



NLMK: Business Suite on HANA

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NLMK Group



1. NLMK Group: The Company update



Company

Novolipetsk Steel (NLMK)

Headquarters

Lipetsk, Russia

Industry

Mill products – primary metals

Products and Services

Slabs and transformer steel; prepainted, galvanized electrical steel; a wide range of plates; a variety of long steel products

Employees

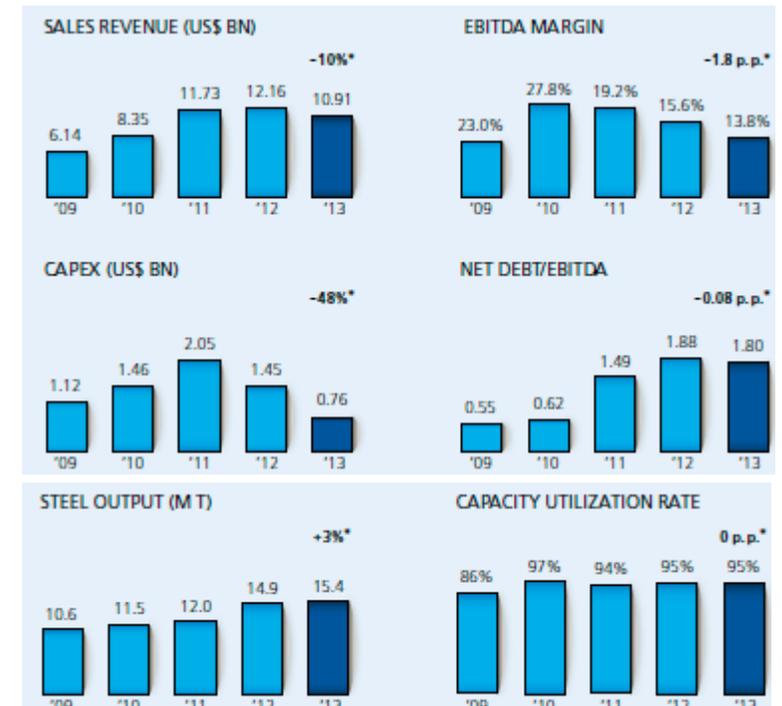
~58,100

Web Site

<http://nlmk.com>

NLMK is THE world's **most efficient steel producer** with **21.2% EBITDA margin** (Bloomberg, Q2 2014 US GAAP Results)

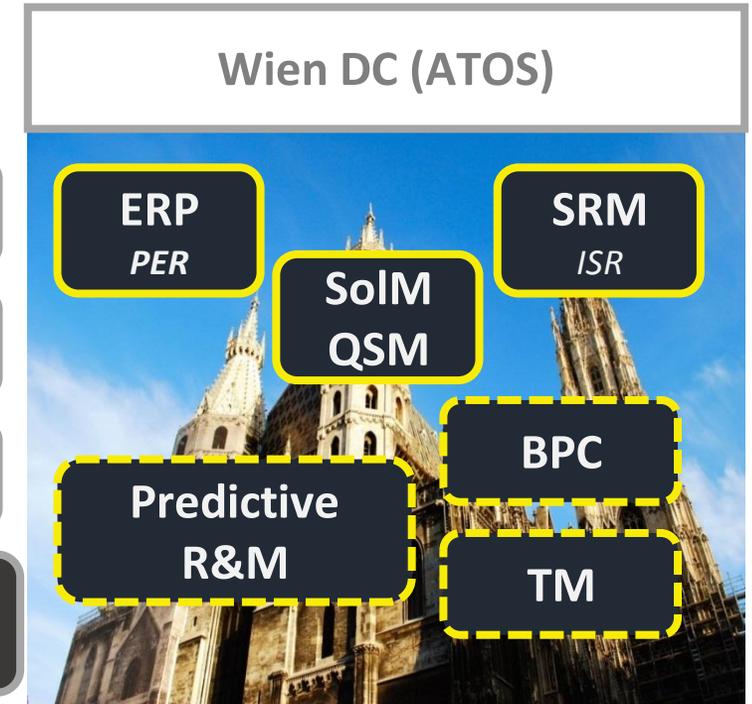
- 15,4 m.t. of steel production in 2013
- 2013 Revenue USD 10.9 billion
- 14% EBITDA margin in 2013
- USD7 billion of organic investments in 2009-2013
- Vertical integration:
 - ~85% self sufficiency in iron ore materials
 - >100% self sufficiency in coke
 - ~85% self sufficiency in scrap
- Sales to over 70 countries worldwide



2. NLMK & SAP – The Story



- Major SAP-Products in productive usage: ERP (FI/CO/AA/MM/SD/PP/IM/PM), BW, BCS, APO, HR/PR(NSMMZ), TRM, BPS
- ~ 5 800 ERP Users
- SAP Installations: One Unified SAP ERP Installation for all the Russian branches and Solution Manager, BW, BO, Open Text
- 500 000 Materials
- 10 000 Production Data Structures
- 8 Gb of daily DataBase growth
- DB: HANA



- not planned to migrate into ATOS DC

- current migration projects

- Planned new implementation projects

- Application currently operating in Atos DC

3. NLMK Challenges: Why HANA?



Objectives

- Manage quickly growing production data volume
- Speed up critical business transactions, provide sophisticated analytics, cut costs, and improve productivity and decision making
- Reduce the total cost of ownership (TCO)

Why SAP HANA®

- Powerful Big Data management and analytics
- User-friendly, role-specific interface and reporting
- Successful test migration in a proof-of-concept (POC) test that covered many standard and custom transactions and reports running through the SAP® ERP application
- Option to run all SAP Business Suite applications on the SAP HANA® platform

Future plans and benefits

- Switch to the SAP HANA platform for an ongoing implementation of the SAP Supplier Relationship Management (SAP SRM) application
- Fully migrate to SAP ERP powered by SAP HANA to drive core business in real time
- Accelerate inventory turnover, accounts receivable, and financial close
- Significantly reduce hardware TCO

“SAP ERP powered by HANA works really well. In a POC test, our customer inventory report went from 4 days to 24 seconds. And many transactions are now 3 to 5 times faster. This will help NLMK drive efficiency and make faster, more accurate decisions. As a result, we have made SAP HANA our core platform.”

Pavel Shulga, Deputy IT Vice President, NLMK

13,000x

Faster inventory report generation (from 3.5 days to 24 seconds)*

20x

Faster generation of a critical financial material turnover report*

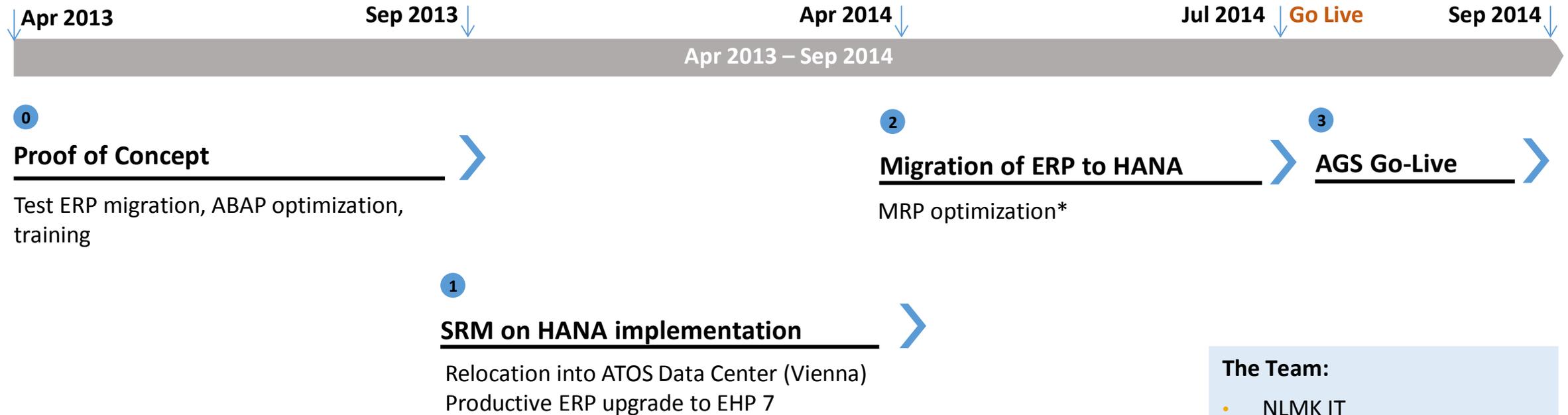
3x – 5x

Faster completion of many standard transactions in SAP ERP*

*in a POC migration of SAP ERP to SAP HANA



4. Decision making & Project execution



The Team:

- NLMK IT
- SAP Development Walldorf
- SAP CIS Consulting
- SAP AGS
- ATOS

*- Customized code of MRP required optimization (7 weeks) to succeed with the migration of ERP to HANA

5. Project outcomes: ERP on HANA



FI Transactions	Acceleration
FAGLL03/FAGLL03H	20,5
FBL1N/FBL1H	3
FBL5N/FBL5H	1
FMAVCR01	33,3
F110	1,74

- The acceleration is achieved on the standard as well as on in-house developed (with required ABAP-code optimization)

CO Transactions	Acceleration	Deceleration
KON2	2,50	
CJN2	172,75	
CJ88	1,50	
ZUNI_CO_CKM3_DIF		1,25
ZUNI_CO_DIF	2	
ZUNI_CO_SMETA	6,49	
ZCO_SMETA	7,32	

BW Extractors	Acceleration	Deceleration
ZBI_EXTR_ZYKSD	14,28	
OFI_AP_4	3,76	
OFI_AR_4	3,99	
1_CO_PA_1000_BUH		2,07
OCO_PC_ACT_1	1,75	
ZBI_CO_EXPENSE_DETAIL	2,59	

MM Transactions	Acceleration	Deceleration
MB5B	2,35	
MB5K	8,98	
MB24	3,11	
MB25	3,83	
MMBE	4,79	
ME2L	3,14	
ME2M	1,50	
ME2N	1,20	
ME2K	1,89	
ME5A	2,50	
ME57	1,00	
ME55	1,00	
/SAPLOM/MRP_D	1,86	
MB5S	63,20	
MB51		1,75
ZMM_REQ_SPEC		1,32
MD01	2,84	
MD02	1,16	

6. Project summary & lessons learned



Project summary

- SAP ERP on HANA – it works:
 - ✓ Report «turnover» **x20** faster
 - ✓ Report «supplies parties» **x13000** faster
 - ✓ MRP: **18 min** instead of **8 hours**
- HANA is a basic platform for SAP applications – new opportunities for new business processes, deeper analytics and new capabilities of end-user interfaces
- The Team is the foundation of success



Lesson learned

- Sizing matters
- SAP Consulting and SAP AGS are required
- ABAP-code optimization and comprehension of the “new-generation ERP” will be required for the acceleration of the internally customized transactions and interfaces
- The team is learning during the project – it is not too complicated

7. Way forward: new ERP scenarios!



- Simple Finance
- APO on HANA
- Fiori Interfaces
- Predictive Maintenance

The image shows several overlapping SAP Fiori dashboards on desktop, tablet, and smartphone screens. Key dashboards include:

- Cash Forecasting:** A desktop view showing a bar chart of cash flow over time.
- DSO Analysis:** A desktop view with a world map showing Days Sales Outstanding by country.
- Cash and Liquidity Forecast:** A desktop view with a world map and key metrics:
 - Cash Balances: Net Position € 8.4 MM
 - Forecast Accuracy: 85%
 - Liquidity Forecast: 30.4 days
 - CCC: 28.8 days
- Fast Financial Close:** A tablet view showing closing status for Dec 2012:
 - Actual / Planned Spend: \$ 0.5M
 - Net Cash Position: € 5,1M
 - Gross Margin: 7.8% down
- SAP Receivables Manager:** A tablet view showing receivables for top 10 customers:
 - € 1,587,857 (due for 60 days)
 - € 1,248,000 (due for 90 days)
 - € 159,610 (disputed amount)
 - € 111,610 (disputed amount)
 - € 0 (receivables due within 5 days)
- iControl Shared Service Center:** A tablet view showing 5 escalations and various workitem metrics.
- Net Order Entry:** A tablet view showing a \$ 20M increase.



Thank you

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