

Building a Bridge between Technical and Business Benchmarking

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BDVe - Databench Webinar, October 9, 2018













Building a bridge between technical and business benchmarking



Main Activities

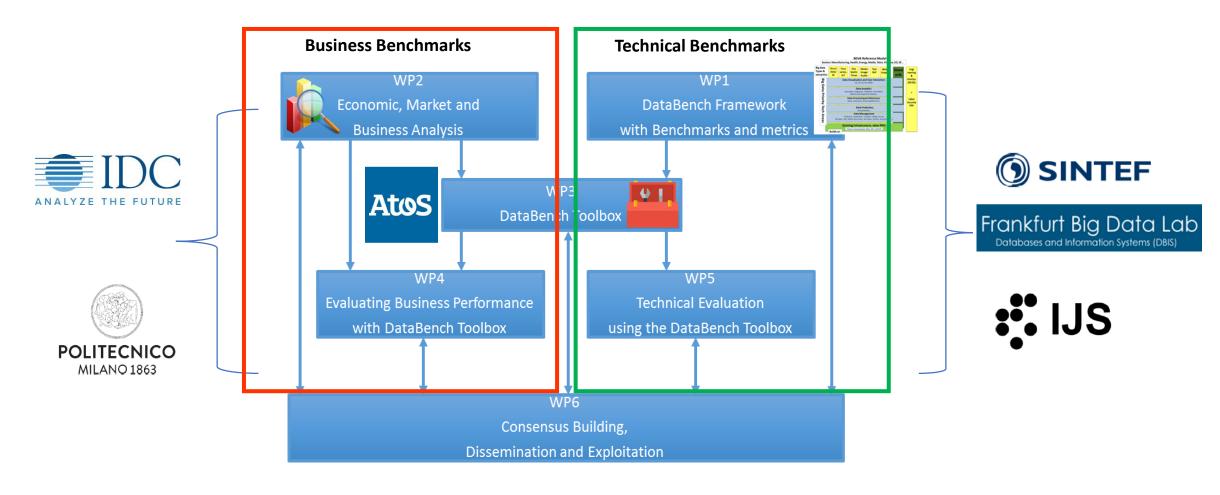
- Classify the main use cases of BDT by industry
- Compile and assess technical benchmarks
- Perform economic and market analysis to assess industrial needs
- Evaluate business performance in selected use cases



Expected Results

- A conceptual framework linking technical and business benchmarks
- European industrial and performance benchmarks
- A toolbox measuring optimal benchmarking approaches
- A handbook to guide the use of benchmarks

WP2's role in Databench Workflow



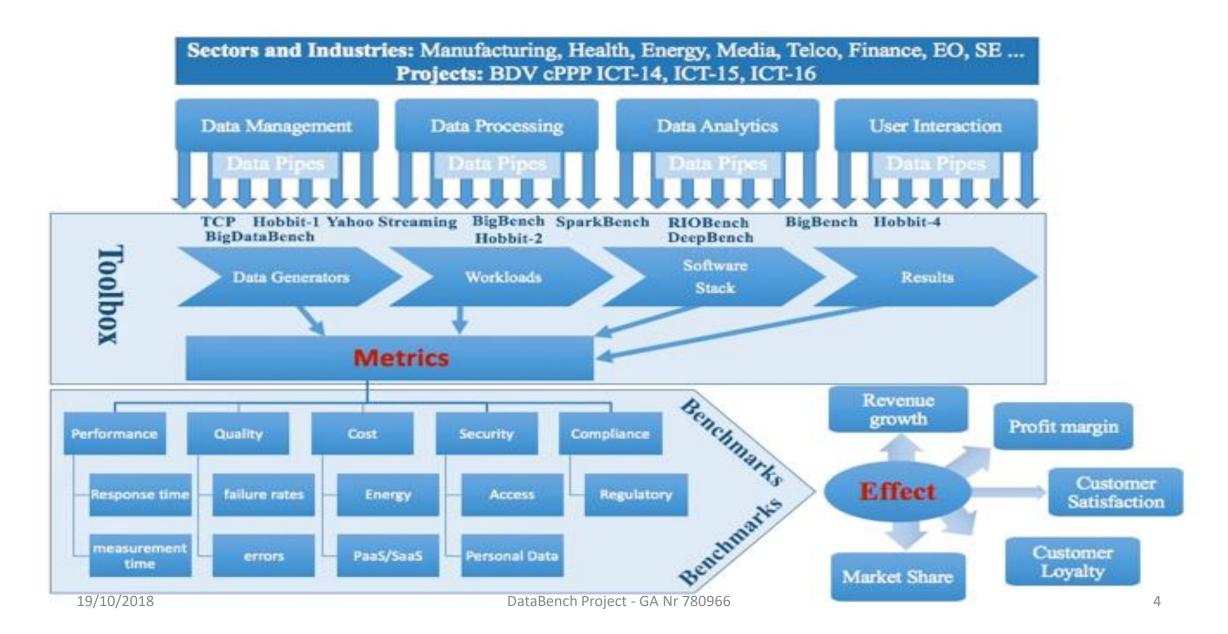






Where Magic Happens





How to link technical and business benchmarking



- Focus on economic and industry analysis and the EU Big Data market
- Classify leading Big Data technologies use cases by industry
- Analyse industrial users benchmarking needs and assess their relative importance for EU economy and the main industries
- Demonstrate the scalability, European significance (high potential economic impact) and industrial relevance (responding to primary needs of users) of the benchmarks



USE CASES = Typologies of technology adoption in specific application domains and/or business processes



- Focus on data collection and identification of use cases to be monitored and measured
- Evaluation of business performance of specific Big Data initiatives
- Leverage Databench toolbox
- Provide the specific industrial benchmarks to WP"
- Produce the Databench Handbook, a manual supporting the application of the Databench toolbox

Leading Business Use Cases by Industry



		#1		#2		# 3
	Finance (exc. insurance)	Fraud prevention and detection		Customer profiling, targeting, and optimization of offers		Portfolio and risk exposure assessment
Accom.		Optimize price strategies		Cross-sell and upsell at point of sale	 	Store location (either physical or digital)
	Manuf.	Analysis of operations-related data	-(Factory automation, digital factory for lean manufacturing		Analysis of machine or device data
Health		Compliance check and reporting on quality of care	—	Illness/disease progression		Organization resources utilization and turnover
	Telecom	Network analytic and optimization	—(Network investment planning		Customer scoring and churn mitigation
Media		Customer scoring	—	Audience analysis		Marketing optimization
	Transport	Logistics optimization	—	Customer analytics and loyalty marketing	-	Prevent and respond to public security threats
Utilities		Customer behavior and interaction analysis	—	Field service optimization		Energy consumption analysis
	Oil&Gas —	Maintenance management		Sensor-based pipeline optimization		Natural resource exploration
Retail/ Wholes.		Optimize price strategies and price management	-	Increase productivity and efficiency of DCs/warehouses		Customer data security, and privacy (fraud prevention)
	Prof. Services	Customer profiling, targeting, and optimization of offers		Ad targeting, analysis, forecasting, and optimization		Predictive maintenance
Govt.		Personalize citizen services	—	Increase efficiency of internal processes		Prevent and respond to natural disaster
	Education	Student recruiting		Back-office process optimization		Course planning and costing

Source: IDC's European Vertical Markets Survey, November 2016 (n = 1,872)

Preliminary Analysis of KPIs and Benchmarks



INDUSTRY	USE CASE	BUSINESS KPI	TYPE OF DATA	TECHNICAL BENCHMARKING AREA
Agriculture	Yield monitoring and prediction	Revenue Growth	Image (satellite) data	Limited time to process Very big data Quality of data (missing values, outliers)
Banking	Fraud prevention and detection	Cost Reduction	Transactional Data	Near real time processing paradigm
Business or Professional Services excluding IT Services	Automated customer 'service	Revenue Growth Time Efficiency	Text Data	Natural Language Processing (NLP) quality benchmarking
Energy	Energy consumption analysis and prediction	Cost Reduction	IoT Data	Real time streaming data processing
Healthcare	Quality of care optimization	Product/Service Quality	IoT Data	Real time streaming data processing
Manufacturing	Inventory and service parts optimization	Time Efficiency	IoT Data	Real time streaming data processing
Media	Social media analytics	Customer Satisfaction	Linked Data	Graph-processing platforms benchmarking (linked data).
Retail Trade	Targeting	Revenue Growth	Transactional Data Text Data	IT architectural cost optimization
Transport and Logistics	Connected vehicles optimization	Product/Service Quality	IoT Data	Real time streaming data processing
Utilities	Field service optimization	Cost Reduction	IoT Data	Real time streaming data processing

Source: Polimi, October 2018



Early Results from the Databench Business users Survey











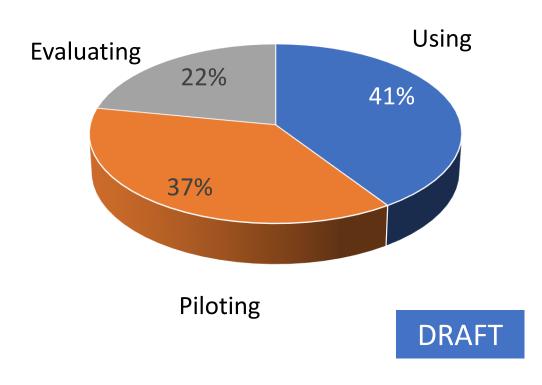
Frankfurt Big Data Lab

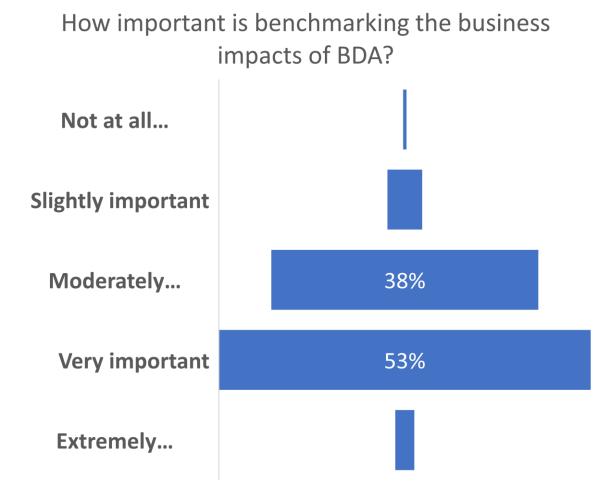
Users recognize the relevance of business



benchmarking...

Respondents by Type of Use of BDA





Source: Databench Survey, IDC, Interim results, 401 interviews, October 2018

19/10/2018 DataBench Project - GA Nr 780966 9

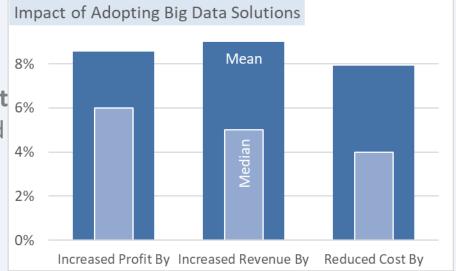
Big Data is Worth the Investment



Nearly **90%** of businesses saw **moderate** or **high** levels of benefit in their Big Data implementation

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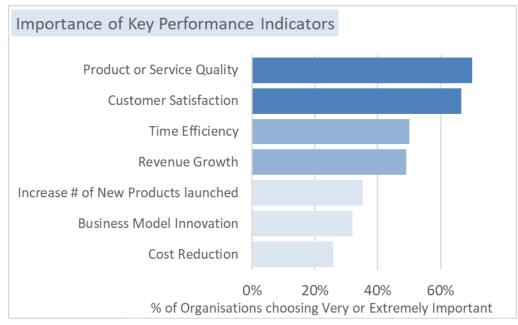
Adopting Big Data Solutions increased **profit** and **revenue** by more than 8%, and reduced **cost** by nearly 8%





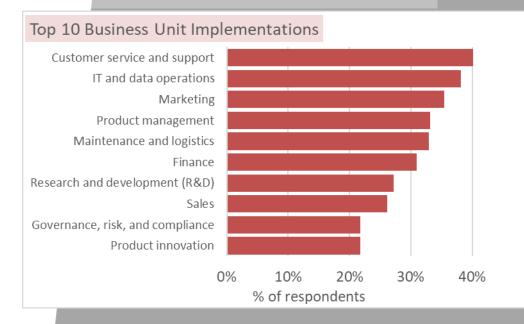


Big Data implementation focus



two most important KPI's

But implementation is balanced across all business units





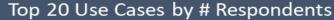


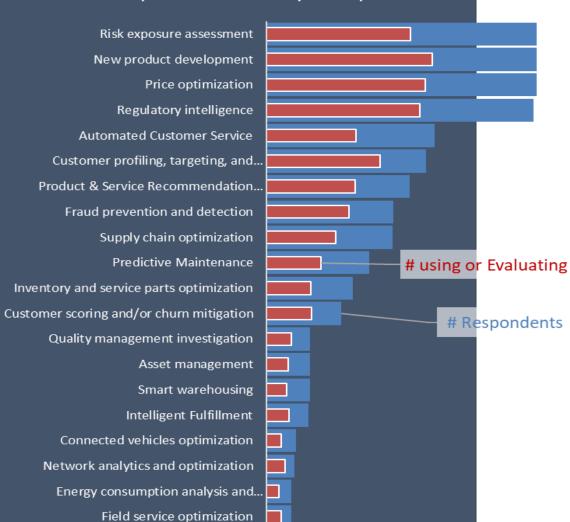
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Big Data – Key Use Cases 🔁 DataBench



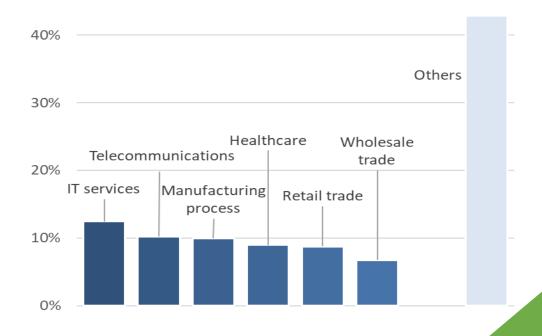




Final results to be presented at the European Big Data Value Forum and in the Databench report due in December 2018

Respondent share by industry







What can DataBench do for you?

 Provide methodologies and tools to help assess and maximise the business benefits of BDT adoption

Provide criteria for the selection of the most appropriate
 BDTs solutions

• Provide benchmarks of European and industrial significance

 Provide a questionnaire tool comparing your choices and your KPIs with your peers

What we want from you?

- Expression of interest to become a case study and monitoring your Big Data KPIs
- Answer a survey on your Big Data experiences



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Evidence Based Big Data Benchmarking to Improve Business Performance

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