

 Bigdatastack.eu

 @bigdatastackeu



## High performing data-centric stack for big data applications and operations

---

Co-funded by the European Commission  
Horizon 2020 - Grant # 779747



- 14 partners from 7 different countries
- Team with partners from industry, academia and research centres
- Project coordinator: IBM Israel
- 36 month project (started 01.2018)
- Funded by EC under grant agreement no 779747



contact@bigdatastack.eu



www.bigdatastack.eu



@bigdatastackeu

**Data-driven infrastructure management system** for infrastructure providers



**Data as a Service** for data providers, decision makers, private and public organisations



**Data toolkit** for data scientists and practitioners



**Process modelling and optimization framework** for business analysts

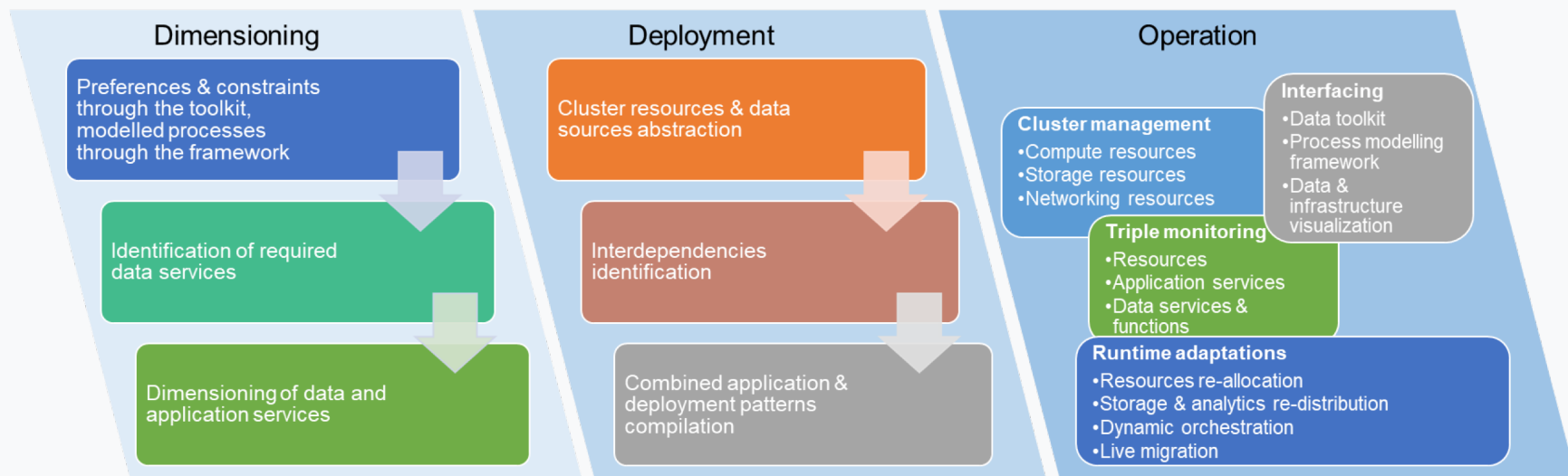


**Application dimensioning workbook** for application providers and engineers



## 3 main phases

- Dimensioning: providing insights from the “upper layer” (i.e. big data applications)
- Deployment: targeting the “lower layer” (i.e. infrastructure) by considering dimensioning outcomes
- Operation: runtime and optimization / adaptation



## ■ Gateway

- Actor: Data owners
- Operation: Store data in BigDataStack (SQL and NoSQL) data stores

## ■ Data Toolkit

- Actor: Data scientists
- Operations:
  - Ingest analytics
  - Set preferences / constraints to be used for dimensioning

## ■ Process Modelling Framework

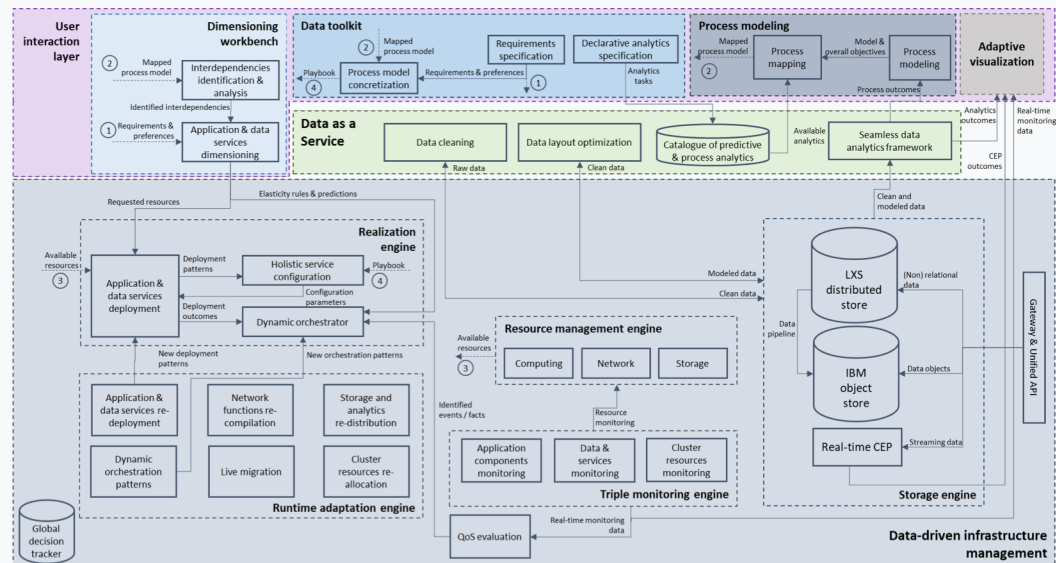
- Actor: Business analysts & application owners
- Operation: functionality-based business processes optimized based on process analytics outcomes

## ■ Application Dimensioning Workbench

- Actor: developers
- Operation: Dimension applications

## ■ Visualization workbench

- Towards all stakeholders
- "Output" endpoint



Efficient and optimized infrastructure management for big data applications



## ■ Real-time ship management

- Predictive maintenance and spare parts inventory management towards dynamic routing



## ■ Connected consumer

- Consumer-tailored predictions and personalized offers in real time



## ■ Smart Insurance

- Profitability prediction, personalized recommendation to customers with cross-selling and upselling strategies, churn prediction

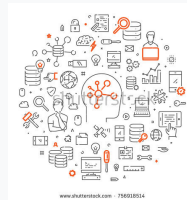


Bringing the outcomes of the research and development into a real context





Big data organizations and initiatives (BDVA, H2020 BigData PPP projects - ICT14 & ICT15))



Entrepreneur, ICT SMEs & Startups (Digital SME Alliance, SBS SME)



Academia and research



Standardisation bodies (ETSI, oneM2M, OASIS, NIST)



Open Source Project and Initiatives (Linux, KVM, OpenShift, Apache)



General public

We are always looking for new collaborations



Visit our website



[www.bigdatastack.eu](http://www.bigdatastack.eu)

Subscribe our Newsletter



[contact@bigdatastack.eu](mailto:contact@bigdatastack.eu)

Follow us on Twitter



[@bigdatastackeu](https://twitter.com/bigdatastackeu)

Connect with us on LinkedIn



[www.linkedin.com/in/bigdata-stack-81508b155](http://www.linkedin.com/in/bigdata-stack-81508b155)

Check our publications



[www.slideshare.net/BigDataStack](http://www.slideshare.net/BigDataStack)

See our videos



[www.youtube.com/channel/UCzRCdfF74jdlWognilOrEHA](http://www.youtube.com/channel/UCzRCdfF74jdlWognilOrEHA)





---

**Thank you very much  
for your attention!**

*Questions?*

**Eliot Salant (IBM)**

Project Coordinator

[SALANT@il.ibm.com](mailto:SALANT@il.ibm.com)

**Dimosthenis Kyriazis (UPRC)**

Technical Project leader

[dimos@unipi.gr](mailto:dimos@unipi.gr)

**Alessio Corongiu (Trust-IT Services)**

Communication Manager

[a.corongiu@trust-itservices.com](mailto:a.corongiu@trust-itservices.com)

