



***The Shape of Things to Come:  
Massachusetts 2020***

***June 18, 2010  
Newton Marriott Hotel***



***Mark Nemec, Ph.D***  
***Managing Director, Technology Industry Client Group***  
***Forrester Research***

The Forrester logo consists of the word "FORRESTER" in a white, serif, all-caps font, centered within a dark green oval. The oval is set against a dark blue background with faint, light blue wavy lines radiating from behind it.

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A small version of the Forrester logo, featuring the word "FORRESTER" in white, serif, all-caps font inside a dark green oval, positioned in the top left corner of the slide.

FORRESTER

# Some Thoughts on The “Reset Economy”

Mark R. Nemec, Ph.D.  
Managing Director  
Forrester Research

June 18, 2010

We have  
experienced the  
“Gateway”  
Recession



## Three Forces Driving Society



The State

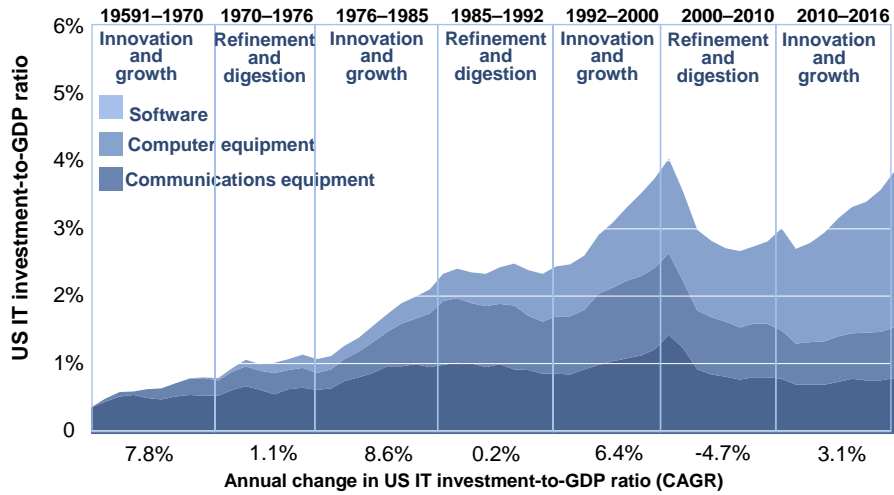


Markets



Technology

## Beyond the Gateway



Source: Forrester Research based on US Department of Commerce data

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## From Process Automation to Optimizing Results



Network computing helped automate transactional processes in industries like manufacturing.

Next Gen (Smart, Cloud, Green)  
Computing will help make collaborative processes more effective by better leveraging assets and managing liabilities.



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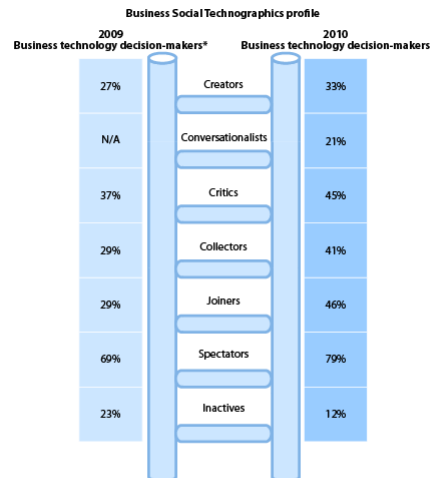


## Consumers who regularly use the Web for the following activities:

|  | Gen Y<br>(18-27) | Gen X<br>(28-41) |
|--|------------------|------------------|
| Use Web-based email                                | 73%              | 65%              |
| Use instant messaging                              | 56%              | 33%              |
| Send photos by email                               | 41%              | 40%              |
| Use social networking sites                        | 42%              | 17%              |
| Play online games alone                            | 39%              | 31%              |
| Download music                                     | 36%              | 22%              |
| Purchase products                                  | 36%              | 45%              |
| Use personal portal/content sites                  | 32%              | 29%              |
| Watch peer-generated video on a video-sharing site | 28%              | 19%              |
| Read blogs   | 27%              | 15%              |
| Watch Internet video/audio                         | 24%              | 21%              |
| Watch Internet video/streaming video               | 23%              | 23%              |



## April 2010 "Social Technographics®: Business Technology Buyers" The Adoption Trend For Social Among Business Technologists Points Up



Base: 793 US and European business technology decision-makers at firms with 100 or more employees  
 \*Base: 1,217 NA and European business technology decision-makers at firms with 100 or more employees  
 (percentages include business technology decision-makers who said they engage in selected social activities for business purposes or for both business and personal purposes)

Source: North American And European B2B Social Technographics® Online Survey, Q1 2010 and  
 \*North American And European B2B Social Technographics Online Survey, Q4 2008





Overall, the Future is Bright

## Thank you

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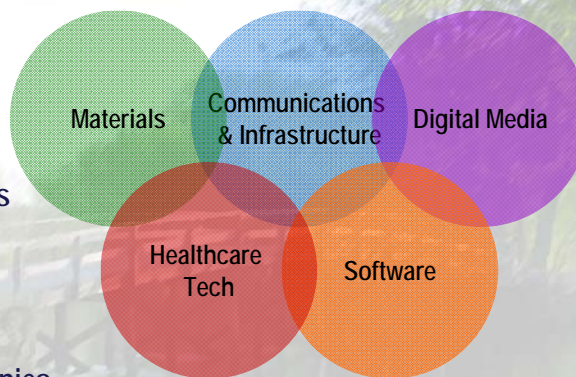


**Jamie Goldstein**  
*General Partner*  
**North Bridge Venture Partners**

NORTH BRIDGE

## NBVP at a Glance

Early-stage Investors  
Seed & Series A  
\$2.3B under management  
12 investment professionals  
Bi-Coastal  
Waltham, MA  
San Mateo, CA  
75 existing portfolio companies



## Growth Areas for Massachusetts

|                                 | <u>Anchor Companies/Employers</u> |
|---------------------------------|-----------------------------------|
| 1. Mobile                       | • Starent, Quattro                |
| 2. Video                        | • Akamai , SeaChange, Brightcove  |
| 3. Cloud Computing              | • EMC, Citrix                     |
| 4. Open Source                  | • Acquia, Black Duck              |
| 5. Healthcare IT                | • PhaseForward, Athena Health     |
| 6. Advanced Materials           |                                   |
| - Energy – Generation & Storage | • A123, 1366                      |
| - Lighting                      | • Color Kinetics, QD Vision       |

## Post-Recession Companies

1. Capital Efficient
  - Limited capital to prove thesis
2. Scalable Business Model
3. Crisp Customer ROI
4. Inexpensive Access to Customers
5. Scrappy Management

## Massachusetts' Strengths

Characteristics:

- Technically challenging
- Strong ROI
- Known customers
- Worldwide markets

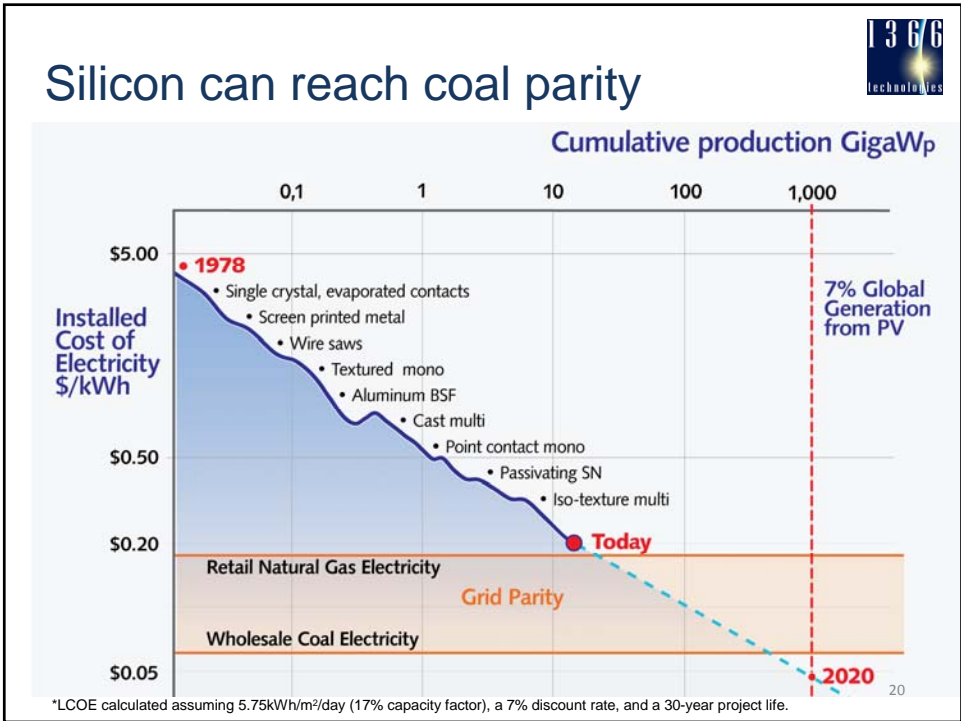
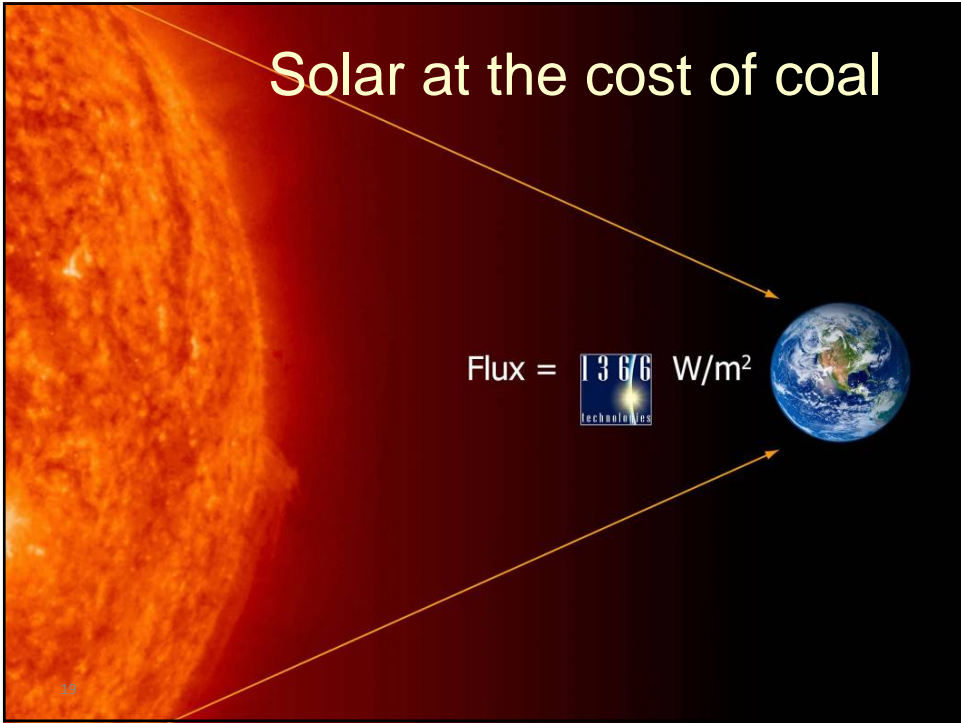
Sectors:

- Communications Equipment
- Infrastructure Software
- Advanced Materials
- Life Sciences

Massachusetts well positioned for the "new" economy



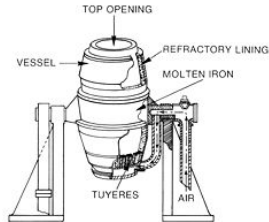
***Frank van Mierlo***  
***President***  
***1366 Technologies***



## We need disruptive manufacturing technologies

Invention: Bessemer Steel Process

Impact: Cut cost of steel by >60%,

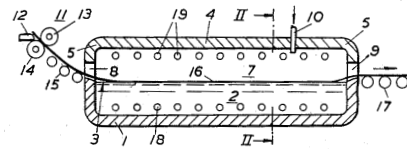


Invention: Pilkington Float Glass

Impact: Cut cost of glass by >60%,

Nov. 10, 1959 L. A. B. PILKINGTON ET AL

MANUFACTURE OF FLAT GLASS



**Need manufacturing innovations in Si PV**

## Direct Wafer

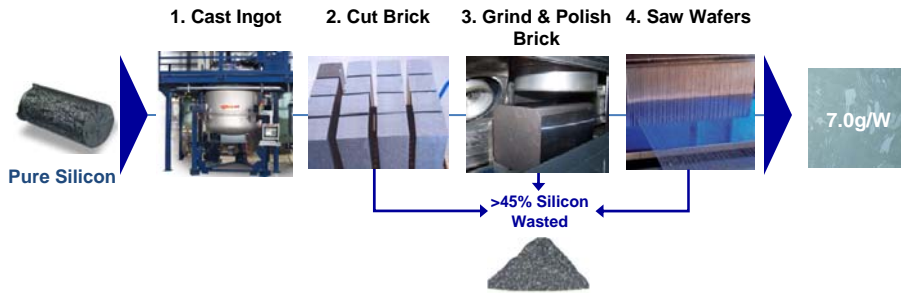
**60% cost reduction in the manufacturing  
of high quality standard Si wafer.**



# Direct Wafer



## Old



## 1366 Direct Wafer



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**One year of US oil imports buys enough solar panels to generate the electricity for all Americans to drive electric cars for 30 years.**



**Solar at the cost of Coal**





**Greg Herrema**  
*Senior Vice President and President of Analytical Instruments*  
**Thermo Fisher Scientific**


**ThermoFisher**  
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***The Shape of Things To Come:  
Massachusetts 2020***

**Thermo Fisher Scientific  
Company Overview**

**Greg Herrema**  
*President, Analytical Instruments*  
June 18, 2010



 The world leader in serving science

## Thermo Fisher Scientific Company Overview

We are the leading provider of analytical instruments, equipment, reagents and consumables, software and services for research, analysis, discovery and diagnostics.

### Scale

- \$10+ billion in revenues
- 35,000 employees in 40 countries
- 350,000 customers in 150 countries
- #234 on Fortune 500

### Depth

- Innovative products
- Applications expertise
- Scientific productivity partner

### Leading Brands

- Thermo Scientific: innovation
- Fisher Scientific: convenience

*The world leader in serving science*

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## An Increasingly Important Mission

Enabling our customers to make the world...

Healthier



Cleaner



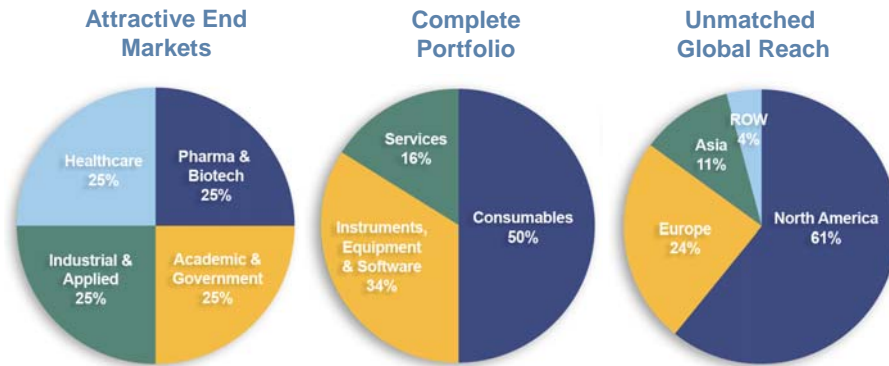
Safer



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## Attractive Revenue Profile



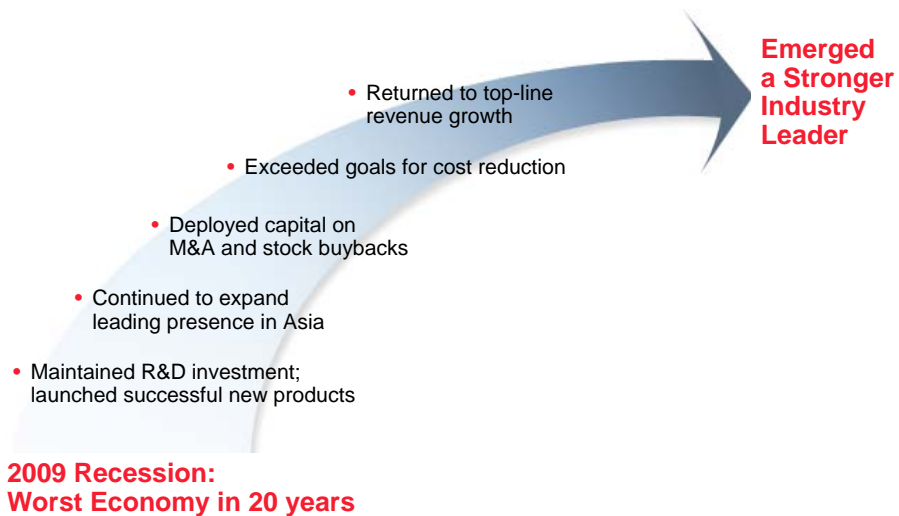
**Global leader in products and services for life sciences and healthcare**

NOTE: Based on 2009 revenues

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## Thermo Fisher Response to Recession



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## Favorable Macro-Economic Trends

| Macro Trends                                  | Thermo Fisher Scientific is Well-Positioned  |
|---|--|
| Aging population                              | More than 2/3 of revenue from life science and healthcare markets                          |
| Growth in emerging markets                    | Largest footprint in Asia and continuing to expand   |
| Increased concern for consumer product safety | World-class portfolio with strength in chemical, elemental and microbiological analysis    |
| Increased environmental regulation            | Leading technologies in air, water and radiation monitoring                                |
| Biopharma consolidation                       | Only supplier with depth of capabilities that enable customers to achieve merger synergies |

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## Thermo Fisher Scientific in Massachusetts

- **Agawam**
  - Research Market Channel
- **Beverly**
  - Environmental Instruments
- **Billerica**
  - Process Instruments
- **Cambridge**
  - Biomarker Research Laboratory
- **Franklin**
  - Environmental Instruments
  - Scientific Instruments
- **Milford**
  - Laboratory Equipment
- **Wilmington**
  - Process Instruments
- **Woburn**
  - Biosciences
- **Worcester**
  - Specialty Diagnostics

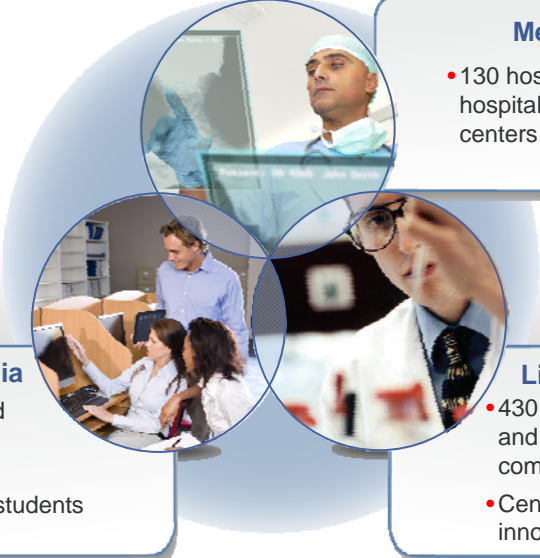
Global Headquarters: Waltham  
Total Employees in Massachusetts: **1,400**



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## Massachusetts: The Perfect Combination



**Medical**

- 130 hospitals, teaching hospitals and medical centers

**Academia**

- 100 colleges and universities
  - Research labs
- Nearly 450,000 students

**Life Sciences**

- 430 biotech, pharma and research product companies
- Center of technology innovation

33 SOURCES: Mass Biotech Council 2010; Mass Board of Registration 2009; College Board 2010; National Center for Educational Statistics, Fall 2010

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## Building on Our Industry Leadership



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The world leader in serving science

- Leveraging scale and depth
- Industry-leading brands
- Strong financial resources
- Commitment to innovation
- Expanding global presence

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