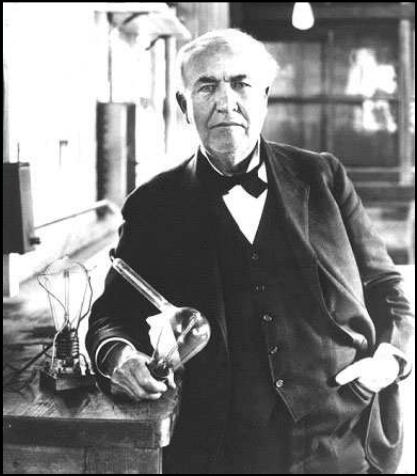# Where we Work

Bill Cheetham

Kai Goebel

General Electric Global Research

1

General Electric Overview

A 125-year old, $126B High-Tech Growth Company

Founded by Thomas Edison

2

General Electric Overview

A diversified technology, manufacturing and services company with a commitment to achieving world leadership in each of its key businesses

Aircraft Engines
Capital Services
Consumer Products
Industrial Systems
Information Services
Medical Systems
Plastics
Power Systems
Specialty Materials
Transportation Systems
NBC

3

Global Research Overview

Founded in 1900 in Schenectady, NY

One of the world's largest and most diversified industrial laboratories

4

General Research Locations

Niskayuna, NY – World Headquarters

Bangalore, India   Munich, Germany   Shanghai, China
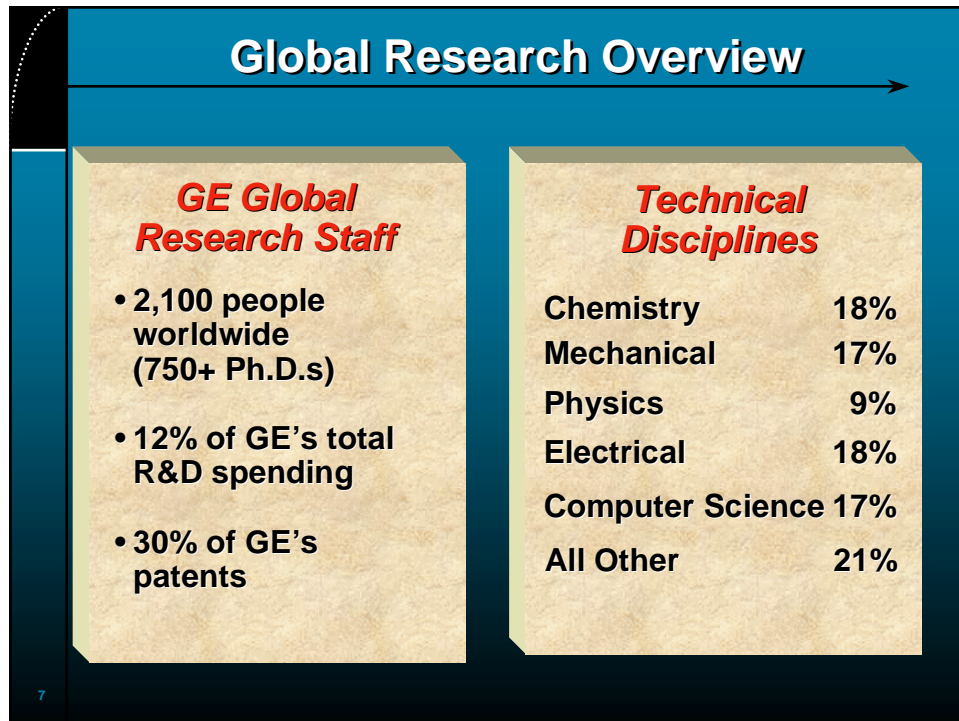
Global Research Organization

5

General Research Innovations

ARCTICA™

Innovations:
- Plastics
- Gas Turbines
- Appliances
- Medical Imaging
- Aircraft Engine
  Diagnostics

6

Global Research Overview

GE Global Research Staff

- 2,100 people worldwide (750+ Ph.D.s)

- 12% of GE's total R&D spending

- 30% of GE's patents

Technical Disciplines

Chemistry	18%
Mechanical	17%
Physics	9%
Electrical	18%
Computer Science	17%
All Other	21%

7

Service Algorithms Lab (22 people)

Mission:

SAL performs research and development in Knowledge Engineering and Advanced Algorithm Techniques in order to provide game changing innovations to our customers. We are a diverse team of experts in the collection, representation, visualization, analysis, and application of knowledge. We provide next-generation technology to solve classification, fusion, reasoning with uncertainty, modeling, and computational complexity issues. This creates value for GE and our customers.

Key Customers:
- All of GE
- Lockheed Martin
- Externals:
    - DARPA
    - NIST
    - Air Force
    - NASA

Core Technologies:
- Soft Computing
- Information Fusion
- Information Visualization
- Case-Based Reasoning
- Knowledge Management
- Multi Objective Optimization
- Forecasting

Professional Activity (2002):
- 40 US patents filed
- 20 US patents granted
- 16 Papers published
- 3 Adjunct Professors

Automating knowledge-based tasks and creating new knowledge-based services.

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