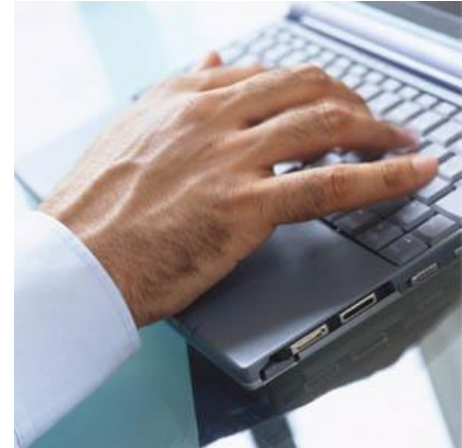# Lean and Digitize: Prioritizing Projects to Add Value for the Customer

Bernardo Nicoletti
CIO
AIG GCF LATAM

Amsterdam
October 27th, 2008

Agenda

- Lean Six Sigma Methodology
- An Integrated Approach: Lean and Digitize
- The Prioritization Process
- Some Best Practices
- The Future of BPM

Chinese Saying ....

"May you live in
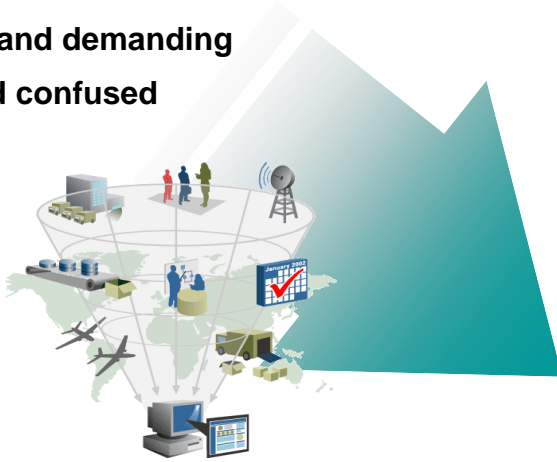
interesting times!"

**"愿你生活在
有趣的时代"**

Changing Environment ... The 4Cs

Customers

Empowered and demanding
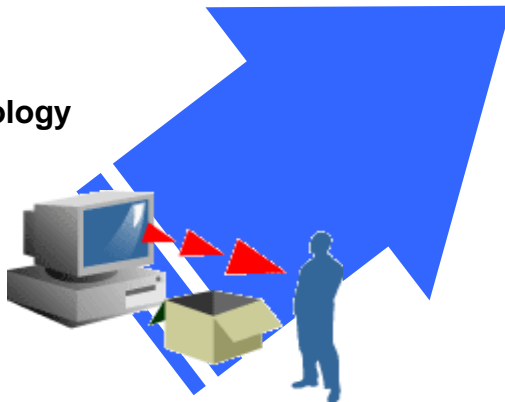
Complex and confused

Bored

Competition

Global

Aggressive

Costs

Inflation

Complex Technology

Outsourcing

Compliance

Security Requirements

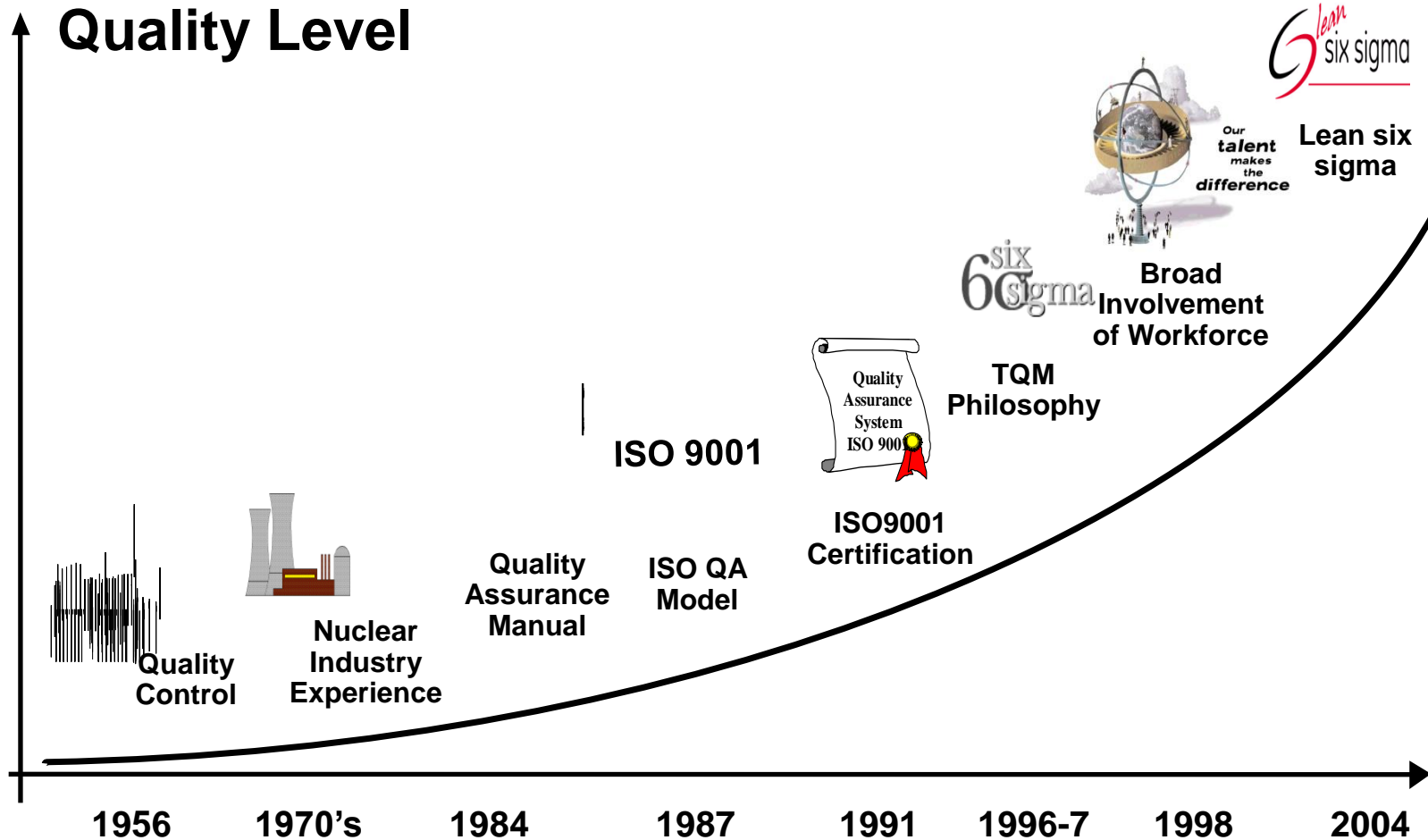**Laws and Regulations**

GRC

Challenging Environment

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Quality … a Darwinian Development

Quality Level

Lean six sigma

Broad Involvement of Workforce

TQM Philosophy

Quality Assurance System ISO 9001

ISO 9001

ISO9001 Certification

Quality Assurance Manual

ISO QA Model

Nuclear Industry Experience

Quality Control

| 1956 | 1970's | 1984 | 1987 | 1991 | 1996-7 | 1998 | 2004 |

"Quality is Customer Satisfaction Profitably" GE

Lean Six Sigma … Executing Faster & Better

Six Sigma   works on **Quality** … *may* improve process speed

+

Lean   works on Process **Speed** … *may* improve quality

=

Lean Six Sigma   reduces complexity and improves both
Quality & Process speed

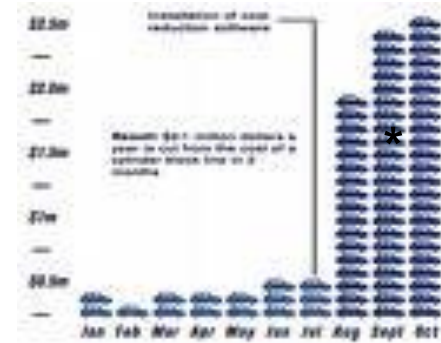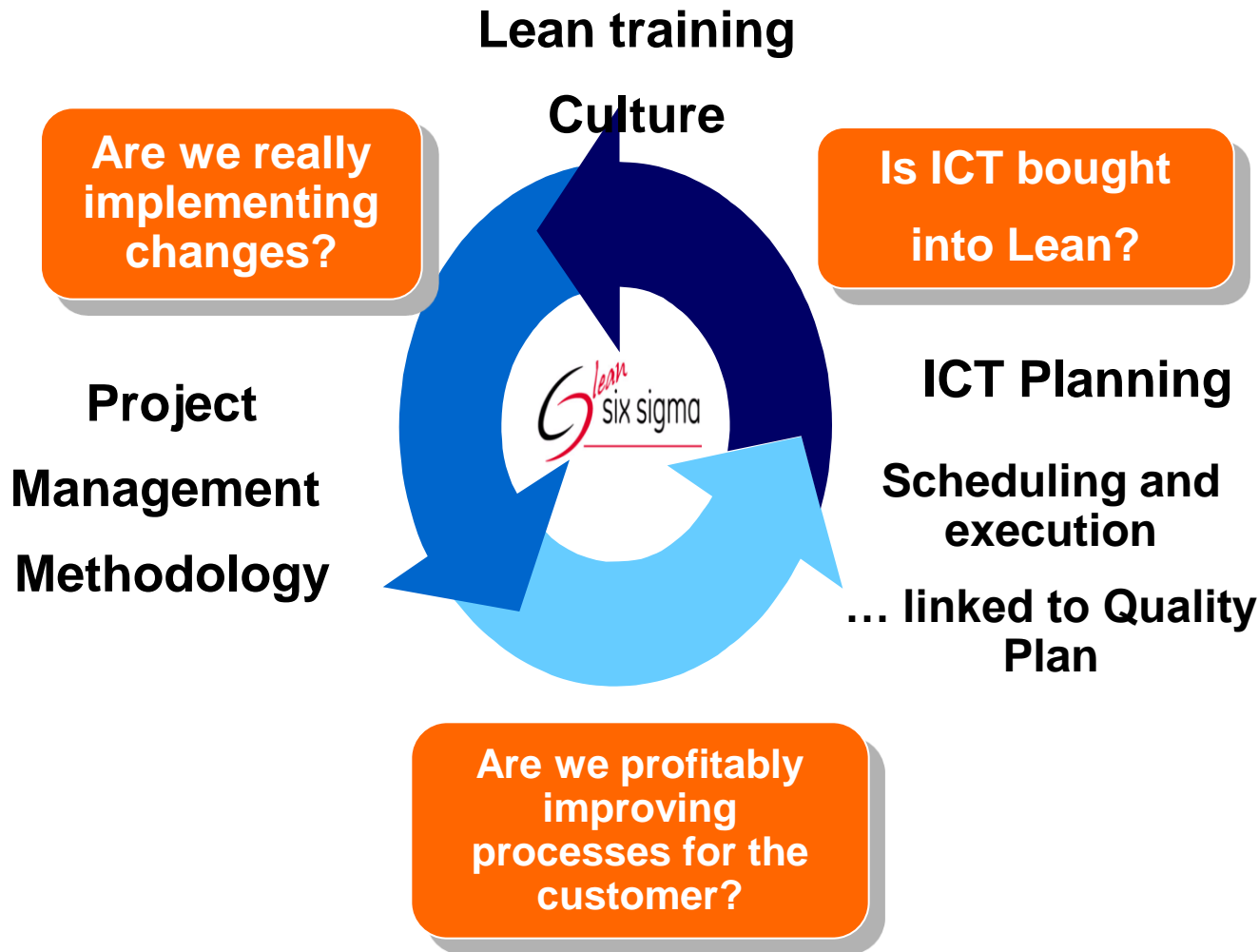**Innovate for operational effectiveness across the enterprise**

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Lean Six Sigma is not enough:
Lean first and then Digitize

Lean training

Culture

| Are we really implementing changes? | | Is ICT bought into Lean? |

Project

Management

Methodology

ICT Planning

Scheduling and execution

… linked to Quality Plan

Are we profitably improving processes for the customer?

Enable process driven enterprise architecture

The Lean & Digitize Methodology

- The Environment and the Needs
- The Vision
- The VoC and the Strategy
  - **The Metrics**
  - **The Prioritization**
- The Governance and the People in the Team
- The Components
  - Processes
  - Physical Layout
  - Digitization
- The Lean First
- The Architecture, the Build and the Deployment
- The Control and the Improvement
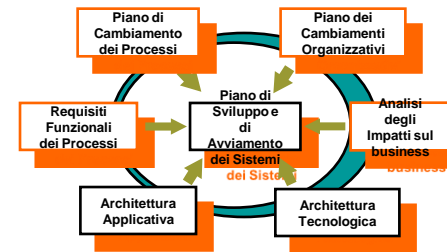
"With Six Sigma... We were able to dramatically improve our processes"
Ken Lewis

Agenda

- Lean Six Sigma Methodology
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- The Prioritization Process
  - Benchmark
  - Bottom Up Approach
  - Top Down Approach
- Some Best Practices
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Benchmark of Project Selection in Six Sigma Programs*

- **89.0% respondents who indicate financial savings is of high or very high importance when prioritizing potential Six Sigma projects**
- 76.4% respondents whose organizations require a formal approval prior to moving forward with a Six Sigma project
- **44.6% respondents whose organization always presents a business case prior to project approval**
- **50.8% respondents whose company frequently or always uses a project prioritization process**
- 19.9% respondents who say employees are the primary source of project ideas
- 40.8% respondents who indicate having a known solution is of high or very high importance in prioritizing projects
- 50.1 % respondents from highly unsuccessful Six Sigma programs who say "gut feel" is of high or very high importance in prioritizing projects
- **0: Number of highly successful Six Sigma programs that do not have an approval process in their business**
- 75.1% respondents who rate their Six Sigma initiative as highly or somewhat successful
- 78.3 % respondents whose senior management is very or somewhat committed to Six Sigma

* Jonathan Atwood, SixSigma Magazine, March 2005, 988 Respondents

Lean at Bank of America

Bank of America

Below is a list of projects and savings generation results at Bank of America:

- $1.3 M Savings: Reduce Cost of Relocating New Hires

- $5 M Revenue: Improve Lockbox Deposit Availability

- $30 M Revenue/$1.5 M Savings: Measure Return on Sponsored Events

- $7.8 M Revenue: Retain Customers Who Move Within Footprint

- $950,000 Savings: Complete Federal Tax Return Faster

- $6.6 M Loss Reduction: Reduce ID Theft Through "Account Takeover"

- $2 M Revenue: Improve Results From New Sales Hires

- $10.7 M Revenue: Improve Customer Referrals From Tellers

- $3.6 M Revenue: Improve Credit Card Sales

"Since launching our Six Sigma efforts, we've saved hundreds of millions of dollars in expenses..." 2003 Annual Report to Shareholders

# Focus on Customer value (Bottom Up)
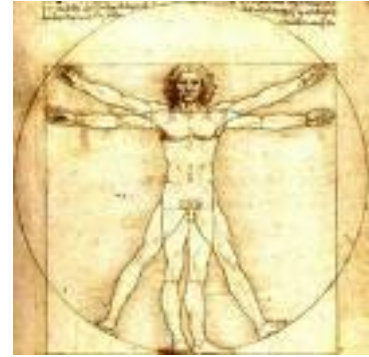
Use Failure Mode Effects Analysis (FMEA).

- Determine your vision.

- Measure Cycle Times and Cost of Poor Quality of all products line.

- Once few (hopefully) worst product lines are identified, create a process flow chart for each product, determine all possible defects at each process steps and how you could accelerate the process time by eliminating waste (non value added steps).

- Focus on critical customer value aspects by prioritizing actions for your limited resources.

- Perform sensitivity analysis

The Vision

Get a Competitive Advantage in the Business

- Build a rich customer value
- This normally requires strategic differentiation
- Reduce operational costs and increase efficiency
- Improve agility and time to market for the introduction of new products
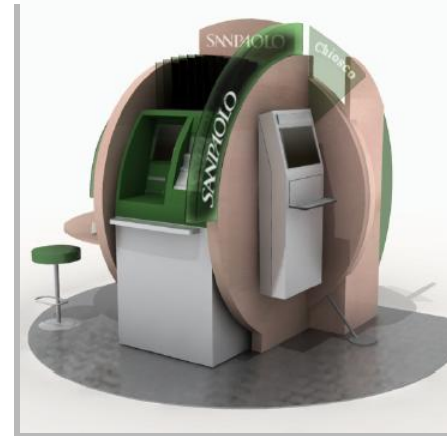
"53% of the institutions surveyed identified customer service as one of their top 3 competitive advantages..." Economist Intelligent Unit

The Metrics ... 3 E

Marketing	Operations	Finance
Effectiveness	**Efficiency**	**Economics**

Customer
    Loyalty/Advocacy/Satifaction
Customer Value
    Cycle Times
    Defects
  Adherence to Specs
Service Experience
Accuracy
Value-added features

Frontline Productivity
Total Cycle Time
Resources Used
Amount of Rework

Eliminated Waste
Frontline Costs
Cost of Defects

The Ultimate Measure is the NPS (Net Promoter Score)

NPS – Net Promoter Score (Top Down)

Question to your customers:

"On a scale 0-*10 (where 0 means you would not recommend under any circumstances, and 10 means you definitely would recommend)*, how likely would you be to recommend our company?"

9 - 10

Promoters

10
9

7 - 8

Passives

8
7

0 – 6

Detractors

6
5
4
3
2
1
0

% Promoters *-less-* **% Detractors**

Net Promoter Score

(% NPS)

The People ... R=Q*A

The Action Workout (AWO!
The change process to apply
the Lean and Digitize tools … target waste
with Value Creation Teams

Ideas ➡️ *Action*

Not traditional workout … intense focus on
action and *speed*

No money …

Key concept: *Trystorm* (vs Brainstorm)
New ideas are tried quickly, observe results
Quick iterations: try-observe-improve … repeat

"Ask the questions that will lead to the possible insights" Jim Collins

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The Strategy

The Lean Logistics Architecture

Implement a set of improvements and best practices which allow the Business to gain competitive advantages through a better logistics system, while removing the "waste" in:

- The process path
- The physical path
- The digitization path

"… information systems have to do more than manage huge amount of financial data…" Bill Gates

Completing the Transformation of the Supply Chain Process with Logistics

Global Sourcing	Inbound Transport.	Quality Control	MRP Manufact.	Outbound Transport	I & F S
2008	2008	2007	2005	2008	2007
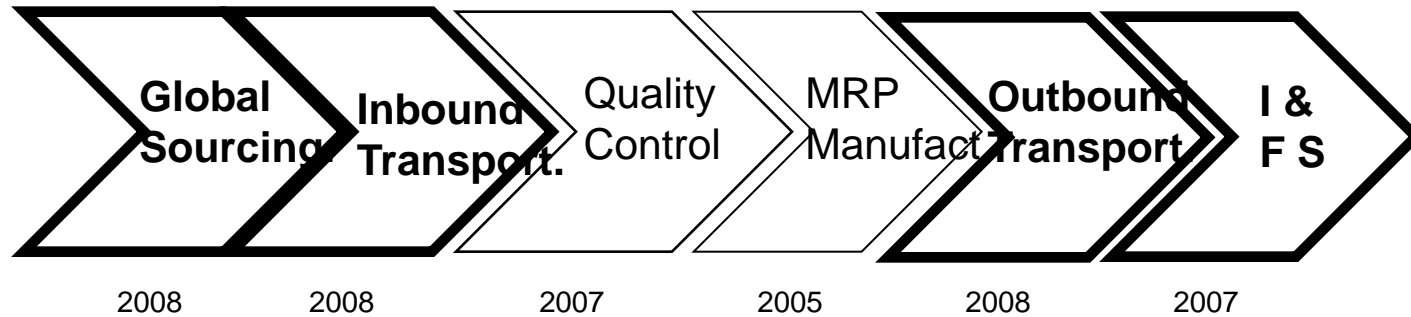
One Lean Supply Chain Process for the entire Business

Oracle Backbone

	TI-MS	GS	TAL	Vibo	Bari	NA	TD	PII	Remote Sites	VG
Shared Services (Sourcing, Finance, HR Modules)	✓	✓	✓	✓	✓	✓	07/07	02/08	✓ Qatar ? Others	?
MRP (Integration with MFG Modules)	✓	✓	✓	02/08	07/08	✓	?	N/A	N/A	
FMS - Fulfillment	✓	✓	✓	✓	✓	✓	07/07	?	N/A	
e-SQM Supplier Qualif.	Q307	Q307	Q307	Q307	Q307	?	Q307	?	?	
Quality/eRequirements	Q307	Q307	Q307	Q307	Q307	?	?	N/A	N/A	
OTM - Transportation	01/08	01/08	01/08	01/08	01/08	?	?	N/A	N/A	
SSP5 – Indirect Buy	Q 108*	✓	✓	✓	✓	✓	07/07	✓	?	?

Stressing the Quality of Service

The Components
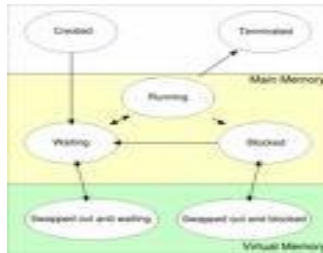
Add Value	Simplify	Consolidation and Virtualization
Process	**Physical**	**Digitization**
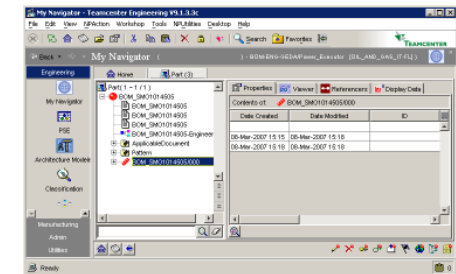
More self-service

More products at the same site with personnel as a consultant

Different processes for different customers:

- Business
- Individuals
- Other logistics organizations

Clear signs

Sequencing of operations according to the improved process

Self service before attended service

One stop service

Recording video cameras

Product promotion while the customer wait

Consistent business logic

Service oriented architecture

Network-centric

On-demand service delivery

"Services Organization can no longer let BPM pass..." Michael Hammer

The Architecture

Customer Contact Point	Connection	The Hub
CRM	**Network**	**Data Center**

Self-service Application

Optional Integrated Functionality

Security

Firewall

Media streaming

Voice Services

... Fun Interaction

Network Components

wLANs

Security

Intrusion detection

Appliances

Multi-purpose wireless network

Sona
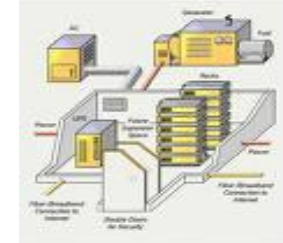
Rich Internet Applications

Software as a service

Business Intelligence

Hw Virtualization

Document management

Backup

"High performance processes require new information systems" Michael Hammer

The Governance

- **The Champion ...** The Top Level Executive sponsoring the project

- **The Steering Committee** ... All the Executives involved in the initiative

- **The Lean Leader** ... The Facilitator ... Full time job

- **The Team Coordinator** ... The Project Leader from the Department more affected for the process ... For the duration of the project (including the Digitization phase) ... In charge of the planning, monitoring and managing the team

- **The Team Members ...** From the various departments interested plus Information Technology ... Either full or part time for the entire duration of the projecty

The Improvement

Elements	Gen 1	Gen 2	Gen 3
Vision	Replace existing legacy system. Standardize tools and process	Controllership on carrier invoices Track of Transportation costs	Maximize shipments optimization
Key Functionality	• Shipment creation • Shipment execution • Arrival • Doc. Mgt • RC access	• Rates & Approval process • Carrier access • Cost allocation • Interface with Holding systems • Alerts • Inventory checks	• Planning & Consolidation • Freight Settlement
Target Customers	• Manufacturing planners • 3PL • Logistics team • Finance	• Manufacturing planners • 3PL • Logistics team • Finance	• Manufacturing and servicing planners • 3PL • Logistics team • Finance
Target Processes	• Inbound • Outbound • Farmout • Interplant	• Inbound • Outbound • Farmout • Interplant	• Inbound • Outbound also with serviced customers • Farmout • Interplant
Technology Requirements	• OTM (web based application) • Oracle DataBase • BPEL middleware	• OTM (web based application) • Oracle DataBase • BPEL middleware • Distance Engine Software	• OTM (web based application) • Oracle DataBase • BPEL middleware • Distance Engine

Multi-Generation Project Planning

The Benefits ... Some Examples

Productivity

Sigma Performance

WestLB

Sustainable cost reductions of €250m p.a. to be

realised by year end 200Headcount in back office to be reduced by roughly

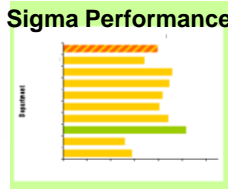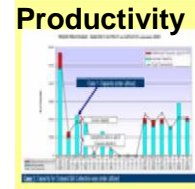500 in Germany within same period

CIMBGROUP

Results in improved business process

In shorter time and at lower cost

Fidelity
INVESTMENTS

$2.1m savings

16% increase in satisfaction score

INTESA nnn **SANPAOLO**

Reduction of 65% in the operations through Six Sigma in some processes

"There's too much waste in banking.." Carl E. Reichardt , Wells Fargo

The Challenges

Plus

Top Management Support

Organizational culture

Dedicated team

Delta

If limit is operational processes

If project focus creates local success but is not replicated

Lack of training

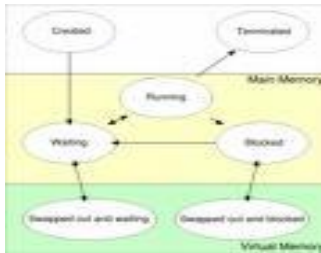**From Multi-channel (3PL) to Multi-mode Channels (4PL)**

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The Future of BPM

Integration

Mobility

Collaboration

Process

Physical

Digitization

Integration of products and process approach

Management of full end-to-end processes

Go beyond the "wall" of the Businesses

Franchising

Virtualization

Green
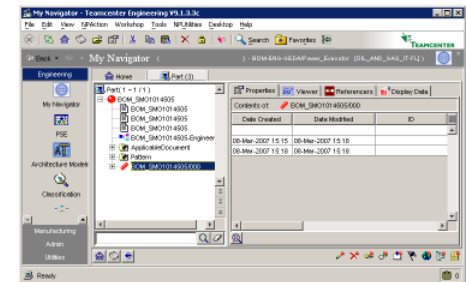
More and more
   Web 2.0 => Enterprise 2.0

Video: Web 3.0?

Personal devices

Social Networks

EDA – Event Driven Architecture

"The Ubiquitous Bank" Forrester Research on 2023 Banking

Summary

- Long Term Commitment to Change and Process Transformation

- Lean and Digitize creates effective processes, lock in them and reduces implementation time

- Standardizing the evaluation of projects ensure consistency in the decision making process

- Intelligent compliance and risk management framework are essential

- From DMAIC to DMIACR, where R stands for Replicate

- Packages with workflows and parameters greatly help

- Monitor Performance and Adjust

Communicate … Communicate … Communicate

Thank You – Any Question ?

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CIO

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Appendix

Resume

- Born in Salerno, Italy
- Fulbright Scholar with a Master from Carnegie Mellon University and a Degree from the Polytechnic of Turin, Italy
- Worked in 10 Countries in several companies
    - MIS and CTO in Alitalia
    - Project Leader in Airplus
    - Program Leader in Galileo
    - CEO in Sigma Plus
    - CTO in GE Money
    - CIO in GE Oil & Gas
    - Management Consultant
    - CIO in AIG CFG Latin America
- Master Black Belt