

AGENDA

- Paranapanema Company
- Paranapanema IT
- The Problem
- Project Planning & execution
- Lessons learned
- Benefits
- Next Steps



PARANAPANEMA - COPPER & REFINERY SMETER IN BRAZIL

- Only integrated copper producer in Brazil
- Market Leader
 - 36% of domestic market share in volume sales
- Second largest Brazilian semi-manufactured copper maker (sheets, bars, tubes, fittings and copper alloys)
 - 34% of domestic market volume in sales
- Gross Revenue of \$4.0B
- Operations include producing single superphosphate and fertilizers
- 44% of total gross revenue from exports
- 5 plants in Brazil, headcount of 3k+ as of December 31,2010
- Owner of the brands: Caraíba Metals, Eluma and Cibrafértil

PARANAPANEMA - SUBSIDIARIES

- Caraíba is the major integrated producer and market leader for refined copper in Brazil in the form of copper cathode, copper rod and copper wire, accounting for about 36% of the domestic volume sales of electrolytic copper in 2010. Caraíba's volume output was around 230,000 tons of electrolytic copper in 2010 on the strength of improving operations and expanding capacity.
- **Eluma** is Brazil's second largest producer of copper and copper alloy semi-manufactured items, such as laminates, bars, tubes and fittings, with a 34% market share of volume sales of copper semis in 2010. Eluma produced around 70,000 tons of semi-manufactured copper in 2010.
- **Cibrafértil** makes single superphosphate and NPK complex fertilizers for agricultural purposes. Its raw materials are the sulfuric acid, a byproduct from the copper processing at Caraíba Metals, and imported phosphate rock.

PARANAPANEMA - History

• Founded to act in heavy civil construction industry 1961 • Entered in the mining industry 1965 • Business focus in metal processing 1978 • Cibrafértil was founded 1994 Control acquired by PREVI 1995 • Non-ferrous metals became the core business • End of construction business 1996 • 550 M Investments till 2013 2010

Strategies and Strengths

- Market leadership and recognition of our brands and products
- Solid customer base
- Low-cost copper production and efficient logistics
- Focus on operational efficiency
- Consolidation of our leading position
- Expansion of our production capacity 1/3 increase capacity by 2013
- Corporate governance based on International "Best Practices", with an experienced management team with proven record of performance

PARANAPANEMA - Locations

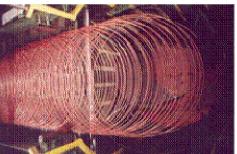


Paranapanema

Caraíba Metais, Dias D'Avila/BA



Produtos







Vergalhão de cobre

Eletrólise

Catodos

Paranapanema

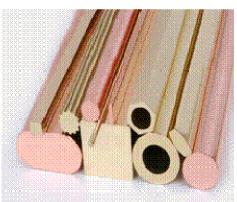
• Eluma, Santo André/SP - Vitória/ES



Produtos







Laminados Arames Barras

Cibrafértil

• Cibrafértil, Camaçari/BA



Processo Produtivo



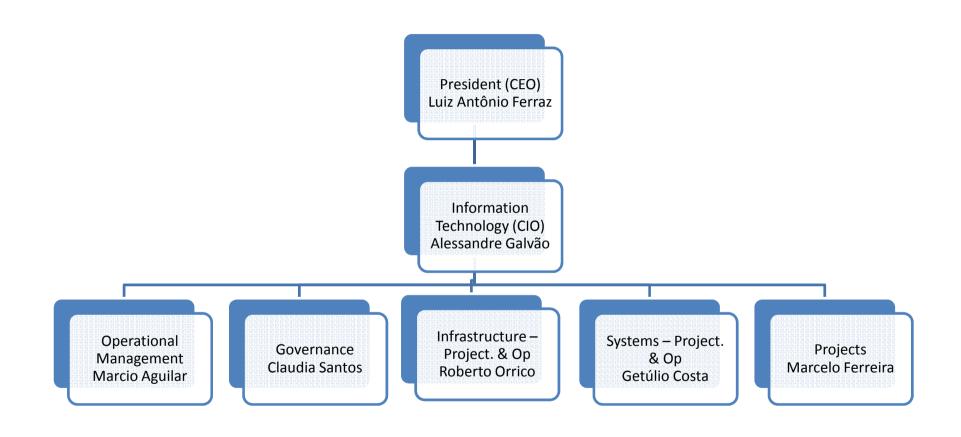




PARANAPANEMA — in some numbers

- Corporation
 - 3.6 Billions of Brazilian Reais Sales (2.1B US\$)
 - 5 manufacturing sites in Brazil
 - 40 % of exports.
 - 3000+ employees, plus 3k of outsourcing
 - Investments o 550 MI to increase capacity till 2013
- TI
 - 2000 PCs, 2500 IT users
 - 100 Servers + 100 Virtual Servers
 - 1200 Notes mailboxes
 - All sites connected by a balanced, redundant, Riverbed optimized, fast MPLS WAN

IT STRUCTURE



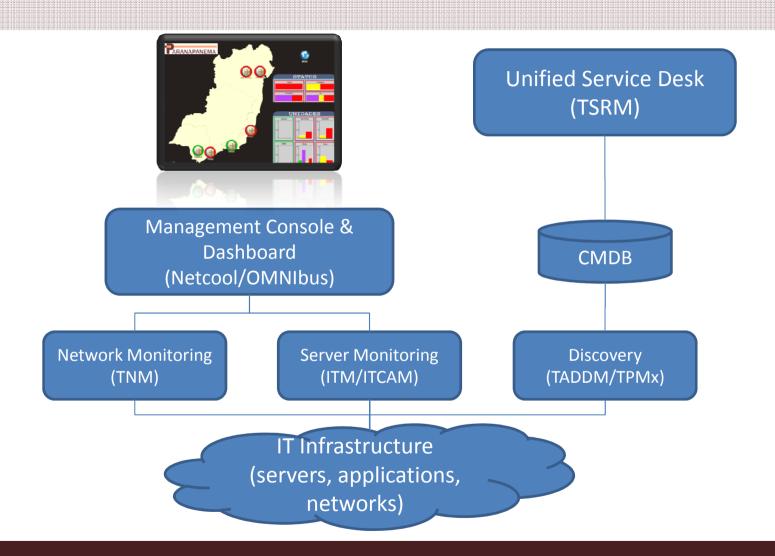
THE PROJECT

- Big Downtime Non Proactive Operation
- No follow-up on calls and other demands
- Big non-documented IT environment
- Low End-User satisfaction with IT
- Increasing IT dependency by SAP implementing Project for the whole company
- No data for capacity planning & project prioritization

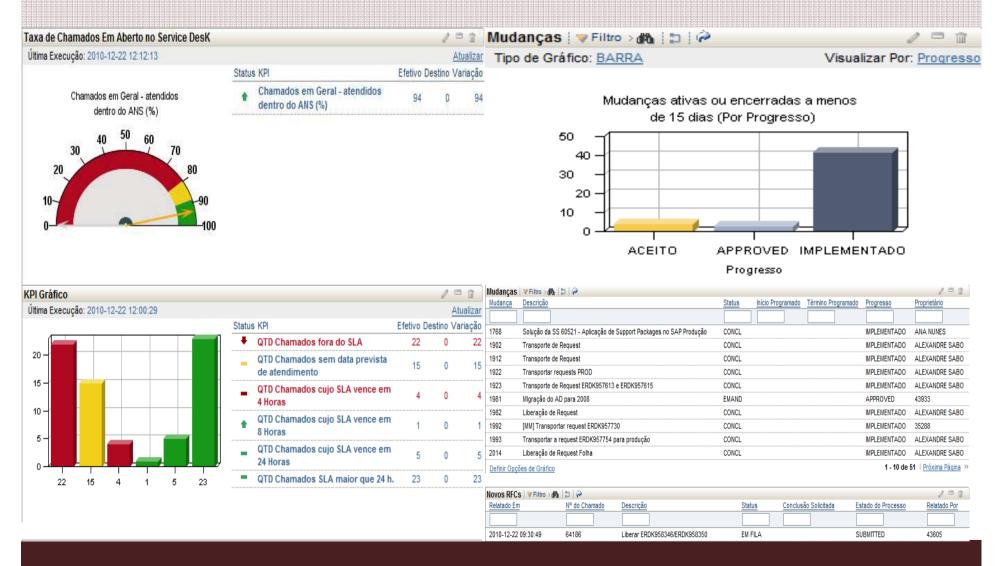
PROJECT PLANNING

- Review the IT processes
- Select a IT process management automation tool
 - Should be ITIL compliant
 - Must have proactive monitoring tools
- Project should use PMI best practices
- In 2006 we implement basic ITIL process Incident management and Network and Server monitoring – IBM, GlobalStand and ICARO Partnership
- 2008 We consolidate the Service Desk for all IT (SAP was out) ICARO Partnership
- 2009 Revision of the whole monitoring services ICARO Partnership
 - TNM implementation (exchange of Netview)
 - Netcool/Omnibus implementation
 - Revision of all alarm configuration
- 2010 New ITIL processes implementation ICARO Partnership
 - Configuration management
 - Problem management
 - Change management

High Level Architecture



INDICATORS: SLA and CHANGES



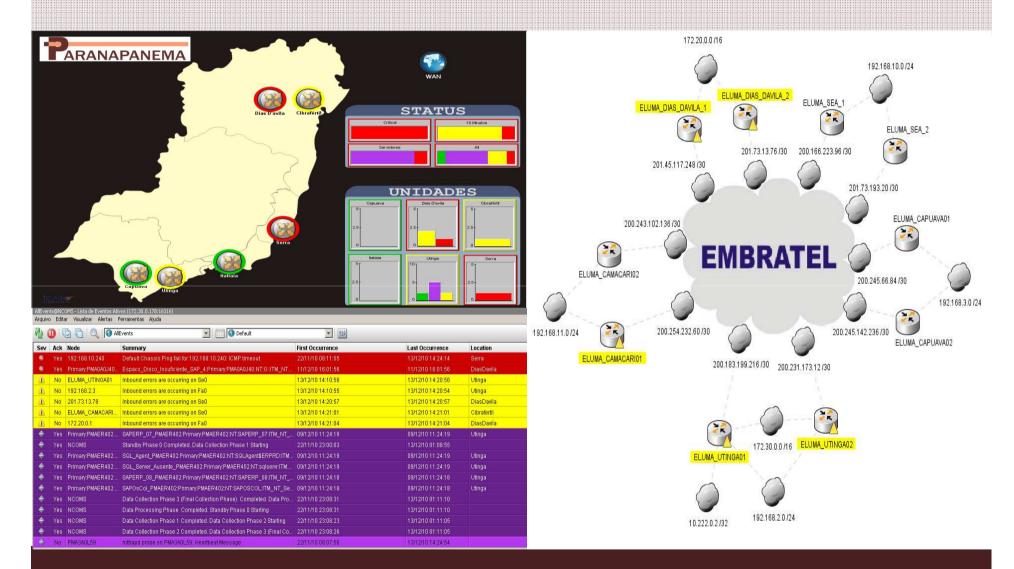


INCIDENT MANAGEMENT





CONTINUOUS MONITORING - PROACTIVE MANAGEMENT





COMPARISON - EVOLUTION IN SERVICE DESK

Jan./2010	Dec./2010	Advantage
Centralized management in SP	Corporate management in SP and local coordination in BA	Faster perception of problems and focus on local matters in BA
SAP Change Management	General Change Management	Better control of changes, minimizing impacts on production
Manual availability control	Automatic availability control and continuous monitoring	Improvement of service and server availability
SLA for incidents only	SLA for incidents and service requests	Better predictability
Projects without formal knowledge transfer to support	Change management used in project transition	Better support of new projects
Management available only to datacenter operator	Management available for several people, including flat panel in IT	Better infrastructure status information to analysts



LESSONS LEARNED

- The company culture is very relevant
- Categorization is crucial for success
- Knowledge base should be focused very hard
- Project Risk Management
- Involve the people, mainly the operation
- The Process is more important than the Tools
- Last, but most important: Communicate, Communicate than Communicate even more...

BENEFITS

- Improved alignment with business
- Better control over assets
- Prioritization of Service Desk calls
- Improved satisfaction of Service Desk users
- Reduction of down-time and Costs
- Knowledge Base is very important!
- Improved visibility of IT infrastructure availability and impact on business

NEXT STEPS

- Follow the path to complete ITIL Processes Implementation
 - SLA management
 - Capacity management
 - Availability management
- Event correlation/consolidation configuration
- Event history collection and reporting
- More training for Operation staff

Thanks

Questions?

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