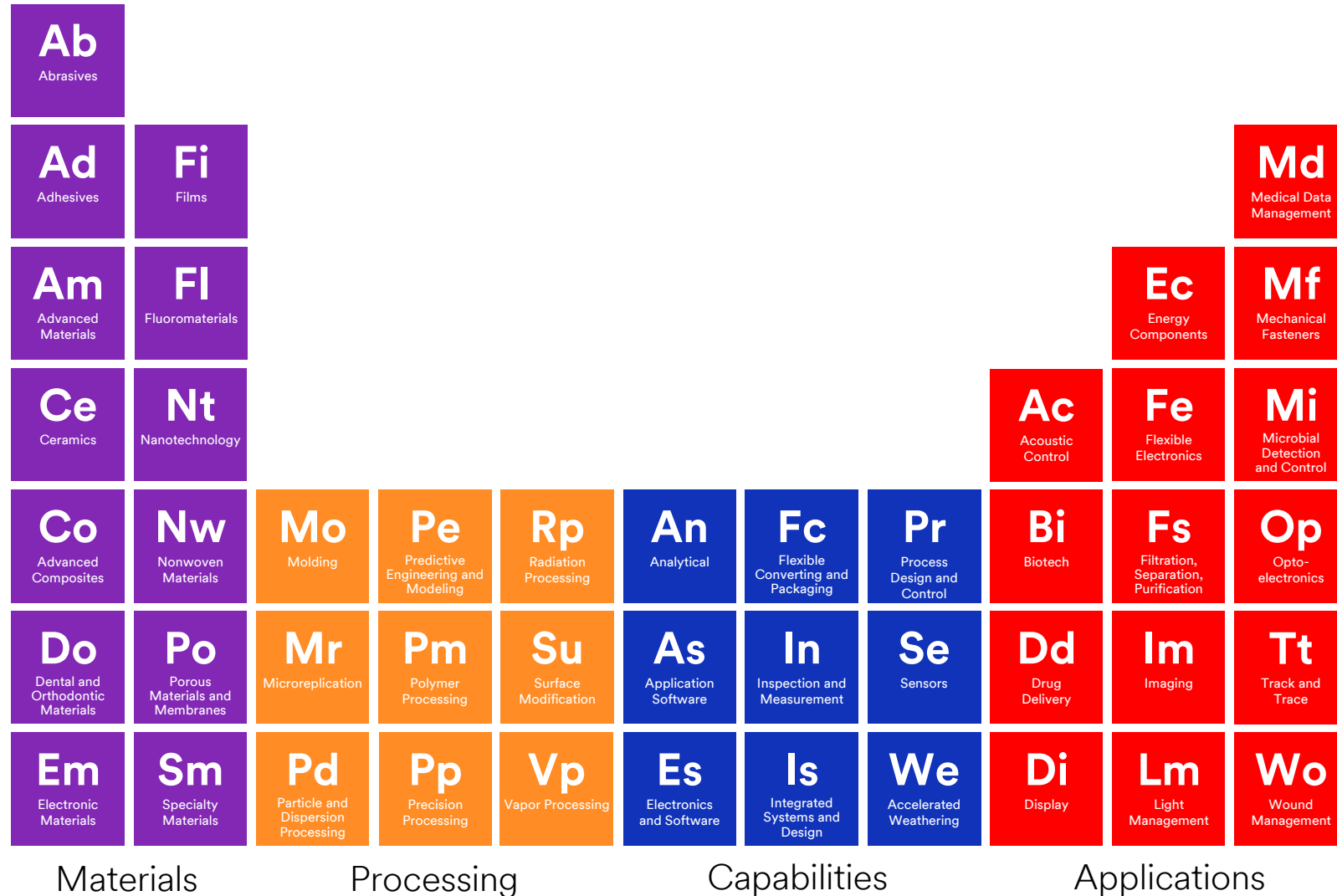


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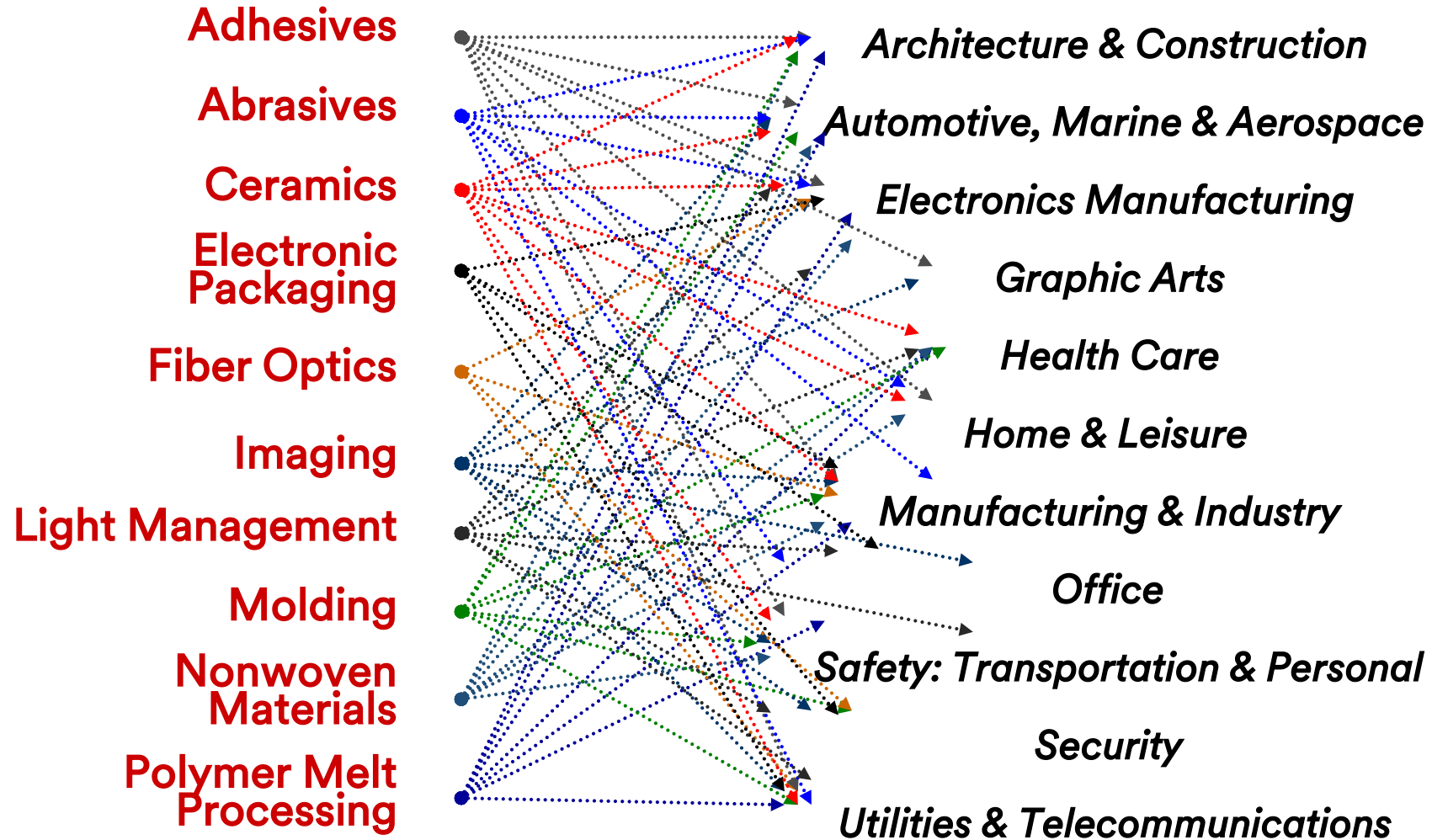
46 Technology Platforms



Technology Platforms...Multiple Markets

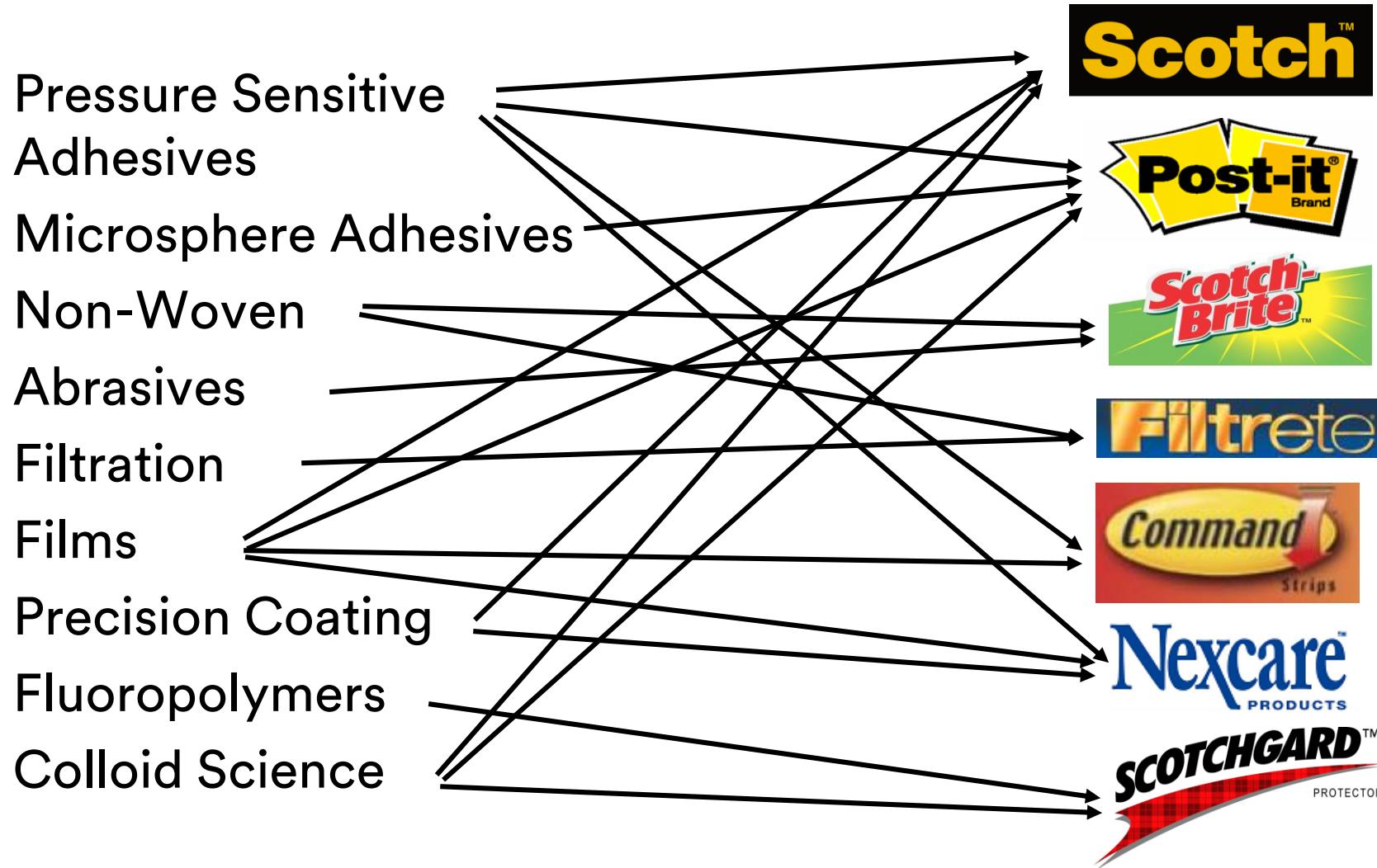
3M Technologies Platforms

Markets



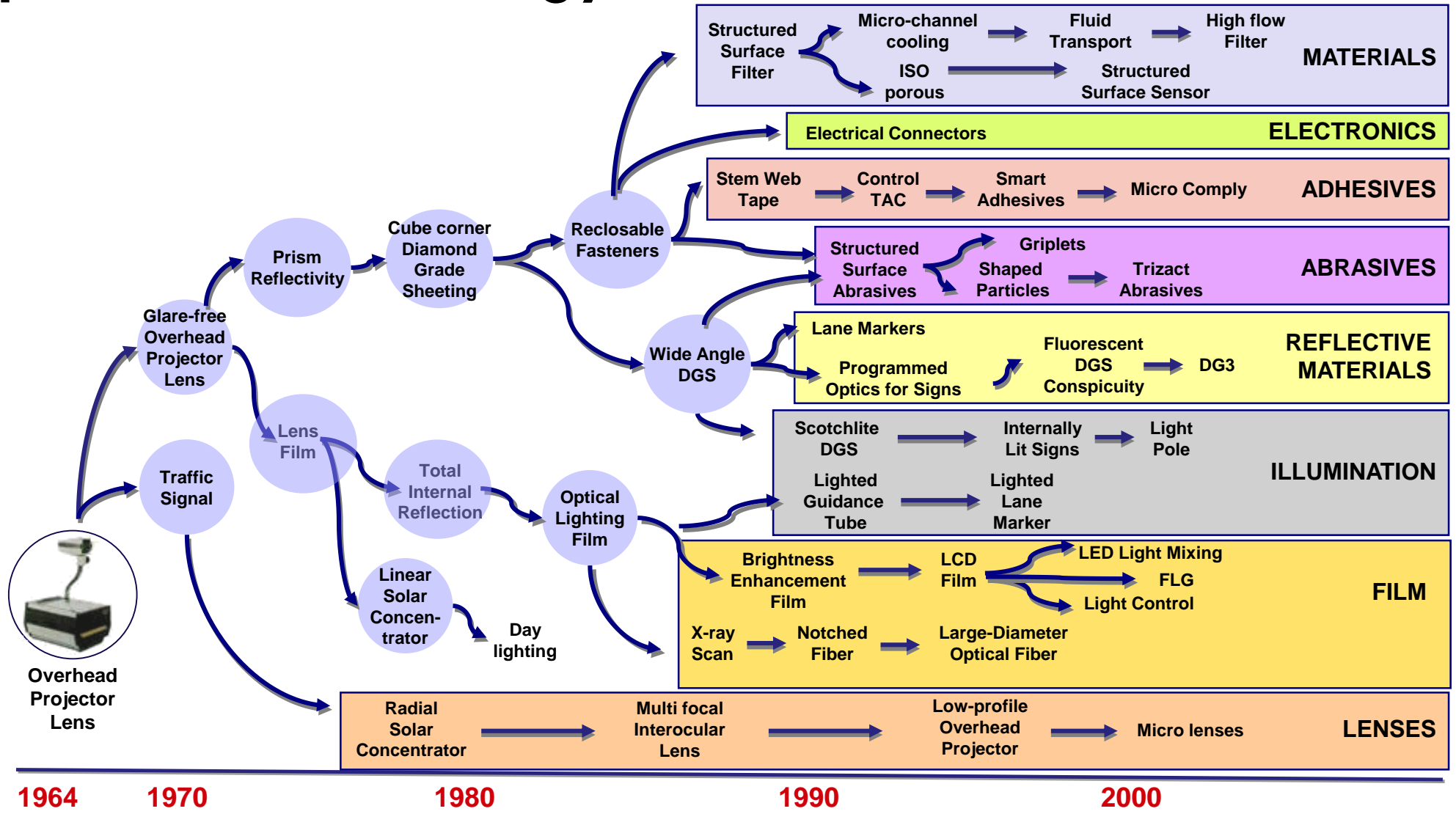
3M's Uniqueness

Transforming Technology into Consumer Brands

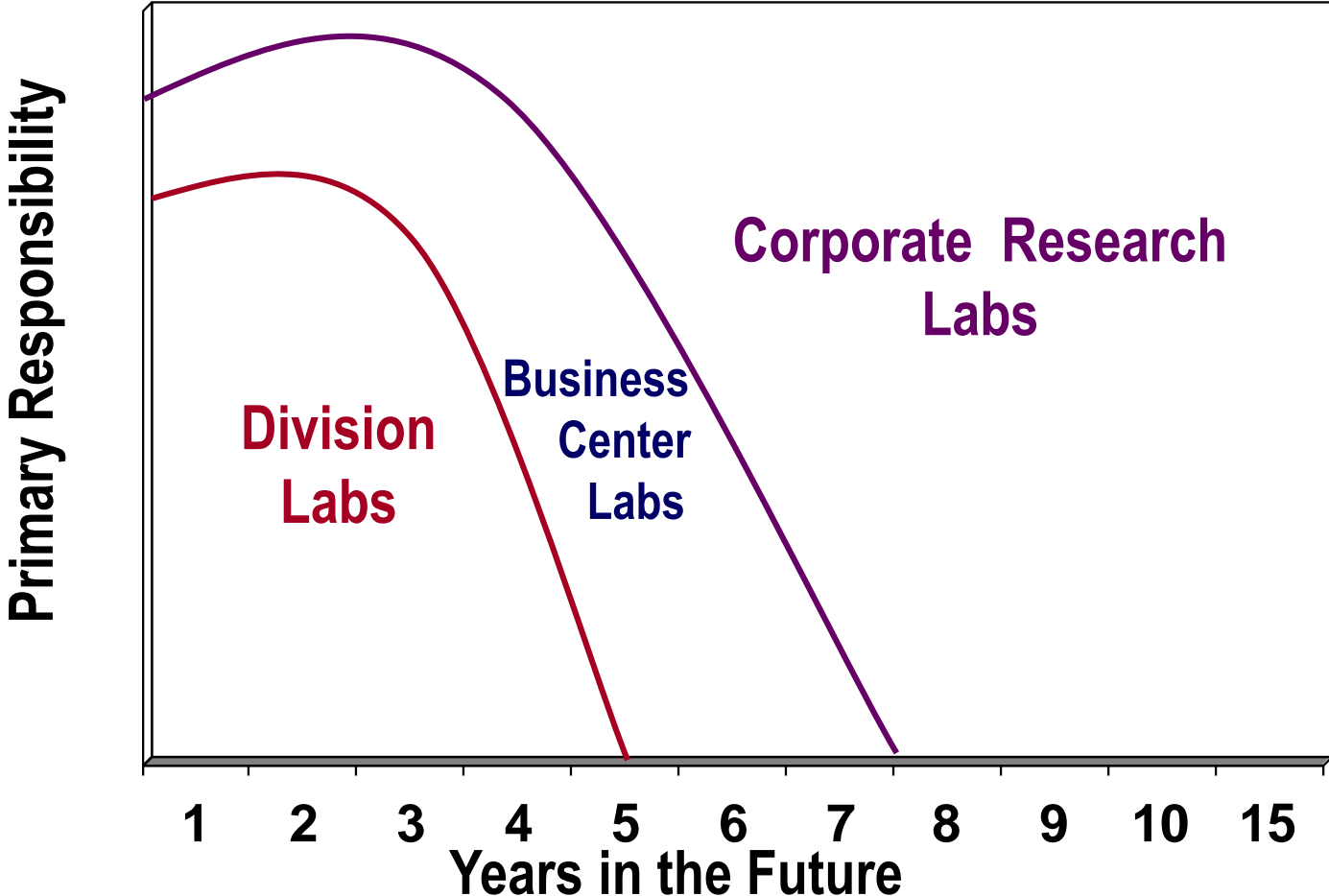


Technology is "Consumerized" into Brands

Product and Technology Migration at 3M - Micro-replication Technology



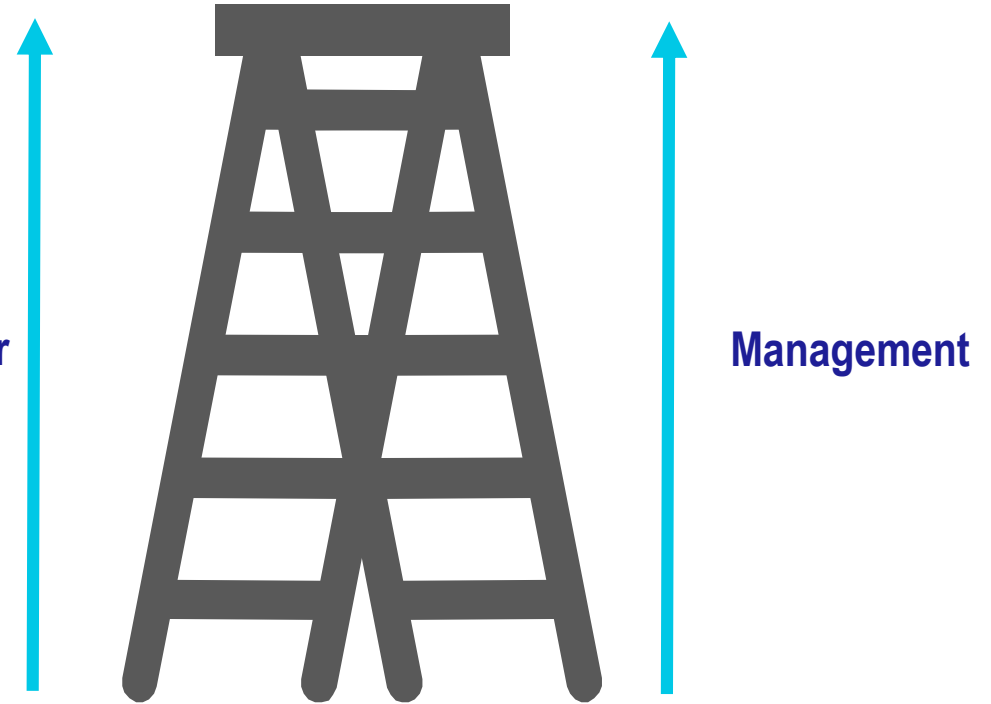
Global R&D Structure



Dual Ladder System

- **Variety of Job Opportunities (Sales, R&D, Manufacturing, Supply Chain etc.)**
- **Variety of Job Locations (Global Exchange of Talent)**
- **Dual Ladder (Management or Subject Matter Expertise)**

Functional
(Subject Matter
Experts)



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McKnight Principles

“As our business grows, it becomes increasingly necessary to **delegate responsibility** and to **encourage men and women to exercise their initiative**. This requires considerable tolerance. Those men and women if they are good are going to want to do their jobs in their own way.

Mistakes will be made. But if a person is essentially right, the mistakes he or she makes are not as serious in the long run as the mistakes management will make if it undertakes to tell those in authority exactly how they must do their jobs
Management that is destructively critical when mistakes are made kills initiative.
And it’s essential that we have many **people with initiative** if we are to continue to grow.”



McKnight Principles

“If you put fences around peopleyou get sheep.

Give people the room they need...Encourage experimental doodling ”



- Individual initiative
- Freedom to do your job in your own way
- Freedom to take risks & fail at times

3M 15% Culture

- **It is a culture/philosophy not a time sheet measurement**
- **Enables employees to explore new technologies and/or new markets**
- **Enables employees to leverage technical specialists**
- **Does not need management approval**
- **Teaches employees leadership and new skills**
- **Diversity in how employees utilize their 15% time**



Many innovative 3M products were initially developed with 15 % Time

3M's Worldwide Technical Community



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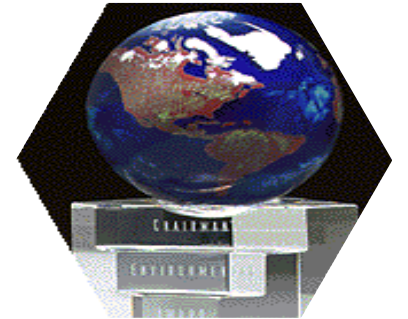
**Evaluation
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Metrics Driving Behavior

- 30% of Sales from New Products - NPVi (New Product Vitality Index)
- New Products Definition – Products launched in last 4 years
- Replacements v/s new
- R&D spend at 6% - in good years & bad

Innovation Awards & Grants

- Variety of awards at both global & local levels
- Peer nominated awards – CTE&i
- Hall of fame
- Grants to fund 15% projects
- Awards for new business creation



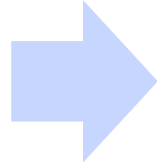
Leadership behaviors

Our behaviors shape our culture, help us execute our strategies and bring our 3M Vision to life.



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3M Science Applied to Life



3M Science.
Applied to Life.™

Thank You !!

Our Vision

3M Technology Advancing Every Company

3M Products Enhancing Every Home

3M Innovation Improving Every Life

Our Strategies

Expand relevance to our customers and our presence in the marketplace

Gain profitable market share and accelerate market penetration everywhere

Invest in innovation: Invigorate existing market opportunities and focus on emerging megatrends

Intensify capabilities to achieve regional self-sufficiency

Build high performing and diverse global talent

Drive consistent superior levels of operational excellence