IT at ArcelorMittal

Linking IT Strategy to Business Strategy

How to be agile and responsive to business needs, while being low cost and reliable in delivering. Combining business intimacy and knowledge of internal teams with advantages of global sourcing. And why one single ERP cannot be the solution for ArcelorMittal.

Patrick Vandenberghe, Group CIO - ArcelorMittal

SAP M&M Forum, September 2012.

ArcelorMittal at a glance

June 2011

The world’s number one steel company

- ArcelorMittal is the world's number one steel company, with over 262,000 employees in more than 60 countries. ArcelorMittal is the leader in all major global steel markets, including automotive, construction, household appliances and packaging, with leading R&D and technology, as well as sizeable captive supplies of raw materials and outstanding distribution networks.

- An industrial presence in 20 countries exposes the company to all the key steel markets, from emerging to mature, positions it will be looking to develop in the high-growth Chinese and Indian markets.

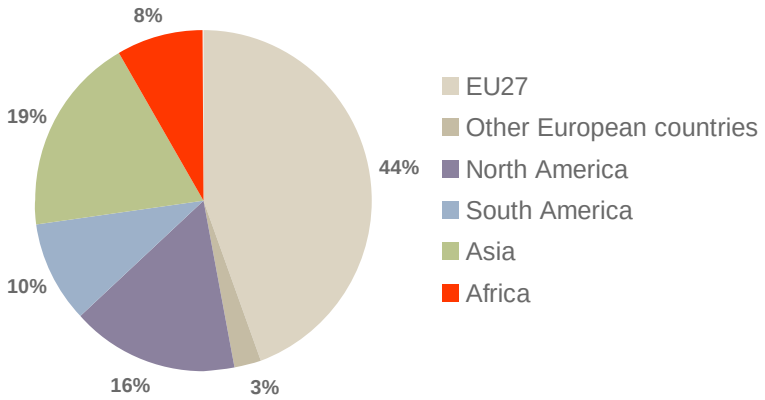
- ArcelorMittal values scale, vertical integration and product diversity. Approximately 35% of our steel is produced in the Americas, 47% in Europe and 18% in other countries such as Kazakhstan, South Africa and Ukraine.

Underpinning all our operations is a philosophy to produce Safe Sustainable Steel

ArcelorMittal 2010 key figures

	2009	2010*
Sales (US$ billion)	61.0	**78.0**
EBITDA (US$ billion)	5.6	**8.5**
Operating income/ /(loss) (US$ billion)	(1.5)	**3.6**
Net income/ (US$ billion)	0.2	**2.9**
Shipments (million tonnes)	69.6	**85.0**
Steel production (million tonnes)	71.6	**90.6**

Geographical allocation of employees in 2010



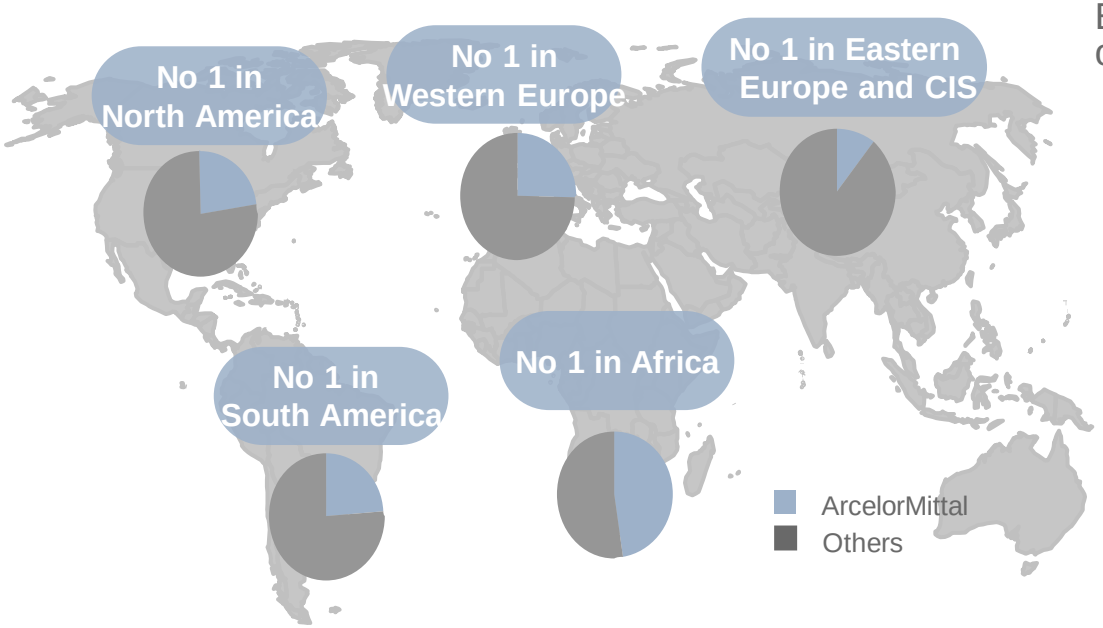
262,000 employees in more than 60 countries

An integrated leader of the metals and mining sector

*Successful spin–off of stainless steel business (Aperam) following shareholders approval on January 25, 2011. Accordingly stainless steel results have been shown as discontinued operations and all periods reported (results and operational KPI's) have been recast

Execute organic growth options

Market position and market share estimates by region



Emerging markets continue to offer the best organic growth potential for ArcelorMittal

- Superior demand growth potential
- We have the platform and experience:
  - Already the steel market leader in Latin America, CIS and Africa
  - ArcelorMittal focus areas for growth are Brazil and India
  - We also have JV projects in the Middle East and China

Industrial and commercial network focus on market sustainability and growth opportunity

ArcelorMittal main markets

- **Automotive**
  - Worldwide no.1 supplier for automotive steels with a leading market share of 19%.
  - Worldwide industrial presence via about 40 coating lines in Europe, North America, South America and Africa.

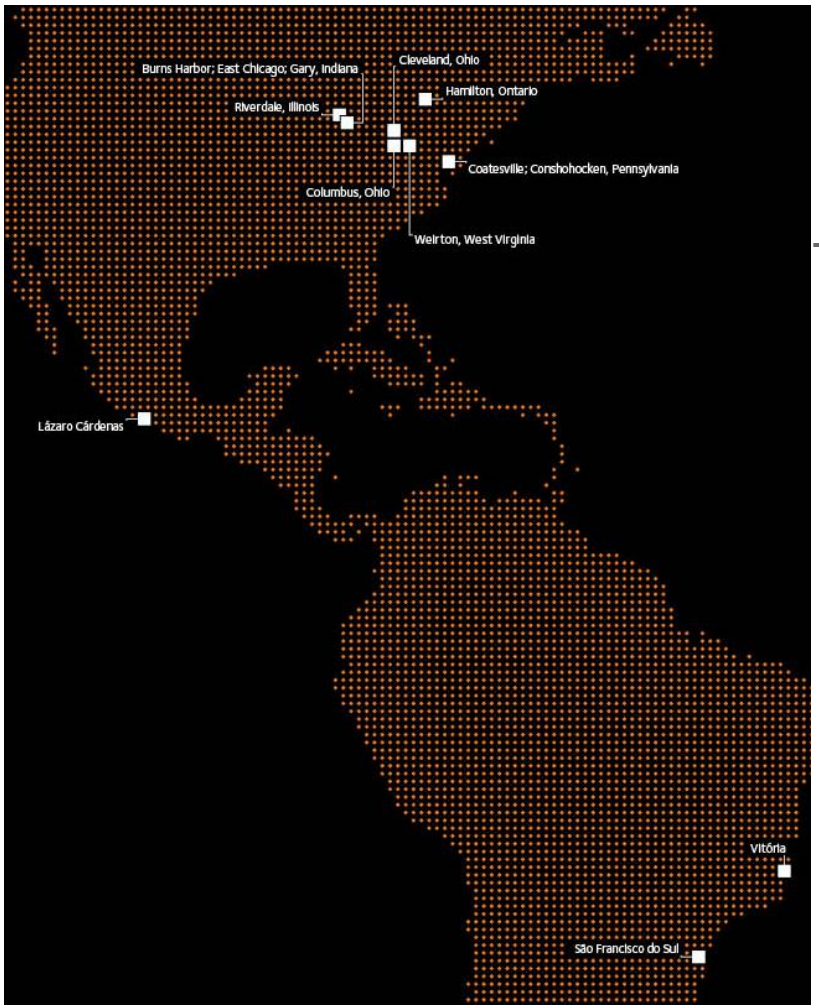
- **Construction**
  - The largest market for steel: a 620 million tonnes steel consumption market comprised of diversified products.
  - Emerging markets represent more than 50% of the square meters constructed each year globally.
  - World leader with over 29 million tonnes of products delivered in 2010 to the building and construction industries.

- **Packaging**
  - New packaging concepts constantly designed to achieve differentiation by steel solution (bottle can, easy open end...).
  - Complementary industrial network in Europe with production plants and service centres near customers' can making facilities.

The leader in automotive steels

STEEL

Flat Carbon Americas

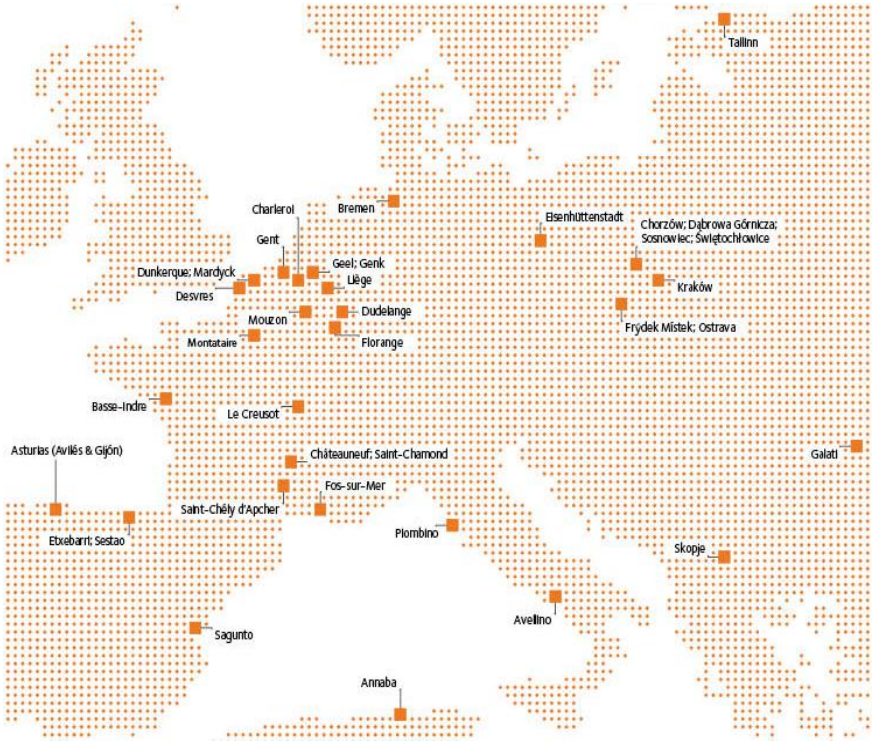


- 2010 sales: $19.3 billion
- 2010 shipments: 21 million tonnes

- Products: slabs, hot-rolled coil, cold-rolled coil, coated steel products and plate.
- Main customers: distribution and processing, automotive, tubular products, construction, packaging, and appliances.
- Production facilities located at 8 integrated and mini-mill sites in 4 countries.
- Operations in Canada, the United States, Mexico and Brazil.

Leading producer of advanced high-strength steels

Flat Carbon Europe



- 2010 sales: $25.6 billion
- 2010 shipments: 27.5 million tonnes

- Products: hot-rolled coil, cold-rolled coil, coated products, tinplate, plate and slab.
- Main customers: automotive, packaging and general industries.
- Production facilities located at 15 integrated and mini-mill sites in 6 countries.

Complete portfolio of flat steel products serving all customer segments across Europe

Long Carbon Americas and Europe

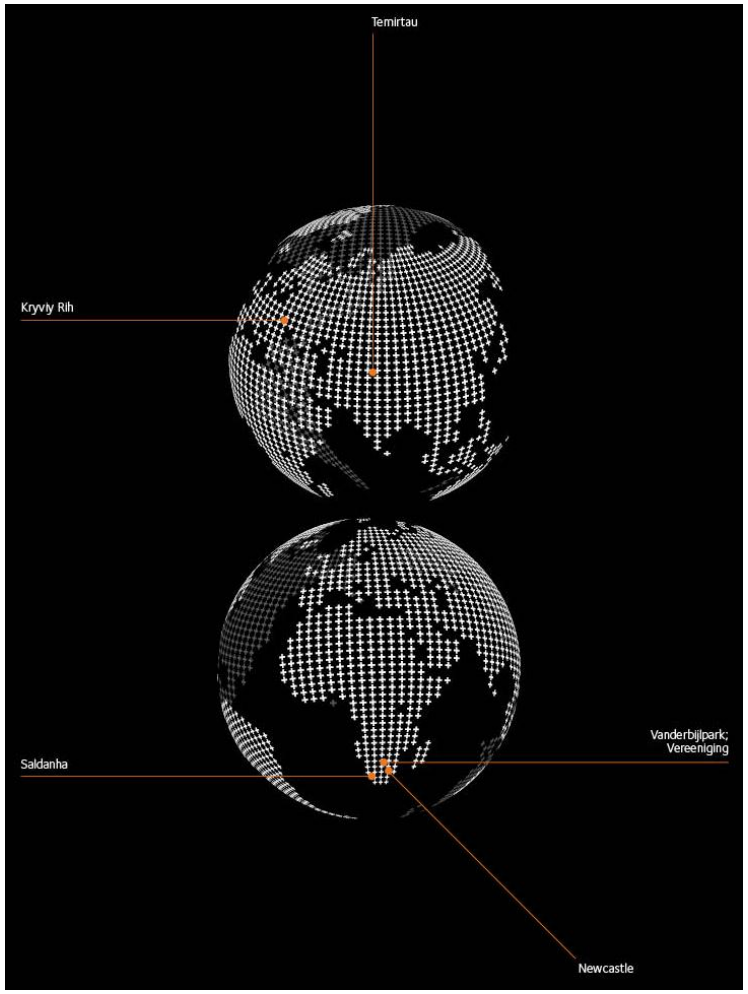
- 2010 sales: $21.3 billion
- 2010 shipments: 23.1 million tonnes

- Products: sections, wire rod, rebars, billets, blooms, wire drawing and pipes and tubes.
- Production facilities in Long Carbon Americas located at 15 integrated and mini-mill sites in 6 countries.
- Production facilities in Long Carbon Europe located at 17 integrated and mini-mill sites in 9 countries.

Long carbon plants in Europe and the Americas producing a wide range of long products

Wire drawing facilities are not shown on map

Africa, Asia and CIS (AACIS)

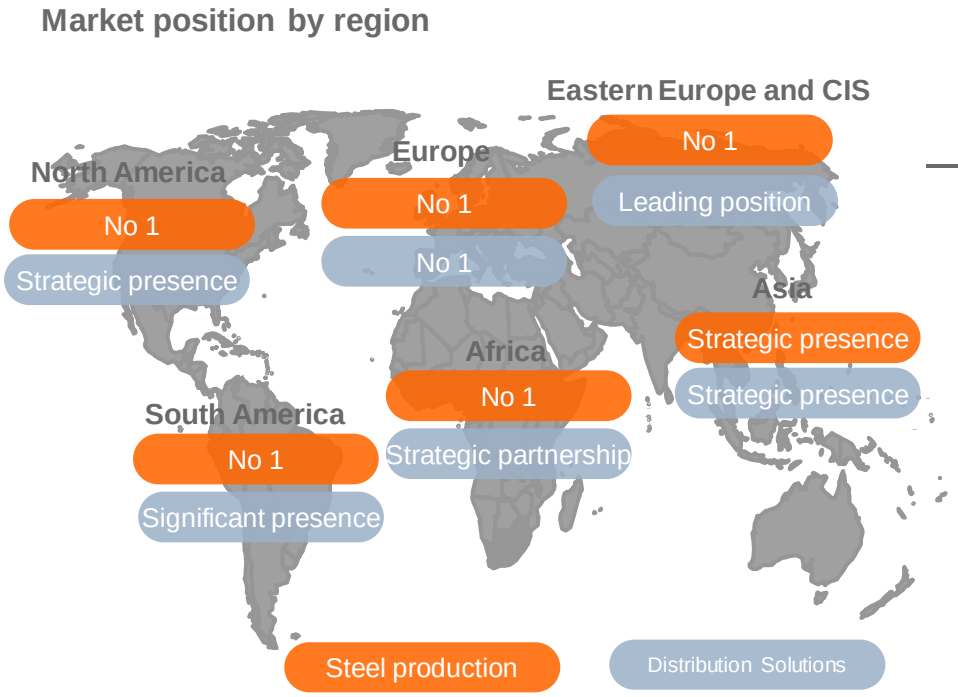


- 2010 sales: $9.8 billion
- 2010 shipments: 13.3 million tonnes

- Products: combination of flat and long products.
- 6 flat and long production facilities in 3 countries.

Large low-cost production base and extensive footprint

Distribution Solutions

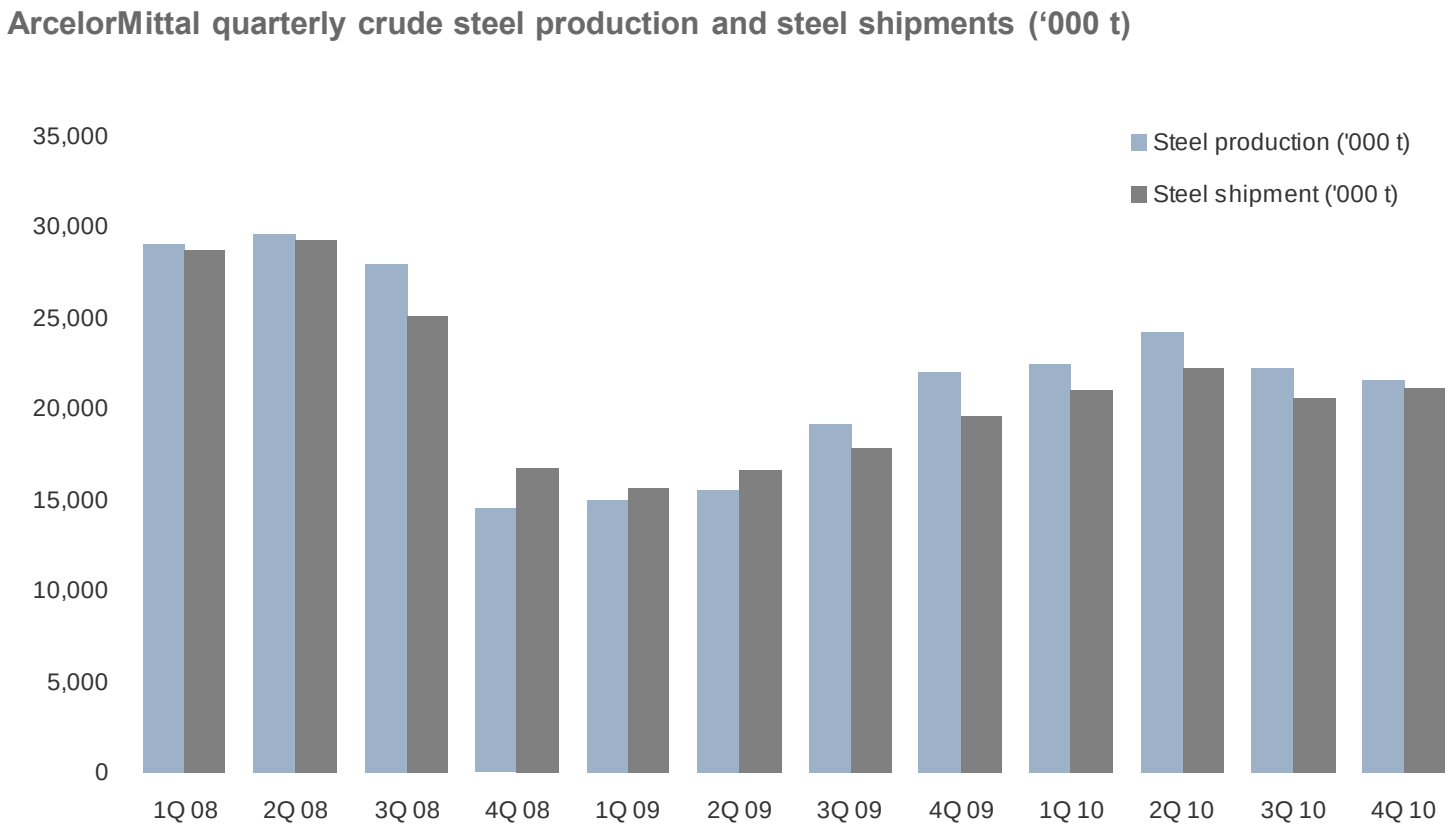


- 2010 sales: $15.7 billion
- 2010 shipments: 18.2 million tonnes

- Network of more than 500 units in 30 countries.
- Value-added and customised steel solutions through further steel processing to meet specific customer requirements.
- Activities: steel processing, technical consultancy, engineering, provision of construction and foundation solutions for infrastructure projects.

The world's largest steel distributor and processor

Steel production and shipments

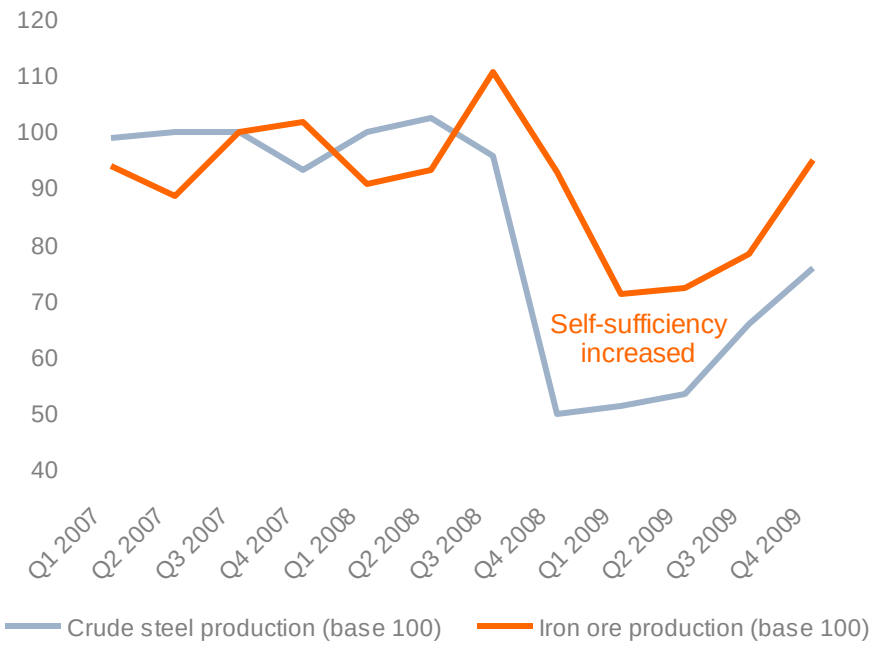


While our steel production declined 3% in 4Q10 v 3Q10, our steel shipments increased by 3%

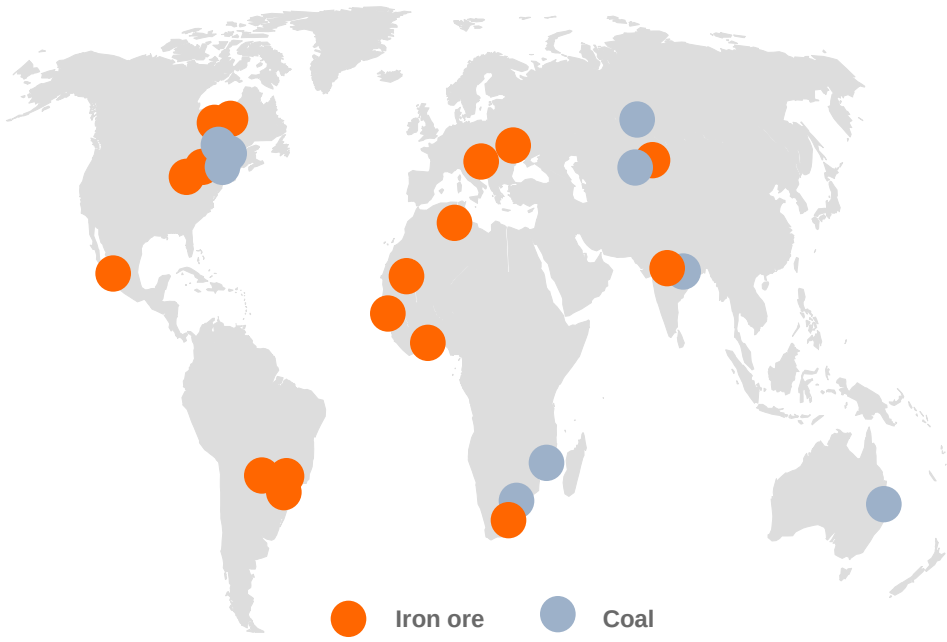
Investing in mining assets for an optimum level of self-sufficiency

ArcelorMittal

ArcelorMittal steel and iron ore production



Key mining assets and projects



Expansion and Greenfield projects in Liberia (iron ore), Canada (iron ore) and the US (coking coal)

ArcelorMittal

ArcelorMittal IT

Linking Sourcing to IT Strategy to Business Strategy

Vision and long-term objectives for IT

Vision

- To actively support and enable Business Strategic and Continuous Improvement objectives
- To constantly optimize the value/cost ratio of IT services, by transforming IT into a managed service and adopting IT Innovation
- Provide to our employees opportunity for growth and development

Strategic Objectives

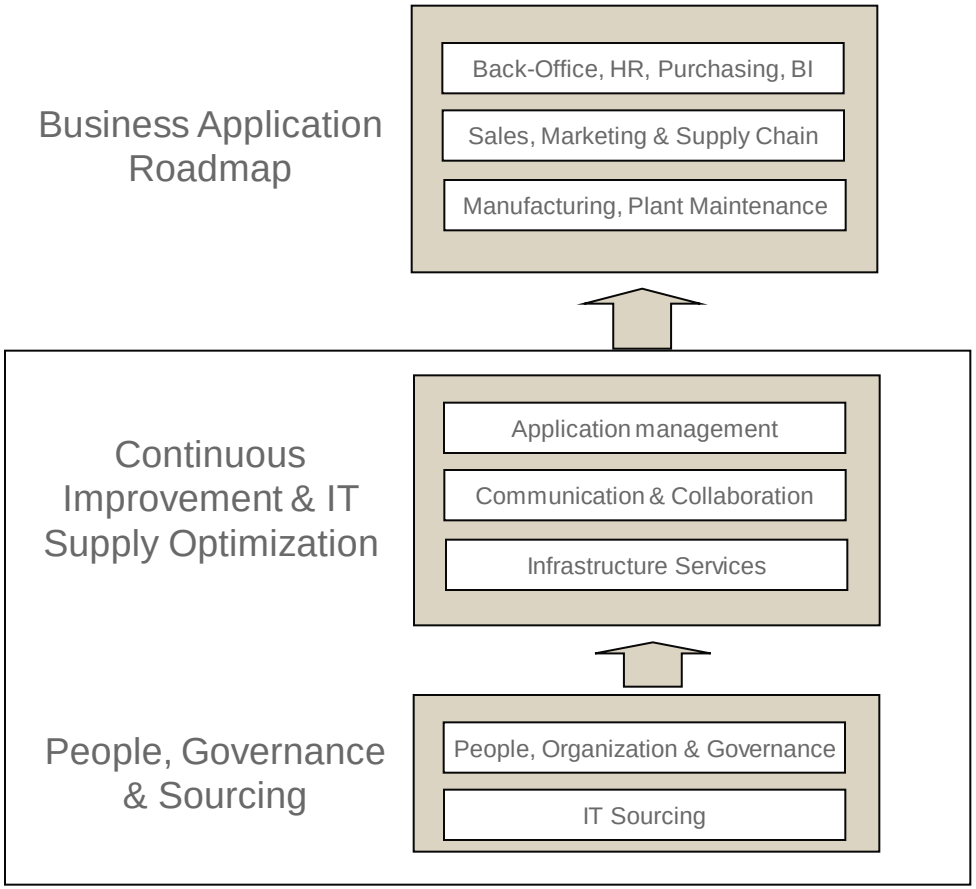
Qualitative

- Be the "IT partner" of choice for our Business Units and Corporate functions.
- Do the right things for the business
  - Be a process- & business model custodian
  - Be aligned and closely linked through a federated model with IT roles deeply embedded in the business organization
- Improve quality in IT process and in deliverables/solutions
  - Project Management & IT lifecycle management
  - "IT as a service" model
  - Adopt new technology for a better service

Quantitative

- Continuously optimize our operating costs
- Capture benefits from global sourcing

Key elements of IT strategy



The solutions and value we provide to the business

The way we act as a service provider and optimize our costs and quality

The future for our people and our organization.

The 'Make or Buy' decisions

Key Success Factors for IT in the current world

- **Enterprise Architecture**
  - What systems do we need?
  - At which level (company wide, business unit, country, plant, …)
  - How do systems relate to each other and integrate
  - Application Architecture, Infrastructure Architecture, Information- & Data Architecture.

- **IT Operating Model: IT Governance , Organization , Jobs and Skills**
  - Who decides on what
  - How to organize IT?
  - Types of Jobs, skills, careers, …

- **IT Sourcing Strategy**
  - Make or Buy
  - Home made developments, Package based, Component Based, …
  - Offshoring, Outsourcing, Cloud Computing, ….

The ArcelorMittal Business Operating Model:

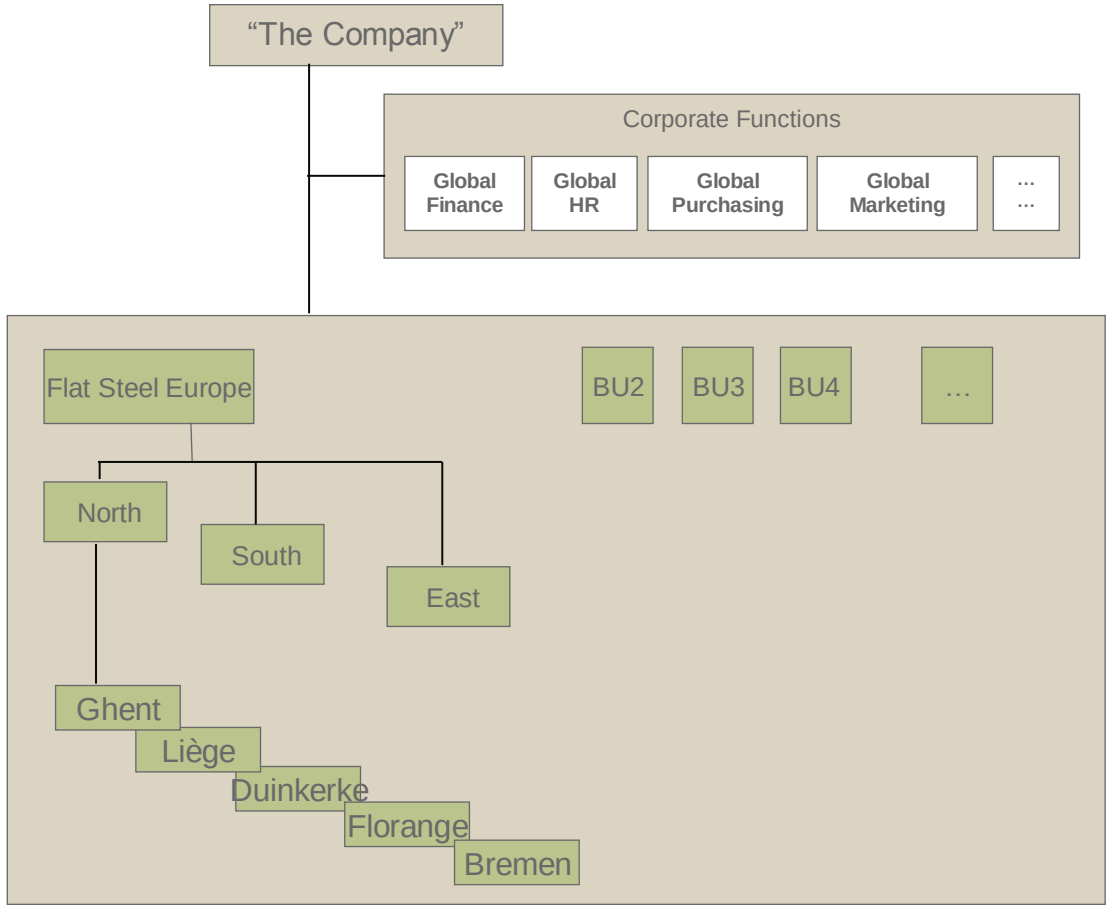
a multi-level **federated model** to balance central control and optimization with local responsibility and authority.

Global Finanace, Consolidation, Treasury
Group Controlling
Global Purchasing
Global Human Resource management
Global Marketing
Legal and Tax
…

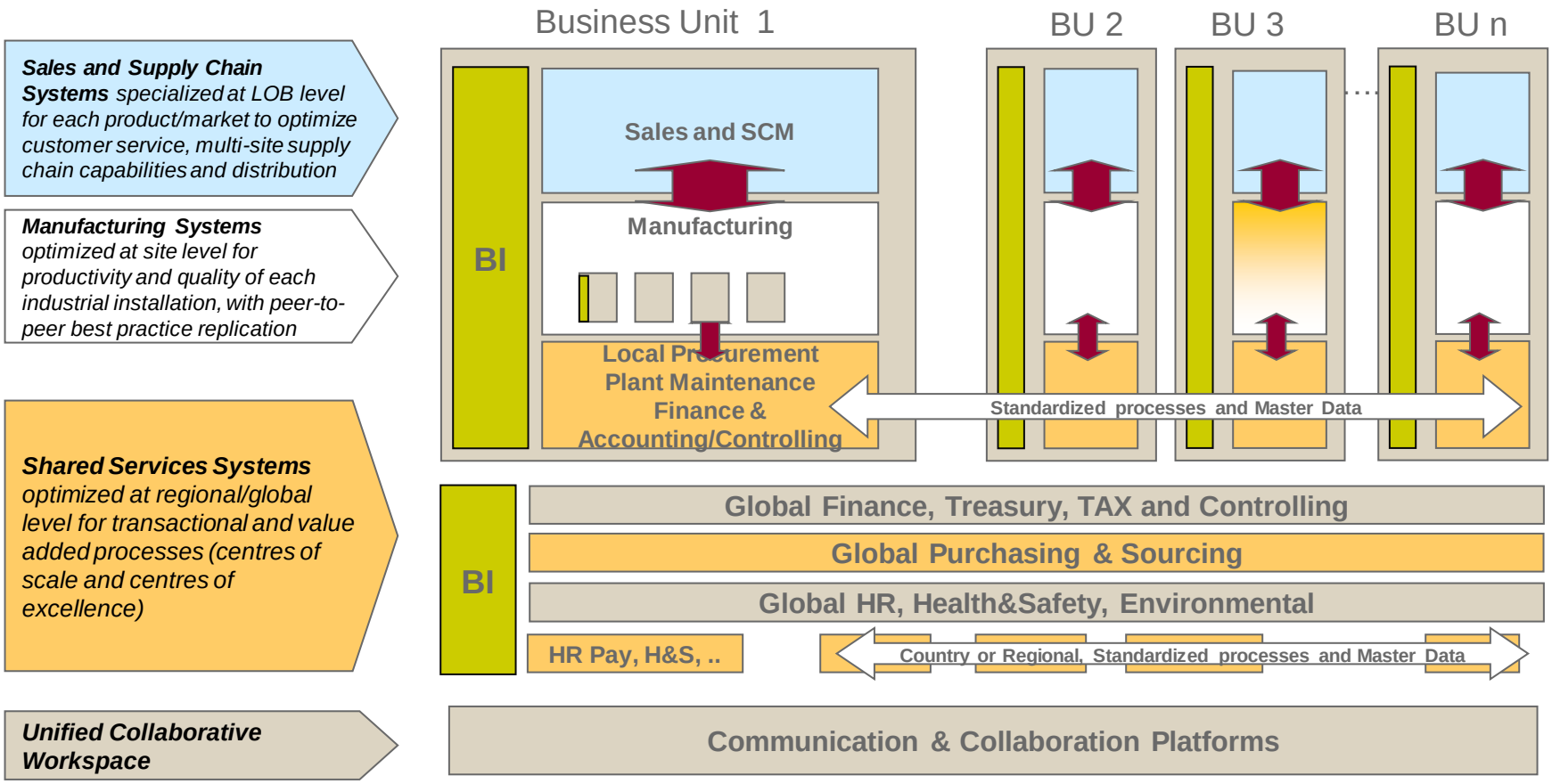
Sales
Supply Chain
- Capacity Planning
- Demand Planning
- Sales and Operations Planning

Outbound Logistics and Shipping…

Plant and Equipment planning and scheduling
Manufacturing
Product Warehouse and Quality management
Process Control and Automation
Plant Maintenance
Procurement
Energy Management
Local finance and industrial controlling

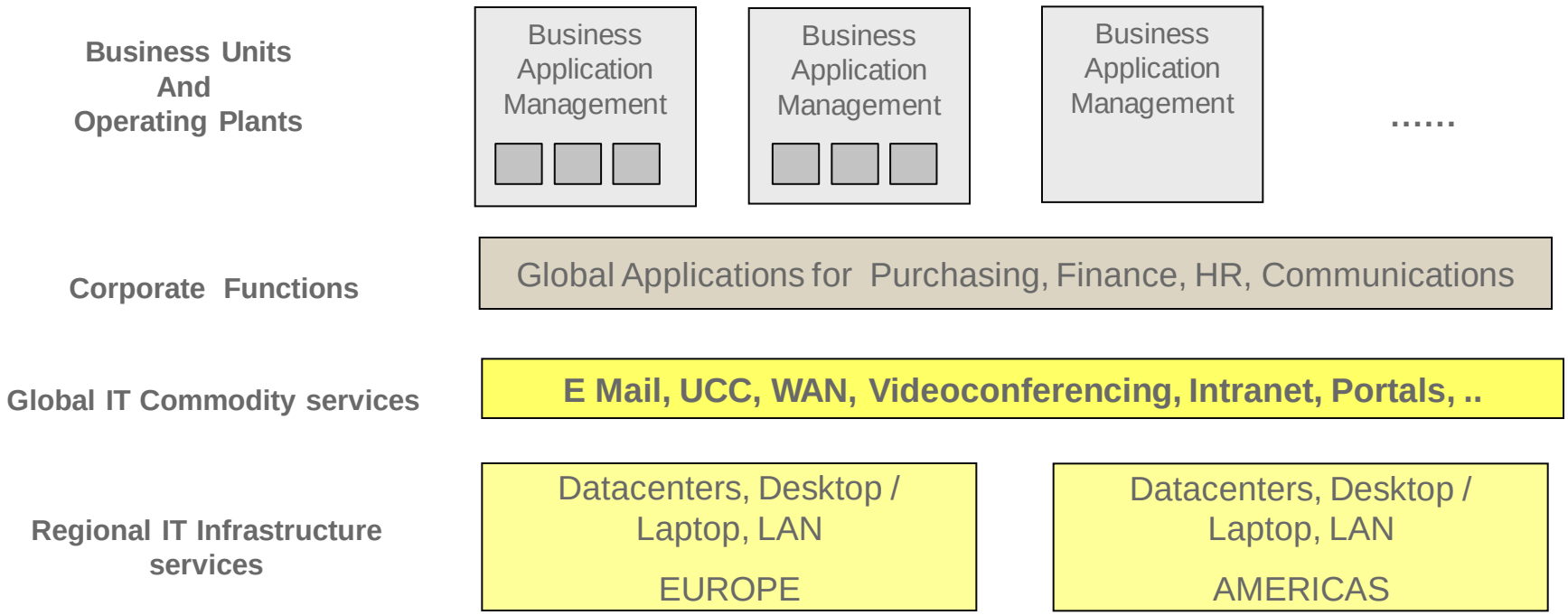


IT Strategy: Business Application Roadmap:
The ArcelorMittal Target IT Enterprise Architecture

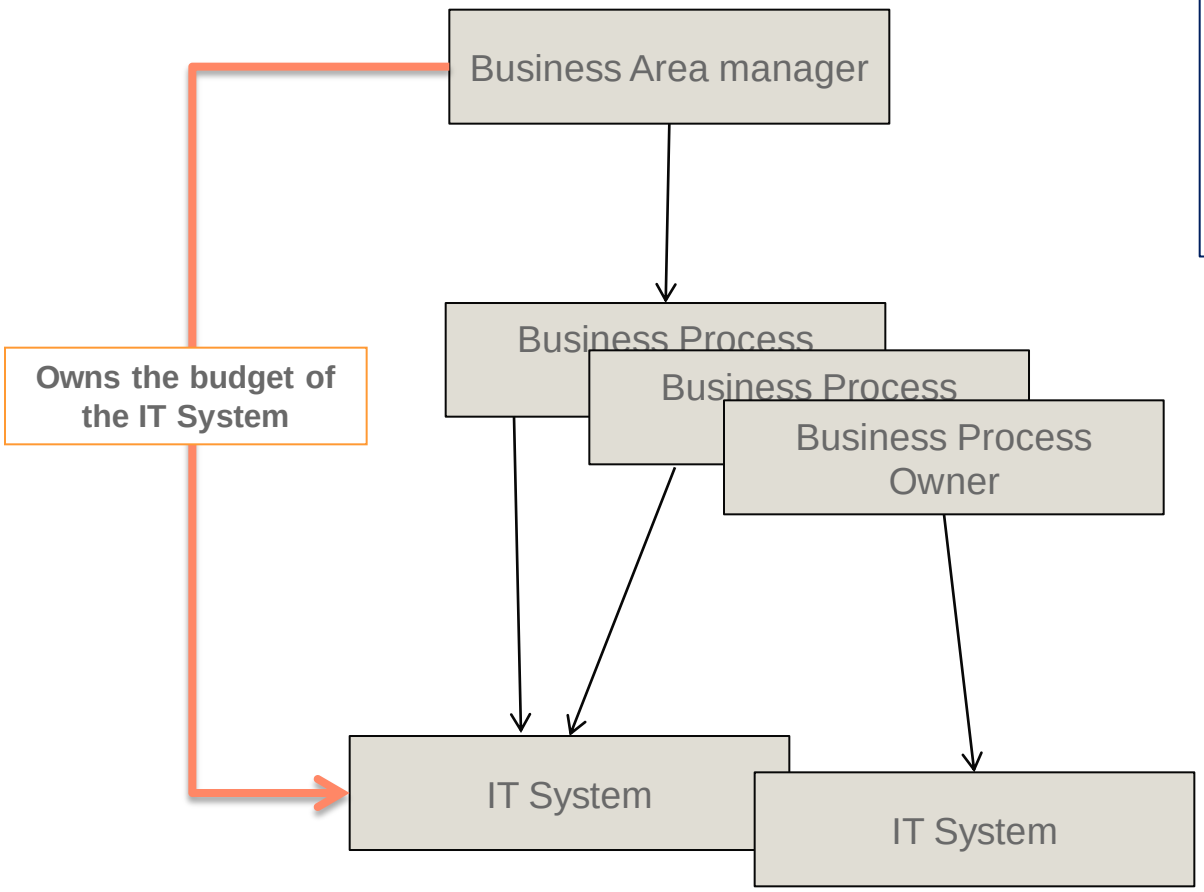


Key Characteristics of IT Operating Model

- IT Operating model mirroring business operating model, with aligned governance
- Federated IT model with Strong Accountability and Empowerment of Business Units.
  - Core Business Application by Business Unit , manufacturing by clusters of units
  - Global application layer to support some global business processes in the area of HR, Finance and Controlling, Purchasing, Legal and Communications.
- Global and Regional model for commodity and other Infrastructure services, serving Business Units and Operating Plants



The Principles of IT Ownership



- A head of a Corporate Function
- A head of a Business Division
- A head of a Plant
- A head of a department in a Plant
- ….

Sets the business objectives and business operating principles.

Decides how a business process or business activity should be working, and therefore is the **customer of the Information System**

An IT system is designed and built to support a series of Business Processes in an integrated way.

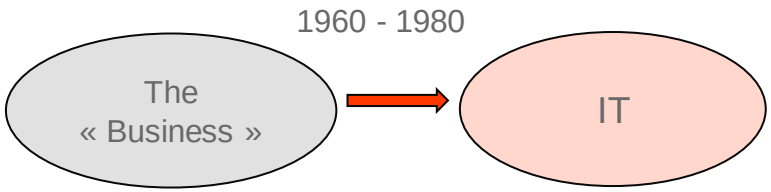
Organize and Govern for alignment and agility - How we do it at ArcelorMittal.

- IT has to **organize** itself in **alignment with the business model**, and focus its internal competencies on the business side,
  - **CIO per Business Unit**, with strong IT Demand Network acting as Business Process custodians
  - Every System has a **Business Owner, owning also the IT budget**
  - IT operates the IT Budget on behalf of the Business Owner
  - **IT Investments are managed with same rigor as Industrial investments** and compete for same money.

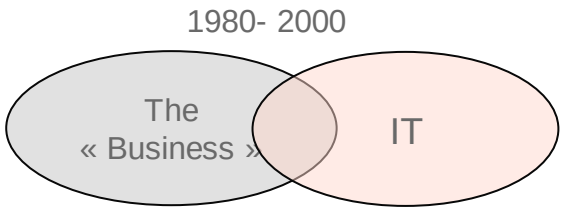
- IT roles are split in DEMAND and SUPPLY roles
  - **IT DEMAND roles**:
    - Are embedded in the business organization, and organized along the company organization.
  - **IT SUPPLY roles**:
    - Design , build and operate IT systems
    - Roles are moving to third party service providers,

The changing role of IT:

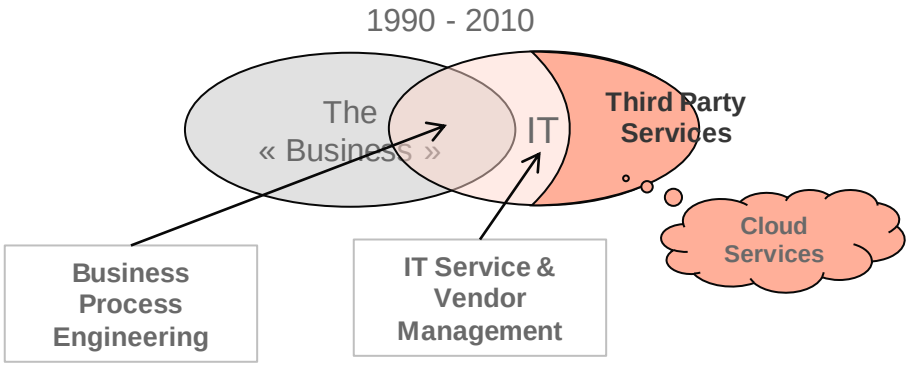
from a technology center to a business enabler and business change agent.



- IT as an Internal Department,
- Focus on Managing Technology
- 20% business interaction, 80% IT Technical work (design, program, test, integrate, …)

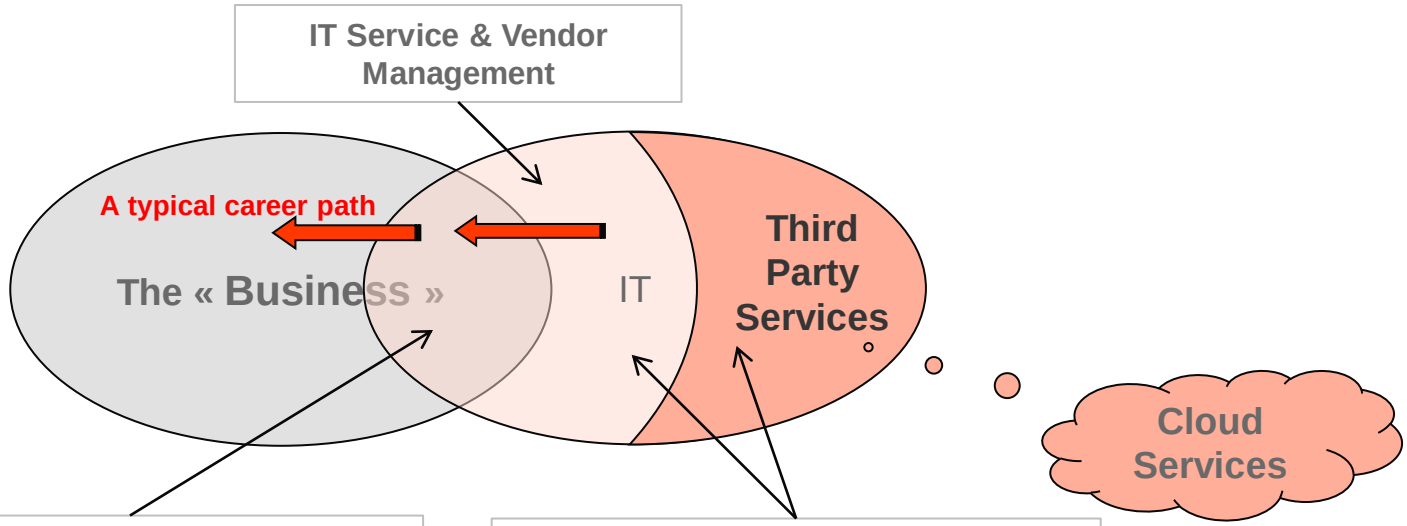


- IT becoming a Business Partner,
- Focus shifts to more Business Interaction and Collaboration
- 50% business interaction, 50% IT Work, using more standard products and solutions.



- IT as a Business Partner, closely aligned
- IT Technical work is more and more moving to external service providers.
- Application development based on configurable packages and standard solutions.
- Cloud Computing….

IT Jobs, Roles and Skills



IT Demand Roles

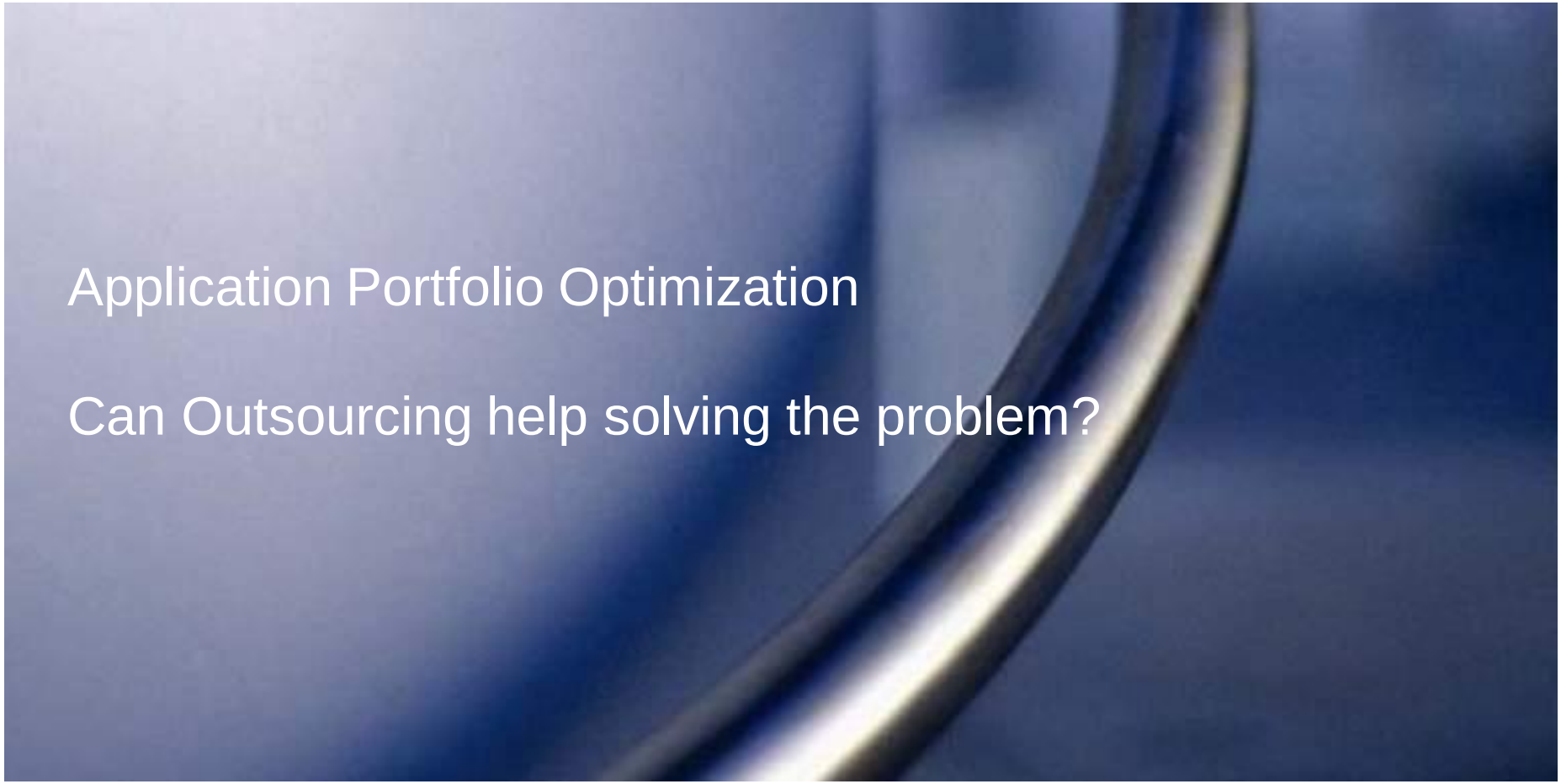
- Business Process Engineer
- IT Enterprise Architect
- Program manager
- IT demand Manager
- Change Manager

IT Supply Roles

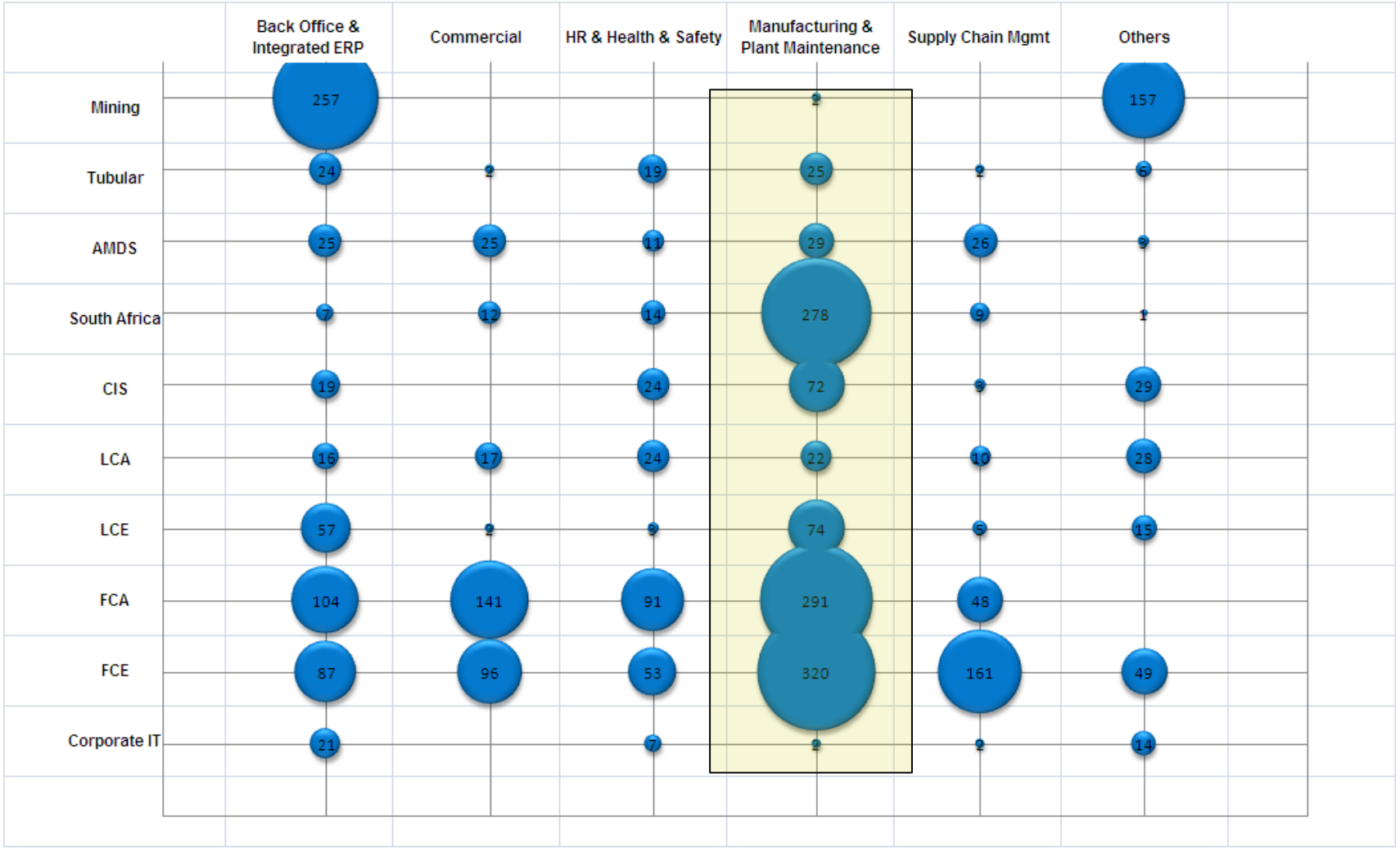
- IT Solutions Architect
- IT Project manager
- SAP expert
- Analyst Programmer
- Infrastructure Expert

Smart Sourcing for cost efficiency and flexibility: How we do it at ArcelorMittal.

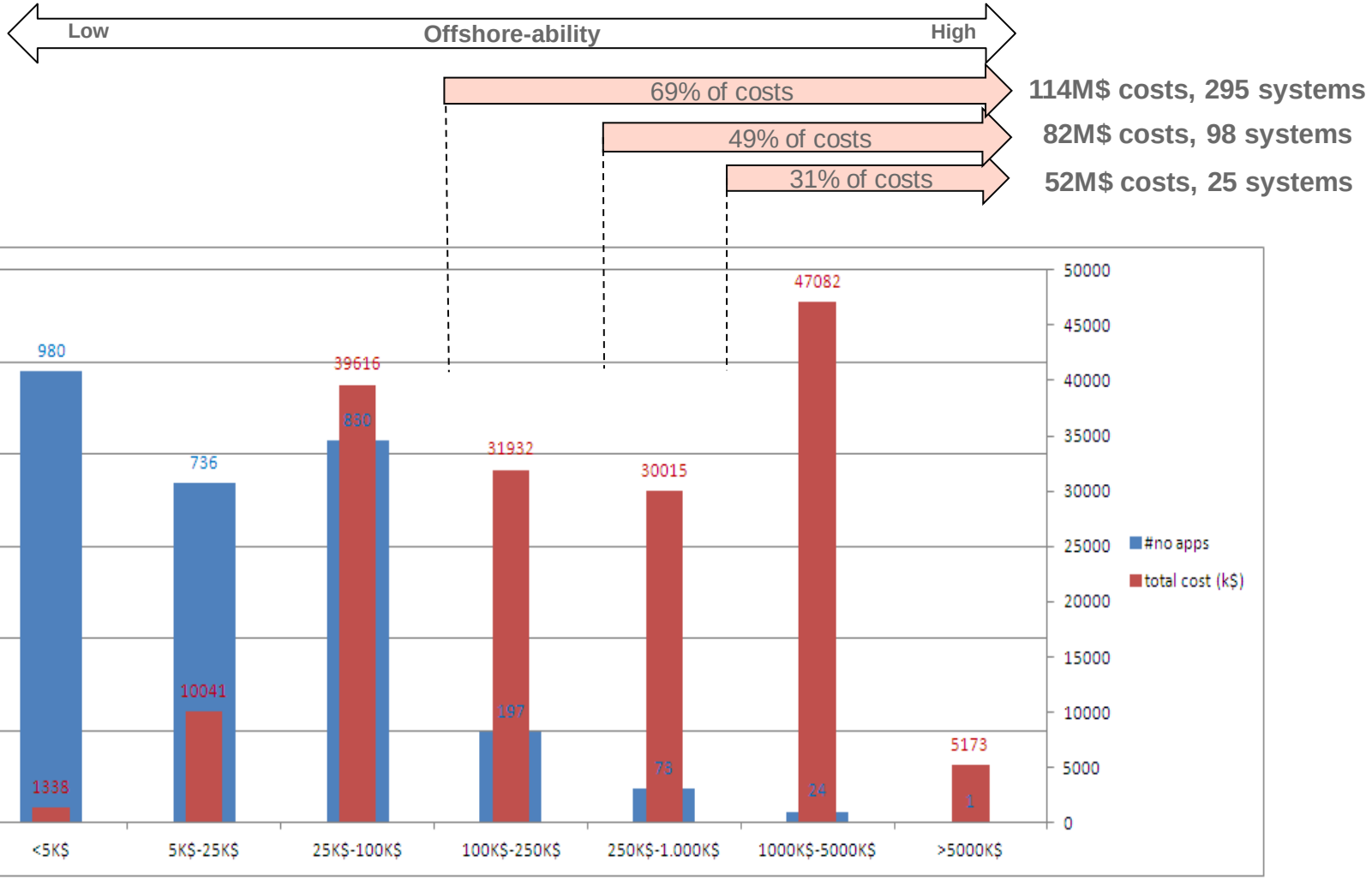
- **Infrastructure Services**:
  - Consolidate and Outsource on Regional Basis:
  - Europe, Americas, Asia, RoW (Rest of the World).
- **Commodity Services in the area of Communication and Collaboration:**
  - Email, Portals, Collaboration Platforms, Office, Unified Communication
  - Global Solutions at company level, based on Standard Market Offerings, moving into pure Cloud Service Model.
- **Application Management (Development and Maintenance**)
  - Keep strong Retained Teams, focus on Business Intimacy and -Knowledge
  - Keep organization aligned to Business Organization to support Process Ownership.
  - "SmartSource" with strategic partners for Application Maintenance, by Business Unit or by Major Business Area (HR, Finance, …)
  - Keep competitive sourcing for major new developments.


Application Portfolio Optimization
Can Outsourcing help solving the problem?

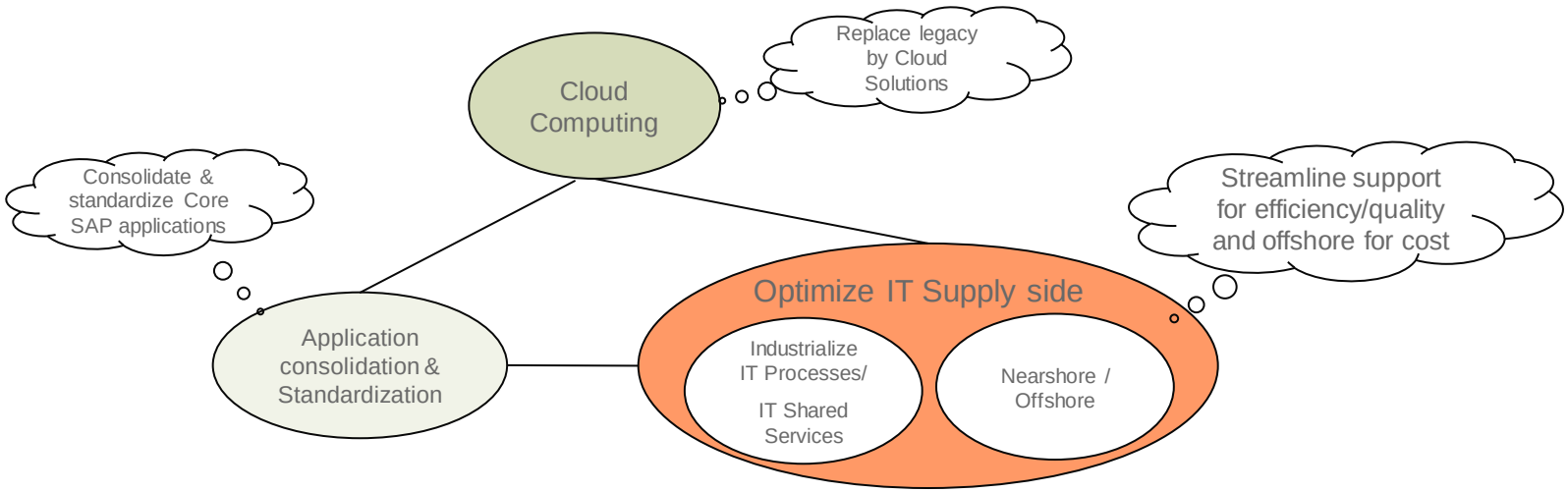
3000 Core applications have been identified, with high diversity in Manufacturing and Supply Chain area



Looking at Offshore-ability of the landscape:



APO: Application Portfolio Optimization:
activating different levers in parallel on different parts of the portfolio, combined into a single sourcing strategy



	Sourcing Strategy	
	In-sourced	**Outsourced**
Application Portfolio Optimization		
Consolidation & Standardization		
Cloud Computing		
IT Delivery - Industrialize - Shared Services - Nearshore/Offshore		

Any sourcing strategy/project should select and combine all possible levers, depending on the type of applications , in order to reduce complexity and costs, improve effectiveness and foster application consumerization and adoption.