

# Procurement 4.0 and the Fourth Industrial Revolution

Bernardo Nicoletti

# Procurement 4.0 and the Fourth Industrial Revolution

The Opportunities and Challenges  
of a Digital World

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Bernardo Nicoletti  
Temple University Rome Campus  
Rome, Italy

Università di Tor Vergata  
Rome, Italy

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## ABBREVIATIONS

ABI	Associazione Bancaria Italiana
AGV	Automated Guided Vehicle
AMA	American Marketing Association
API	Application Programming Interface(s)
ASC	Agile Supply Chain
B2B	Business to Business
B2C	Business to Consumer
BAS	Building Automation Systems
BAU	Business as Usual
BCG	Boston Consulting Group
BDAQ	Big Data Analytics Quality
BOL	Bill of Lading
BOM	Bill of Materials
BPaaS	Business Process as a Service
BPO	Business Process Outsourcing or Business Process Optimization
CAGR	Compounded Annual Growth Rate
Capex	Capital Expenditure
CBR	Case-Based Reasoning
CFFR	Collaborative Planning, Forecasting, and Replenishment
CFM	Cash Flow Management
CLM	Contract Lifecycle Management
CNC	Computer Numerical Control
COPIS	Customer, Output, Process, Input, Supplier
CPM	Critical Path Method
CPM	Corporate Performance Management or Critical Path Method
CPO	Chief Procurement Officer
CPS	Cyber-Physical System

CRM	Customer Relationship Management
CWL	Carlson Wagonlit Travel
DBA	Database Administration
DDLC	Document Development Lifecycle
DTC	Digital Trade Chain
E-Proc	e-Procurement
ECM	Enterprise Content Management
EDI	Electronic Data Interchange
EERP	Extended Enterprise Resource System
EMS	Small and Medium Enterprises
EOQ	Economic Order Quantity
EPC	Engineering, Procurement, and Construction
ERP	Enterprise Resource Planning
EVI	Early Partner Involvement
FMCG	Fast-Moving Consumer Goods
FTE	Full-Time Equivalent
GDPR	General Data Protection Regulation
GIS	Global Information Systems
GMS	Global Mobile System
GPO	Group-Purchasing Organization
GPP	Green Public Procurement
GRI	Global Reporting Institute
IaaS	Infrastructure as a Service
IBIN	Intelligent Bin
ICC	International Chamber of Commerce
ICT	Information and Communication Technology
IoE	Internet of Everything
IoO	Internet of Objects
IoP	Internet of People
IoS	Internet of Services
IoT	Internet of Things
ISO	International Standard Organization
ITS	Integrated Transport Management System
JiT	Just in Time
KPI	Key Performance (or Process) Indicator
KPO	Knowledge Process Outsourcing
KRI	Key Risk Indicator
KYC	Know Your Customer
LAN	Local Area Network
LGV	Laser Guided Vehicle
LMS	Logistics Manufacturing Services
MaaS	Mobility as a Service

MDM	Mobile Device Management
MMR	Mass Market Retailers
MMS	Managed Mobility Services
MMSP	Managed Mobility Services Provider
MOU	Memorandum of Understanding
MRO	Maintenance, Repair, Operations (Material)
MRP	Manufacturing and Material Requirement Planning
MSA	Master Service Agreement
MTO	Make to Order
MTS	Make to Stock
MWM	Mobile Workforce Management
NFC	Near Field Communication
NIST	National Institute of Standards and Technology
OBS	Organization Breakdown Structure
OEE	Overall Equipment Effectiveness
OEM	Original Equipment Manufacturer
OMP	Open Manufacturing Platform
Opex	Operating Expenditures
OT	Operations Technology
P2P	Purchase to Pay
PaaS	Platform as a Service
PBI	Process Business Intelligence
PLC	Programmable Logic Controller
PLM	Product Lifecycle Management
PROU	Perceived Ease of Use
R2P	Requisition to Pay
RACI	Responsibility-Accounting-Control-Information
RFB	Request for Bid
RFI	Request for Information
RFID	Radio-Frequency Identification
RFP	Request for Proposal
RFQ	Request for Quotation
RFX	Any Type of Request for Procurement
ROA	Return on Assets
ROI	Return on Investment
RPA	Robot Process Automation
RTLS	Real-time Locating System
S2P	Source to Pay
SaaS	Software as a Service
SCF	Supply Chain Finance
SCM	Supply Chain Management
SIM	Subscriber Identity Module

SIPOC	Partner, Input, Process, Output, Customer
SKU	Stock-Keeping Unit
SLA	Service Level Agreement
SMS	Short Message Service
SRM	Supplier Relationships Management
STP	Straight Through Processing
SWOT	Strengths-Weaknesses-Opportunities-Threats
TAM	Technology Acceptance Model
TCM	Total Cost Management
TCO	Total Cost of Ownership
TIM	Trust in Motion
TMS	Transportation Management System
TQM	Total Quality Management
UAV	Unmanned Aerial Vehicles
UMTS	Universal Mobile Telecommunications System
VA/NVA	Value-Added/Non-Value-Added
VoC	Voice of the Customer
WAN	Wide-Area Network
WBS	Work Breakdown Structure
WIP	Work in Process
WMS	Warehouse Management System
WSN	Wireless Sensor Networks
XML	Extended Messaging Language

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