

Science For A Better Life

Challenges for the LT Industry

LT CEO Summit

June 26, 2013 / Laurie Miller, CIO Bayer MaterialScience AG

Personal snapshot

Laurie Miller

Bayer MaterialScience



I like

- “You miss 100% of the shots you never take”
- Watching my children play soccer
- Sports, particularly soccer, ice hockey and driving fast
- Traveling, reading, horseback riding
- Talking with people
- Passion & laughter
- Fairness



I dislike

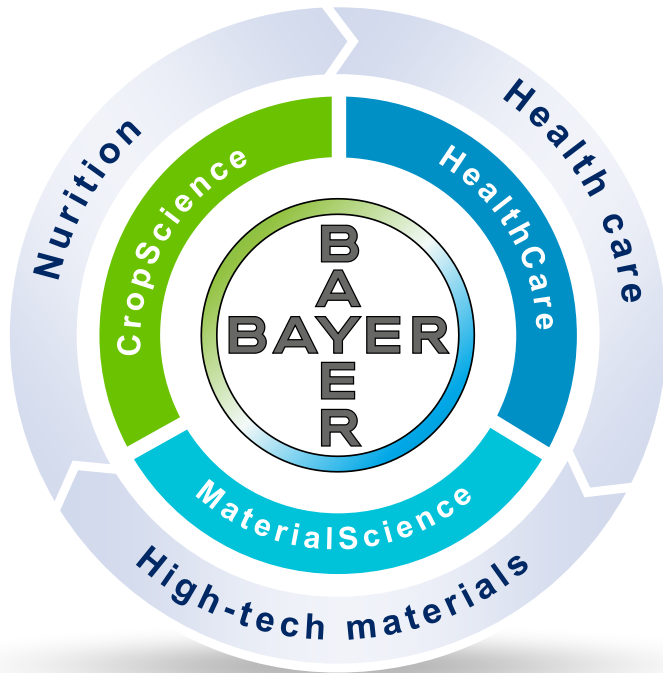
- Inequality
- Exclusion
- “I / we can’t do that”
- Snakes

My career highlights:

- Hampton High School, Pgh, PA, USA
- Robert Morris University, Accounting
- Deloitte & Touche
- Certified Public Accountant
- Masters of Business Administration (MBA), International Business & Marketing
- Bayer (20+ years)
 - Controlling
 - Marketing
 - O&I
 - Projects (carve-out, acquisitions, ProgramOne)



Bayer Overview



111,600 Employees

Full year sales: €39.8 billion

291 subsidiaries

R&D expenditures: €3.0 billion

As of December 31, 2012 / Employees: March 31, 2013



HealthCare

- ❑ Pharma
- ❑ Consumer Care
- ❑ Diabetes Care
- ❑ Animal Health



MaterialScience

- ❑ Polycarbonates
- ❑ Polyurethanes
- ❑ Coatings, Adhesives and Specialties

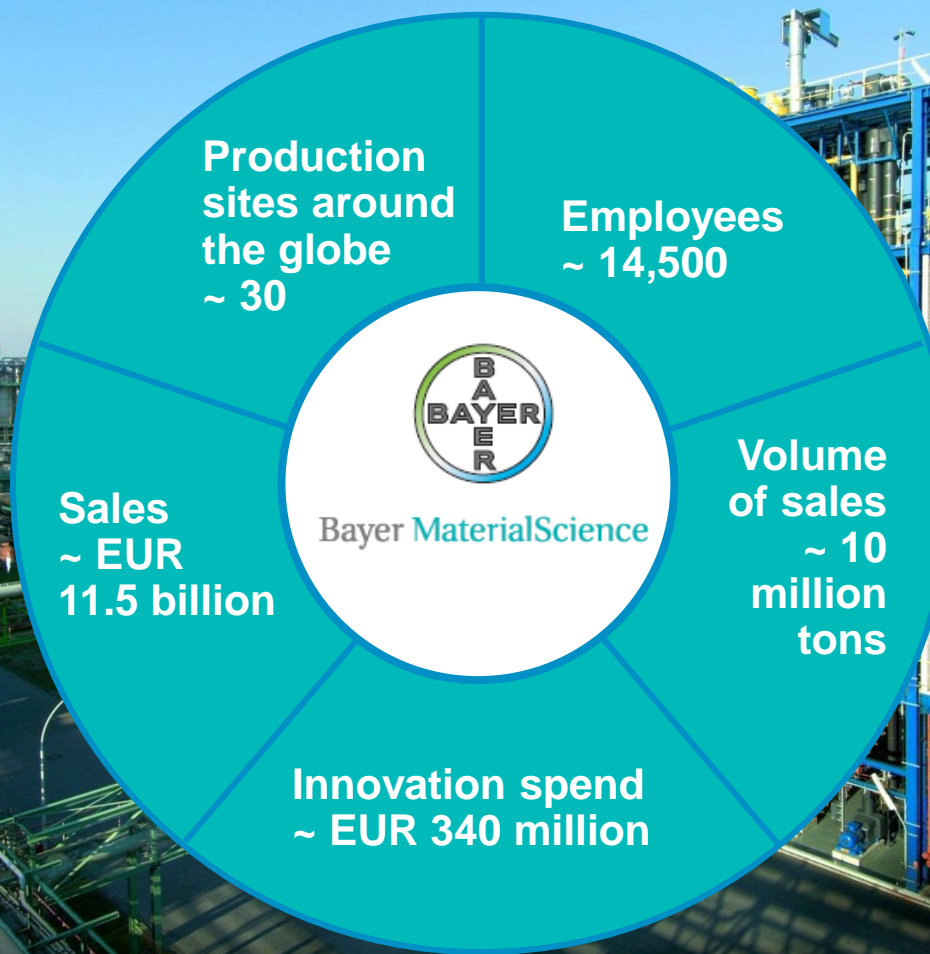


CropScience

- ❑ Crop Protection
- ❑ EnvironmentalScience
- ❑ BioScience



The World of Bayer MaterialScience



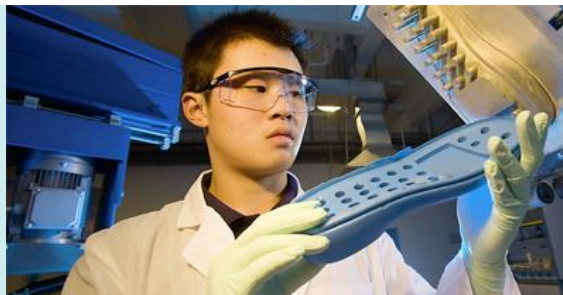
Figures 2012

Bayer MaterialScience

Commodity business in a highly competitive environment

Polyurethanes

- Polyurethane is a foam material with wide variation of tailored properties
- Rigid foams are used for insulation in construction, refrigerators and other cold chain applications
- Elastic foams are used for furniture, mattresses, car and other vehicle seats
- Further applications in the automotive, sports and leisure industry



Polycarbonates

- Polycarbonate is a transparent, tough and heat resistant performance material
- Application in automotive (i.e. for weight reduction)
- Construction (i.e. integrated heat and light management)
- Electronics & IT
- CD/DVD/Blu-ray



Coatings, Adhesives, Specialties

- Input materials for coatings, adhesives, i.e.
 - solvent-reduced
 - solvent-free
- Coatings for vehicles, industrial coatings, corrosion protection
- Adhesives for furniture, shoes and vehicles



Bayer MaterialScience – Strategy

Key Building Blocks



Operational Excellence

Cost efficiency through technology leadership

Industrial Marketing & Innovation

Additional market growth and value through new marketing and innovation approaches

Global Business Platform

Cost optimization through standardized processes.



Our key building blocks to realize the strategy

1. Low Cost Leadership
2. Reduction of complexity
3. Global business and IT processes
4. Project and portfolio management across regions
5. Market and customer orientation
6. Global environment for innovation based on leading technologies
7. Open and interactive communication and collaboration
8. Sustainable solutions that add value

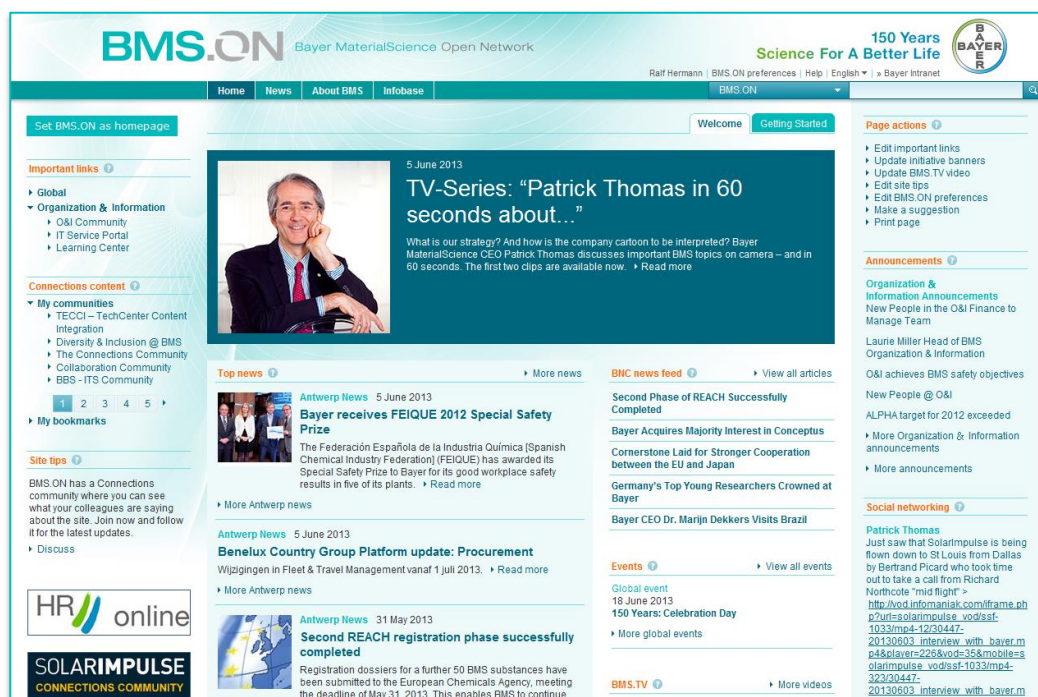




Innovative Solutions

such as Bayer MaterialScience Open Network (BMS.ON)

- Consolidated 30 intranet sites to one single global portal.
- Created a portal where users from all around the world can choose the local, regional and global information they want and need.
- Eliminated duplications of content, infrastructure and effort.
- Obtained a paradigm shift away from centrally controlled information towards end-user generated information in up to 11 different languages.
- Fostered workgroup collaboration and corporate social networking.
- Reduced hidden costs by decommissioning intranet sites and content management systems, but supporting 11 languages is slow and expensive.



BMS.ON

equals Unified Information Access



“Unified Information Access will remove barriers to the access, use and understanding of information using highly scalable platforms that integrate large volumes of unstructured, semi-structured and structured information into a unified environment for processing, analysis and decision-making. Unified Information Access will be built on hybrid architectures that combine database, search, reporting, visualisation and translation technologies.

Intelligent multilingual tools support Unified Information Access in any language and across languages.”

[LT-INNOVATE.EU, An Industry Vision, page 9]

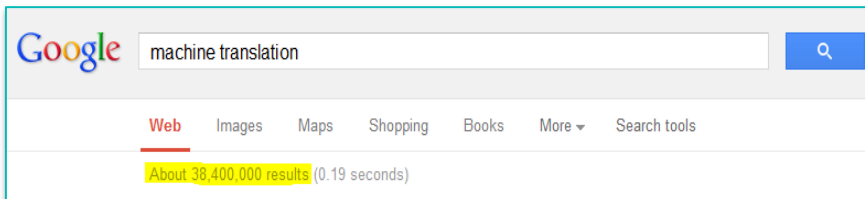


BMS.ON already contains several “intelligent” tools e.g. semantic tagging, content clustering, taxonomies, ontologies and analytics.

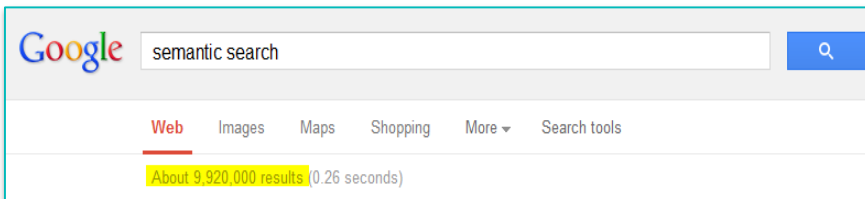
I went searching for LT tools and services and found...

Search

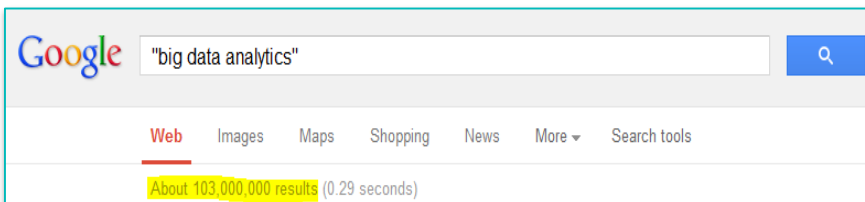
Findings



- 38.4 Mio results
- Confusingly complex range of tools / services
- Free tools on the web but unsatisfactory quality
- Compatibility with Sharepoint 2010?



- 9.9 Mio results
- Impressing information how Google and other specialists will change everything on the web
- What does it mean for our business?



- 103 Mio results
- Big data analytics will transform companies
- How can we implement in our applications and IT services?

Our Questions ⇔ Your Challenges

In our world of opportunities and challenges driven by globalisation, harmonization, standardization, communication and collaboration across boundaries, we ask you...

- How far away are we from automated translation tools of acceptable quality?
- Where is your guidance for customers who do not have the resources to dive deeply into technical details?
- Can you ensure compatibility with the big software manufacturers (Microsoft, IBM, Oracle, SAP...)?
- Will you form partnerships with global IT players?
- Where is your vision for cost efficient solutions e.g. for the Chemical Industry?
- When will you overcome national fragmentation?
- When will you promote industry and software standards?





Science For A Better Life

Thank you!



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