Evidence Based Big Data Benchmarking to Improve Business Performance

D6.4 Dissemination and Liaison Report - Period 2

Abstract

At the heart of the DataBench project is the goal to design a benchmarking process helping European organizations developing Big Data Technologies to reach for excellence and constantly improve their performance, by measuring their technology development activity against parameters of high business relevance. DataBench has investigated existing Big Data benchmarking tools and projects, identified the main gaps, and provided a robust set of metrics to compare technical results coming from those tools. In particular, DataBench has provided a framework to associate those technical results with the economic processes that are imperative to a company. It has provided a robust set of benchmarks to assess which tools respond best and provide the most pertinent information for organisation's economic planning and respond to their current and emerging industrial needs. The project also developed a software tool which the industrial and research community users can leverage to do this evaluation. DataBench has also interacted with the Big Data PPP ICT-14 and 15 projects to give access to its Toolbox and framework to leverage the Big Data benchmarking investment so far carried out in the benchmarking community, contributing to the success of the BDV-PPP. The project successfully interacted with the leading BDT suppliers and international industrial benchmarking user communities and has a strong relationship with the BDV cPPP.

This deliverable is the final report of dissemination and communication activities performed within WP6 for the positioning and visibility of DataBench among its stakeholders, with the objective to support the project exploitation and maximise its potential. D6.4 is based upon previous deliverables related to dissemination and communication, including D6.1, D6.2 and D6.3. Hence it compiles the information of all channels, tactics and actions executed within the digital ecosystem (website and social media), as well as the traditional marketing and communications activities, such as the development of dissemination material, participation at events, etc. DataBench project has achieved all the KPIs defined without any deviation.

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Benchmarking, Big Data, Big Data Technologies, Business Performance, Economic Indicator, European Significance, Industrial Relevance, Performance Metrics, Tool, Use Cases, Dissemination, Communication, Marketing, Big Data Value PPP, Stakeholders, Dissemination Materials, Logo, Infographics, Events, Final Report

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Acronyms and Abbreviations

Acronym	Title
AI	Artificial Intelligence
BDBC	Big Data Benchmarking Community
BDT	Big Data Technologies
BDV	Big Data Value
BDVA	Big Data Value Association
BSS	Business Support System
CMS	Content Management System
CoE	Center of Excellence
CRM	Customer Relationship Management
DG	Directorate General
DIAS	Data Information Access Services
DIH	Digital Innovation Hub
EBDVF	European Big Data Value Forum
EC	European Commission
ECSO	European Cyber Security Organisation
EFFRA	European Factories of the Future Research Association
ENoLL	European Network of Living Labs
EU	European Union

GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
HIPEAC	High Performance and Embedded Architecture and Compilation
HPC	High Performance Computing
HTML	HyperText Markup Language
ICT	Information and Communication Technologies
IoT	Internet of Things
JRC	Joint Research Center
KPI	Key Performance Indicator
LDBC	Linked Data Benchmarking Council
NFV	Network Function Virtualization
OSS	Operational Support System
PPP	Public Private Partnership
RoI	Return on Investments
SRIA	Strategic Research and Innovation Agenda
SC	Steering Committee
SDIL	Smart Data Innovation Lab
SDN	Software Defined Networks
SME	Small and Medium Enterprise
TC	Technical Committee
TF	Task Force
TFP	Total Factor of Productivity
TRL	Technology Readiness Level
UK	United Kingdom

USA	United States of America
WP	Work Package

Executive Summary

The purpose of this deliverable is to present the final report of the communication and dissemination activities that have been executed primarily in Period 2 of the project. Nevertheless, it also provides a brief description of activities performed throughout the project duration in order to present a complete overview of the work executed.

Throughout the lifetime of the project, WP6 and more specifically T6.1, T6.2, T6.3, and T6.4, have been devoted to position the project, its work, progress and results, among different stakeholders such as the BDVA PPP and Benchmark Communities which are key for the exploitation strategy of DataBench which will be presented in D6.5.

First, an analysis of the strategy is presented along with a brief description of all the activities that have been done to achieve the objectives and KPIs presented in D6.1. The next sections include a detailed description per activity, both on the traditional communication/dissemination scenario as well as on our digital ecosystem, in order to provide the reader with solid information that showcases how the resources have been managed for achieving maximum visibility and impact.

DataBench project achieved all the KPIs defined without any deviation, therefore the deliverable concludes with an overview and analysis of the KPIs achieved including lessons learned and recommendations that could be useful for future research projects that would like to achieve outstanding communication and dissemination as it has been done within DataBench project.

1. Introduction

WP6 of DataBench has focused on building an appropriate communication ecosystem and community to maximise the visibility of the project and position it among relevant stakeholders that have been identified as key for the commercialisation and sustainability strategy defined for the technical results developed.

Aligned to the technical development and milestones, the communication and dissemination strategy was executed successfully considering not only the achievement of KPIs but also the generation of valuable content to engage with our audiences, such as dedicated material based on the results of the survey conducted by IDC in 2018, the availability and validation phase of the DataBench Toolbox, the use cases, among many others.

The four-phase strategy which has guided all the work performed revolves around WP6's three major lines:

- Community engagement and active involvement of stakeholders: We held various activities aiming at presenting the project to stakeholders and in some cases, we also contributed to the liaison between technical WPs and stakeholders in terms of validation.
- Awareness, Communication, Dissemination and Marketing Campaign: Raising awareness about the project with specific messages throughout the life of the project has been essential to promote the continuous progress of DataBench and to engage with potential users of its results.
- Exploitation of DataBench Toolbox taking into consideration the go-to-market and sustainability strategy: Even though this part was led by T6.5, the internal alignment between the other WP6 tasks was of utter importance in order to communicate the right messages to the right audiences. Considering the relevance of the DataBench Toolbox among the results, a high effort was put on promoting its availability and benefits for different types of users.

In general, we evaluate the communication and dissemination work done as successful given the fact that we have managed to create a solid base of people interested in the project and its results. For this, the involvement and collaboration with BDV PPP were fundamental. The closeness of DataBench with this community brought significant opportunities in terms of audience outreach, visibility, engagement, awareness, among others, that for sure will contribute to a strong exploitation strategy at individual and consortium level.

Finally, we would like to stress that we had planned stronger participation in events during the last year of the project, given that technical results were more mature to showcase. The original plan had to be modified because of the impact derived from COVID-19, but we managed to sort it through the development of virtual actions such as a series of webinars called *Virtual BenchLearnings* and a strong presence on virtual events, social media and other digital channels from the project, partners and even 3rd parties.

1.1. Objective

D6.4 is part of WP6 Consensus Building, Dissemination and Exploitation, and presents an overview of the communication and dissemination actions performed during the whole life of the project, but with a special emphasis on the actions that took place on the 2nd period of DataBench: M18 – M36.

The deliverable is directly related to deliverables D6.1 – Dissemination and Liaison Plan, D6.2 – Project Web Portal and Dissemination Materials, and D6.3 – DataBench Dissemination and Liaison Report – Period 1.

As the final deliverable about communication and dissemination activities, it presents the outputs of the whole strategy carried out with a description of the activities, channels and tools used to communicate important milestones and results achieved within the project. Thanks to the strategy, we were able to reach and engage with various target groups and produce relevant content to be disseminated on both own and external communication channels.

1.2. Structure of the Document

To present a comprehensive description and analysis of the activities carried out within WP6, the deliverable has the following structure:

- Chapter 1: Introduction, objectives and structure of the deliverable.
- Chapter 2: Dissemination and Communication Strategy and a complete overview of all activities carried out since the beginning until the end of the project considering different channels and formats.
- Chapter 3: KPIs and monitoring analysis of the strategy adopted.
- Chapter 4: Conclusions, next steps and lessons learned that could be helpful for future research activities.

2. Dissemination and Communication Strategy

DataBench communication and dissemination strategy followed four phases in order to communicate sound messages of interest for target stakeholders, aligned to the technical roadmap and main milestones of the project.

Figure 1: DataBench Communication and Dissemination Phases

The first phase was devoted to generating awareness about DataBench on different channels while identifying key stakeholders which were relevant to consolidate a message and content strategy considering the technical development phases and milestones. A strong relationship with the BDV PPP was created since that point, and it has been extremely useful to foster relationship during the life of the project as well as to reach bigger audiences.

On the second phase, the communication focus was shifted towards the preliminary results produced by the other WPs such as the survey conducted by IDC, the releases of the ToolBox, the self-assessment survey, among many others. This work was a fundamental input for the development of relevant content that allowed the engagement with external stakeholders.

The third phase served for maximising the impact of the results generated through the consensus and development of networking and communication actions. As it was previously mentioned, the plan presented in D6.3 referring to use the budget available for participation in events to run demos and showcase the results to key stakeholders had to be modified due to COVID-19. Nevertheless, DataBench was present in virtual events and held virtual sessions where demos of the ToolBox were shown. In addition, WP6 collaborated on the coordination of different validation actions for the ToolBox. All the activities carried out during this phase definitively contributed to reach out potential users of the project's results, as well as to provide useful input to T6.5 regarding exploitation and sustainability strategies.

The valorisation phase of DataBench's communication and dissemination strategy focused on the preparation of different materials on the final results of the project, in order to communicate a long-lasting message on the objectives and benefits for the end-users and communities. In the same sense, the final event where the work and results of DataBench consortium were shown, took place within the European Big Data Value Forum 2020 which was held virtually.

Regardless of the phases, throughout the life of the project, the communication and dissemination actions of DataBench aimed at building a strong community by leveraging external partners and/or associations communications channels. Thanks to it, we had a

great performance on communications based on powerful and consistent messages shared on different channels and by different experts.

2.1.   Implementation of the Strategy

As it is shown on Figure 1: DataBench Communication and Dissemination Phases, the communication and dissemination strategy had different objectives for which specific actions and channels were used to achieve these while spreading the word about DataBench and engaging with different stakeholders. The actions and channels corresponding to previous phases have been described in detail on previous deliverables.

In order to keep track of the various activities executed by the different partners of the consortium, in some cases even only for promotion purposes, DataBench Consortium used EuresTools Tracker to report activities, authors, audience reached, among other valuable data which helped us determine if the strategy and activities were successful and contributing towards the objectives set.

During 36 months of project, communication and dissemination have evolved in line with the maturity of the project. Hence some channels, formats and tactics have been implemented according to the communication needs identified to address key audiences such as:

- General Public
- Academia & Research
- Industry
- Benchmarking Communities
- BDV PPP Framework and Projects
- I-Spaces
- DIHs

The following table presents an overview of the channels and tactics used along with a succinct description:

Channel	Description	Specific Tactics	Description
Project Website	Main communication and dissemination channel presenting the vision and most important information about the project and its progress. It has been constantly updated with different type of content related to milestones achieved and specific technical developments such as the Self-Assessment Survey and the Toolbox. In addition, the website serves as a documentation hub as	SEO Monitoring & Keywords strategy	Evaluation of common search terms for topics related to DataBench in order to improve the organic position on search results. This contributed to getting new visitors and increase traffic. In addition, the construction and update of the website were done in a way that it was compliant with SEO requirements for better indexing.
		Link Building Strategy	An important tactic within SEO administration is the generation of external and internal links for both, growth of the traffic and positioning of the content. The publication of various content and external events was key to provide visitors with

	different type of information was constantly uploaded: deliverables, publications, presentations, marketing material, webinars' recording, etc. Last but not least, the website presented all information regarding DataBench participation at events, and general information on events interesting for the community.		interesting information linked to other relevant sites. In the same sense, the fact of publishing DataBench information on partners websites, PPP newsletter and website, social media, among others was fundamental to drive traffic to the project website.
Social Media (Twitter**,** Facebook**,** LinkedIn**,** Slideshare**,** YouTube**)**	Thanks to a wide presence on social media, and to the diverse purposes and users of each one of these, DataBench was able to maximise its impact and outreach while generating interesting conversations around key topics of the project. Each account was used to publish specific types of content with different periodicity. In general, the strategy and daily use of this was focused towards redirecting traffic either to a specific account or to the website.	Community Management	Besides generating relevant content for social media, there's an important task to do regarding the administration and interaction with the community (who is following the account, who should be following it, who are we following, how to interact with key users, etc). Thanks to the work done in this regard, we were able to get really good results in terms of followers, engagement rates, impressions, and other metrics which demonstrate that the content generated internally was perceived as relevant.
		Content Marketing and Dissemination Material	Focuses on identifying relevant internal and external topics that could be of interest for the community built around DataBench to produce engaging content leading to more traffic on the website, more followers, and better interaction with them. In this sense, different kind of dissemination material has been essential such as visuals for social media posts, infographics, and videos.
BDV PPP Ecosystem	The Big Data Value Public-Private Partnership has played an important role in driving the use of DataBench outcomes,	Newsletters	To leverage the big community that this ecosystem has, DataBench actively used BDV PPP channels by contributing with news about the project results or special activities for their newsletter and social media
		Social Media	

		Webinars	accounts. In parallel, we exploited their webinars and events, such as BDVe webinars, BDV Virtual workshops, EBDVF, Meet-up events, among others, as a platform to promote the results of the project and get relevant contacts that could be beneficial for validation and exploitation purposes.
	involve different projects in the validation of the results, and dissemination of different content within their own channels.	Events	
DataBench Consortium + Partners' Ecosystem	This channel refers to the joint efforts of the DataBench consortium towards disseminating the results at events and conferences, through the development of scientific publications, and last but not least, by developing relevant content in different formats in order to engage with external audiences. In addition, it considers the ecosystem of digital channels and contacts that each one of the seven partners of the consortium used to support and maximize the reach of all communications of the project.	Webinars	Even though for this action BDV PPP provided some opportunities, the DataBench project launched its own series of webinars called *Virtual BenchLearnings* targeting benchmarking and research communities around the world and industry stakeholders. During the pandemic, this was an essential action to keep on with the dissemination pace of the previous years, and actively contributed to making some interesting contacts for validation and exploitation purposes.
		Social Media	The support of partners in sharing DataBench content on their own social media accounts allowed to reach a much wider audience than if we would have focused only on sharing information about the project on our official accounts. As an example, only considering the corporate Twitter accounts of the partners, we have reached more than 30K followers.
		Content Marketing	Complementing what was mentioned on this tactic for social media, the development of specific content for partners' internal and external channels, such as newsletters, allowed DataBench to enhance its visibility among external audiences.

Another example of this would be the IDC Survey Spotlight, a series of blog posts presenting the project findings leveraging the outstanding work done by IDC with the survey to 700 European businesses. |

		Conferences, presentations, exhibitions, workshops…	The participation of the project and its partners on different types of events served for maximizing the impact and reach among key target audiences. Through different modalities, DataBench was featured on booths, presentations, panels, workshops, among others.
		Research and Position Papers	Within the research projects and communities, showcasing the findings, progress and results in scientific papers for journals and scientific conferences contributed to demonstrate the work of the project and the investment made by the European Commission on research topics.
		Dissemination and Marketing Material	On a broader level than just for social media positioning purposes, DataBench developed different dissemination and marketing material which was used on different occasions such as physical events, although this was also available on digital formats for online dissemination and to reinforce key messages.

Table 1: Dissemination and Communication Channels & Tactics

2.2. Overview of Activities

The communication and dissemination efforts of DataBench were successful throughout the life of the project considering both the digital and traditional channels. This is the result of a strong strategy, the continuous work on being creative and finding relevant opportunities of the team involved in WP6, and undoubtedly the support of the whole consortium in the development of various activities towards generating awareness about the project, increasing the potential, and maximising its results.

The following sections present a detailed description of the work done on each channel and tactic mentioned previously. Some of the information has been presented already in prior dissemination and communication deliverables but since D6.4 is the final report we will present the complete information between M1-M36.

The following image presents the total of dissemination and communication activities performed between M1 and M36:

DataBench OVERVIEW
M1 - M36

WWW.DATABENCH.EU

7,114 Unique Visitors
9,446 Sessions
17,405 Page Views

7,083 New Users
1.84 Pages/Session
2:02 Avg time spent

SOCIAL MEDIA

520 Followers
+208K Impressions

102 Posts
230 Followers
+56.8K Post Views

32 Presentations
2,500 Views

830 Followers
8K Impressions

8 Videos
750 Views

DISSEMINATION MATERIAL

1 Handout
1 Roll-up
1 Project Fiche
2 PPT Template
1 PR Template

5 Videos
4 Infographics
+10 Social Media Banners
+4 Emailing
5 "Goodies"

EVENTS

25 Events
4 Webinars
1 Final Event
1387 Audience Size

DISSEMINATION & OTHER CONTENT

11 Scientific Publications

25 Contributions BDV PPP

18 BDV PPP newsletters

20 Contributions ARI Newsletters

16 ARI Newsletters

6 IDC Survey Spotlight

+1500 Audience reached

2.3. Project Website

The project web portal (www.databench.eu), representing DataBench main informative dissemination and communication tool, has been active since Month 6 of the project with the aim to provide stakeholders with regular updates on project deliverables and outcomes, news and upcoming events. All sections of the website have been regularly updated on a weekly basis by WP6 communication team, including highlights of the project's work. The website navigation has been constantly monitored and improved in order to guarantee a user-friendly experience from part of the users, while maintaining high quality standards in terms of attractiveness.

Since the release of D6.3[1] in Month 18, the website structure has undergone some structural changes. Some features have been revised and improved in order to ensure the best functionality and usability.
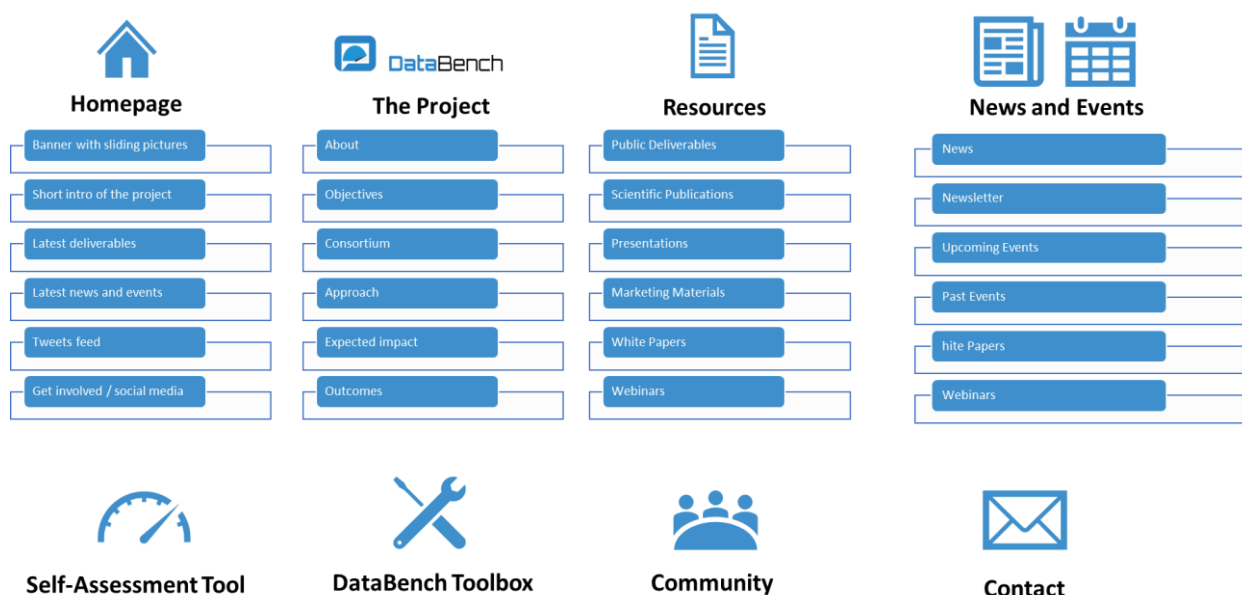
Figure 3: DataBench Website Structure

• A "DataBench Toolbox" section was developed with the aim to drive potential users to the Toolbox, as well as to provide information on the offering of the tool towards different types of users (business users, technical users or benchmark providers) through ad-hoc videos and infographics;

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[1] DataBench, D6.3 DataBench Dissemination and Liaison Report – Period 1, June 2019, https://www.databench.eu/wp-content/uploads/2019/07/d6.3-databench.pdf
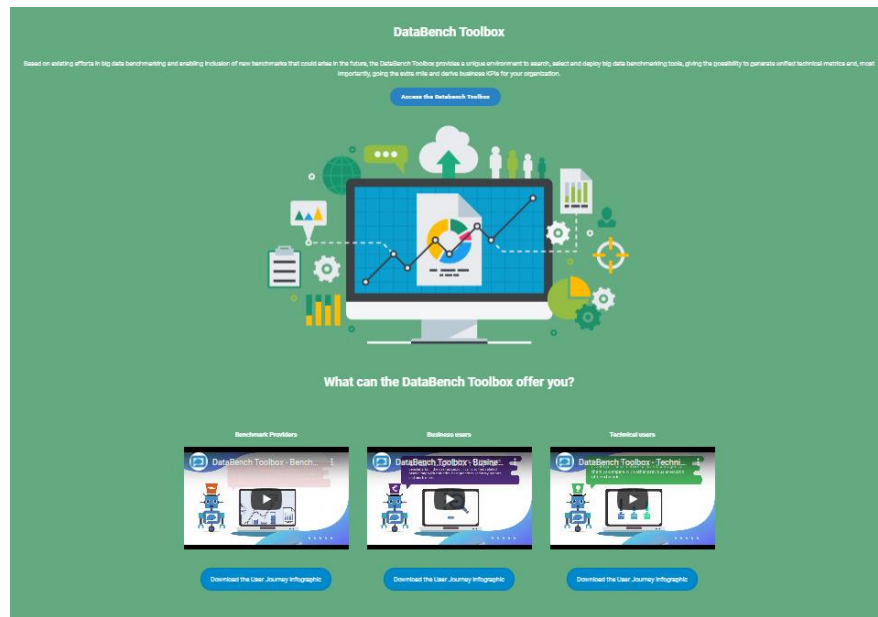
Figure 4: DataBench Toolbox Section

• A "Self-Assessment Survey" section was developed to allow organisations using or planning to use Big Data Analytics to benchmark their business performance against their peers (same industry and company size) through the DataBench Self-Assessment Tool. Based on the answers provided by survey respondents, a real time self-assessment report including an analysis of the results is then issued by the tool.
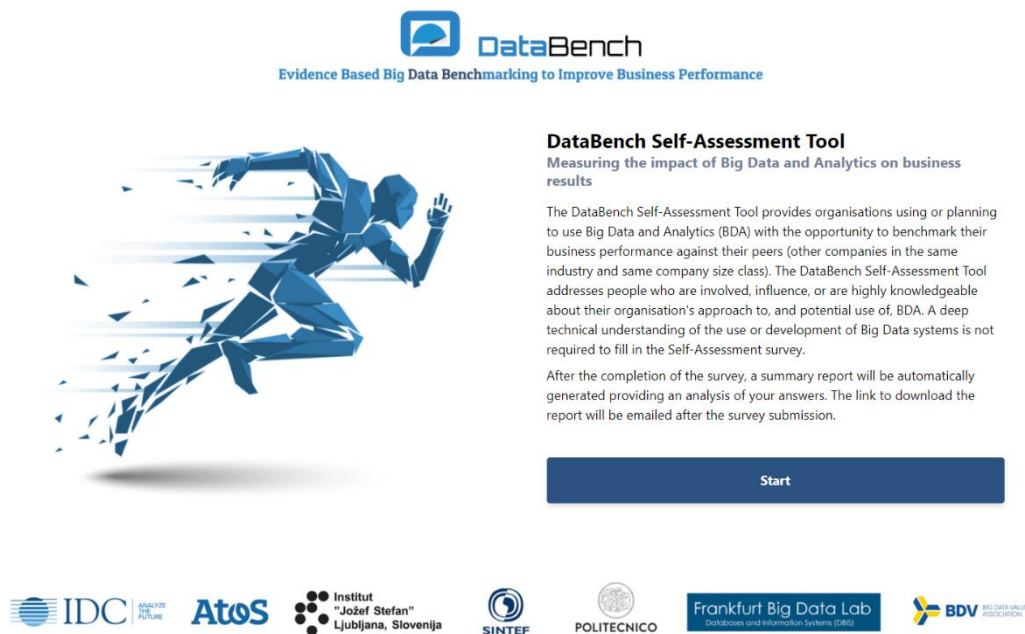

Figure 5: DataBench Self-Assessment Tool

2.3.1. Website Statistics

The website has run analytics in order to measure traffic and performance. The analytics are monitored through a specialized platform (Google Analytics) which provides key information including the number of users visiting the website and the most visited pages.

During Period 2 of the project the website has registered a considerable increase in the number of users and page views, basically doubling the statistics registered in the first reporting period. As matter of fact, from July 2019 until the time of writing the website has registered 4,532 unique visitors (against the 2,038 in Period 1) and 10,256 page views (against the 6,029 reported in the previous period).
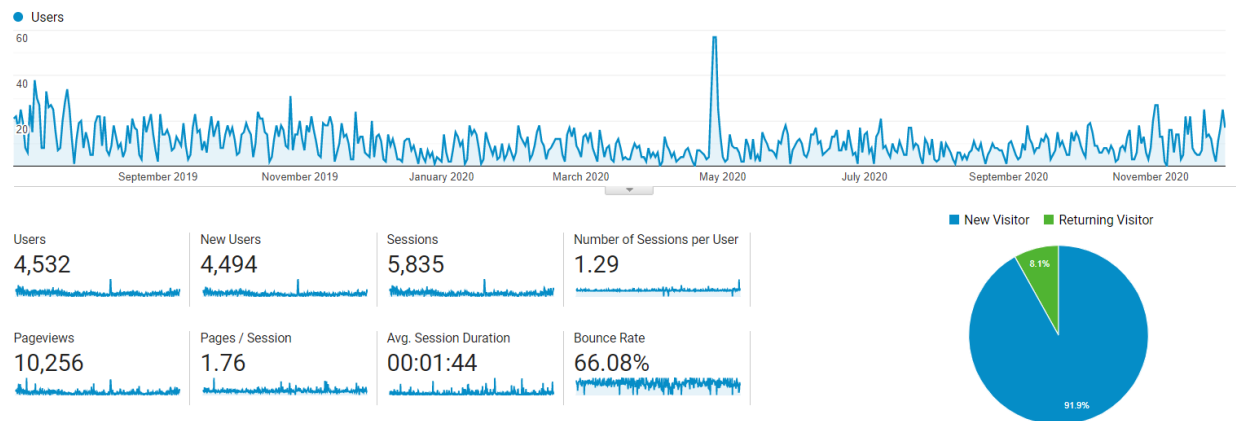
Figure 6: DataBench Website Analytics (Period 2)

During the period, the DataBench website has gathered views from multiple countries in the world, mainly US, Italy, India, UK and Germany (Top 5). The most visited sections have been the homepage (2,988 views), The Project (779 views), Public Deliverables (437 views), Events (386) and the Self-Assessment Survey area (376).

Since its launch, the website has registered 7,114 unique users and 17,405 page views overall with an average session duration of 2:02 minutes. These data are all above the KPI targeted by the project, thus demonstrating the success of WP6 communication and dissemination strategy in driving interested stakeholders to the project web portal.

The most visited sections have been the homepage (4,773 views), The Project (1,648 views), Public Deliverables (763 views), News (597) and Presentations (514). An overview of the key statistics for the 36-month period is provided in the Figures below. In terms of the audience distribution by country, most users were from the US, Germany, UK, Italy and India (top 5).
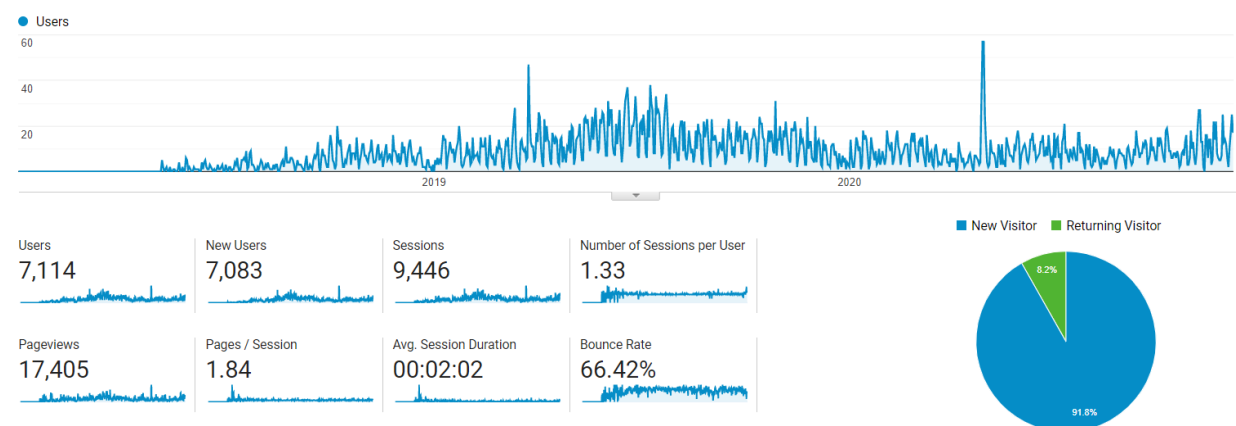

Figure 7: DataBench Website Analytics (36 months)

2.4. Social Networks

The project social media channels have been active since the project start to allow for effective interaction and engagement of the stakeholder community. All the channels featured frequent updates with the aim to maximise the audience awareness about the project developments and have been effectively exploited by WP6 communication team throughout the whole project lifetime. In particular, during the COVID-19 pandemic, the social media channels have been instrumental to ensure the dissemination of the project assets and fill the gap represented by the absence of physical events.

The sections below provide screenshots of the social media channels of the project along with key achievements.

Twitter

The project Twitter account ([@DataBench_eu](#)) has been mainly used to increase the visibility of the contents published on the project website, including information concerning past and upcoming events, news and public resources.

Figure 8: DataBench Twitter Profile

Additionally, news and information coming from external sources that are considered relevant for the audience and in line with the scope of the project are re-tweeted and further disseminated. The account currently registers more than 520 followers and more than 280,000 impressions.

LinkedIn

At the beginning of the project, WP6 communication team established a LinkedIn group as a dedicated space where the project team members could share content related to the project with the community and invite their own network of contacts to interact. Since the group only allowed for restricted access, at the beginning of Period 2 the team decided to launch a public LinkedIn page which has registered outstanding results in terms of outreach: the page is currently followed by more than 830 followers and has registered more than 8,000 views.
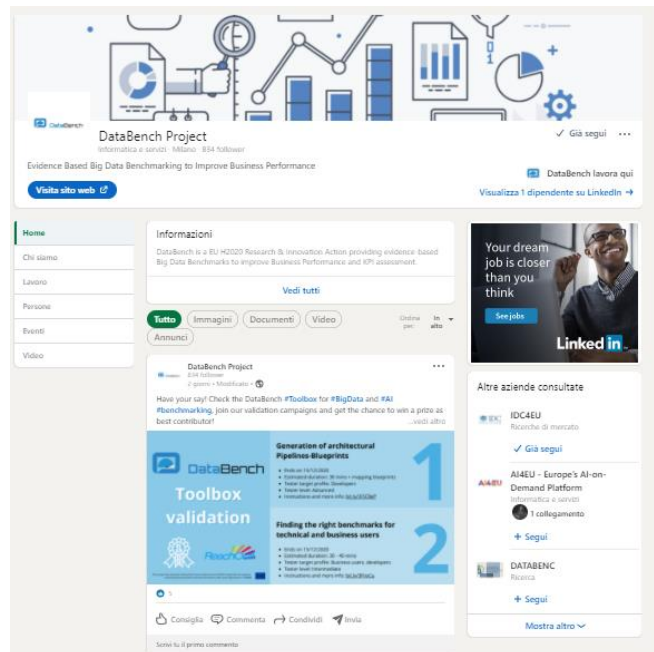
Figure 9: DataBench LinkedIn Page

Facebook

The Facebook page (DataBench) has been used as an additional and complementary channel to promote the project's outputs, share content within groups focused on Big Data and AI and drive traffic to the website. The page counts 102 posts, 230 followers and a total reach of 56,885 post views.

Figure 10: DataBench Facebook Page

YouTube

The YouTube channel ([DataBench Project](#)) has been exploited to share the videos produced by DataBench, which have been further disseminated through the social media channels and displayed during physical events. A detailed description of the different videos produced is provided in section 2.5 of the present report. The account currently registers about 750 overall views.
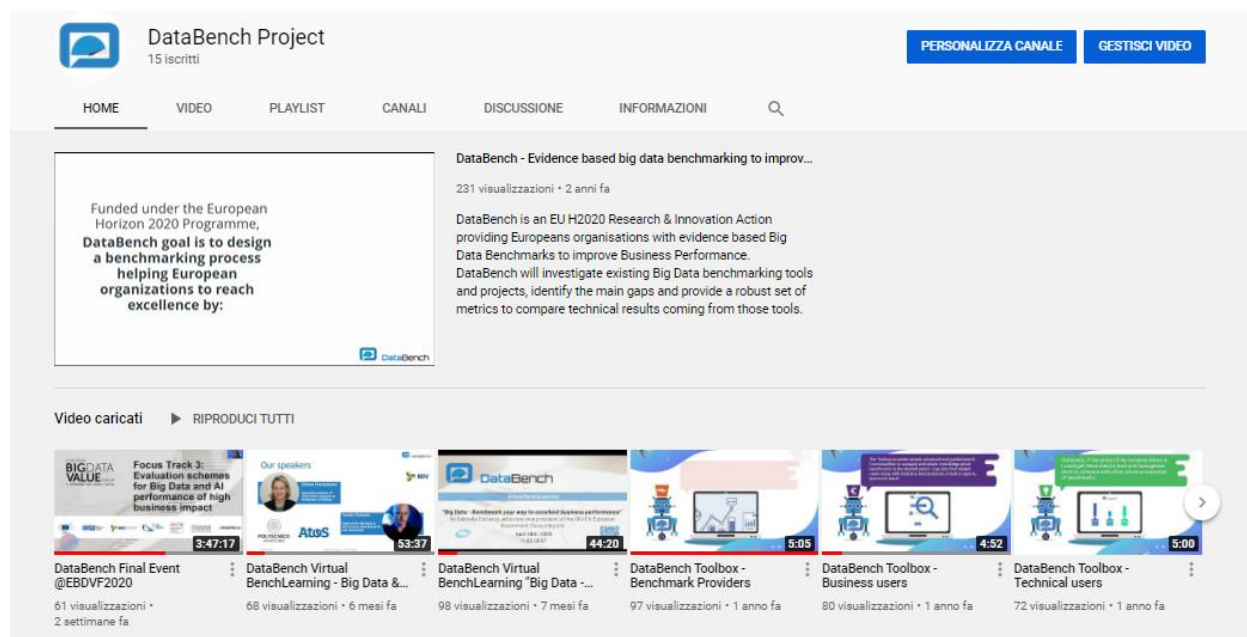
Figure 11: DataBench YouTube Channel

SlideShare

Since the project start, this channel ([DataBench](#)) has been used as an additional repository of all public presentations prepared by the project team for physical and virtual workshops/events to increase their visibility. 32 presentations are currently available on this platform and count more than 2,500 views overall. In order to generate traffic, links to these documents have been shared through the project's Twitter, LinkedIn and Facebook accounts.
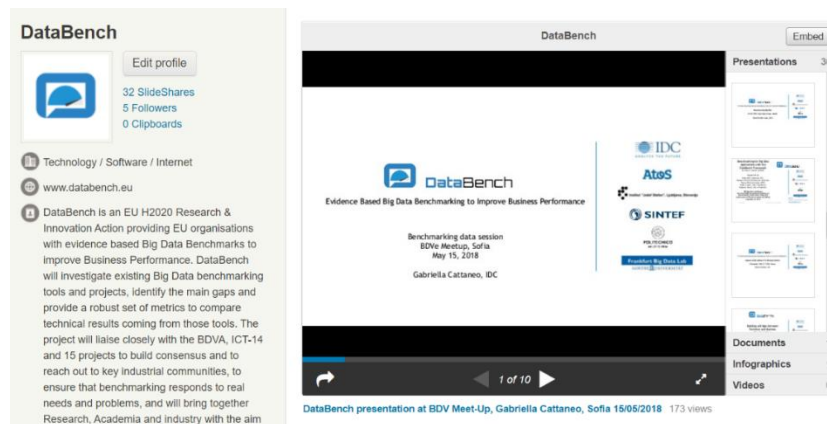
Figure 12: DataBench SlideShare Channel

2.5. Dissemination Materials

Considering the Brand Identity defined at the beginning of the project, DataBench dissemination materials were developed with the aim to share important information about the project progress and results in a creative format. These materials helped for the positioning of the project and the identification of it on different scenarios. In the same sense, digital dissemination material and physical dissemination material was created in accordance with the communication needs identified.

- **Logo:** Including determinate palette of colours, typography, and icon, which communicates key concepts and essence of the project.

Figure 13: DataBench Logo

In addition, a specific one was developed for the DataBench Toolbox:

Figure 14: DataBench Toolbox Logo

- **Presentation Template:** Used in all presentations delivered by the project representatives and internal meetings. Available at the OnlyOffice workspace.
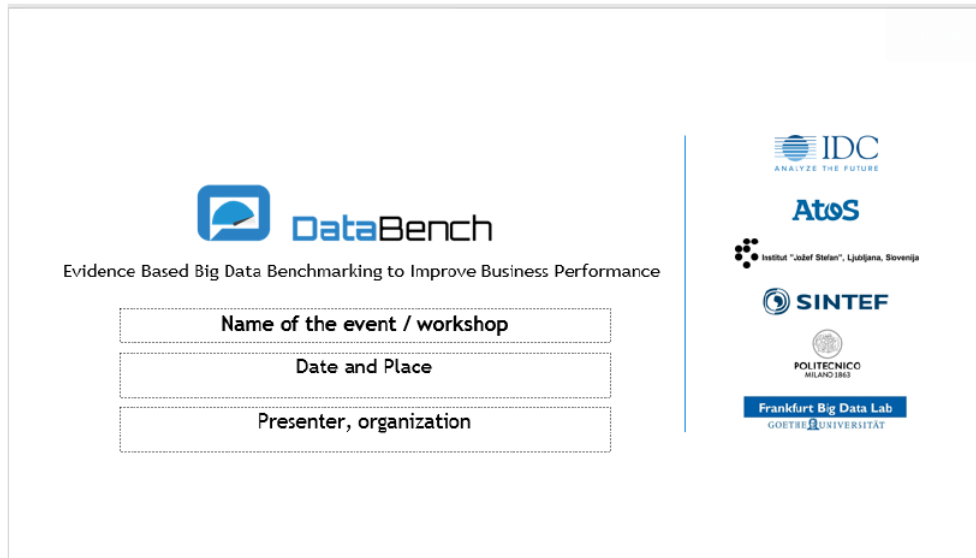
Figure 15: DataBench PPT Template

Nevertheless, for the Final Event of the project within the European Big Data Value Forum we developed a special one considering also the branding of the event.
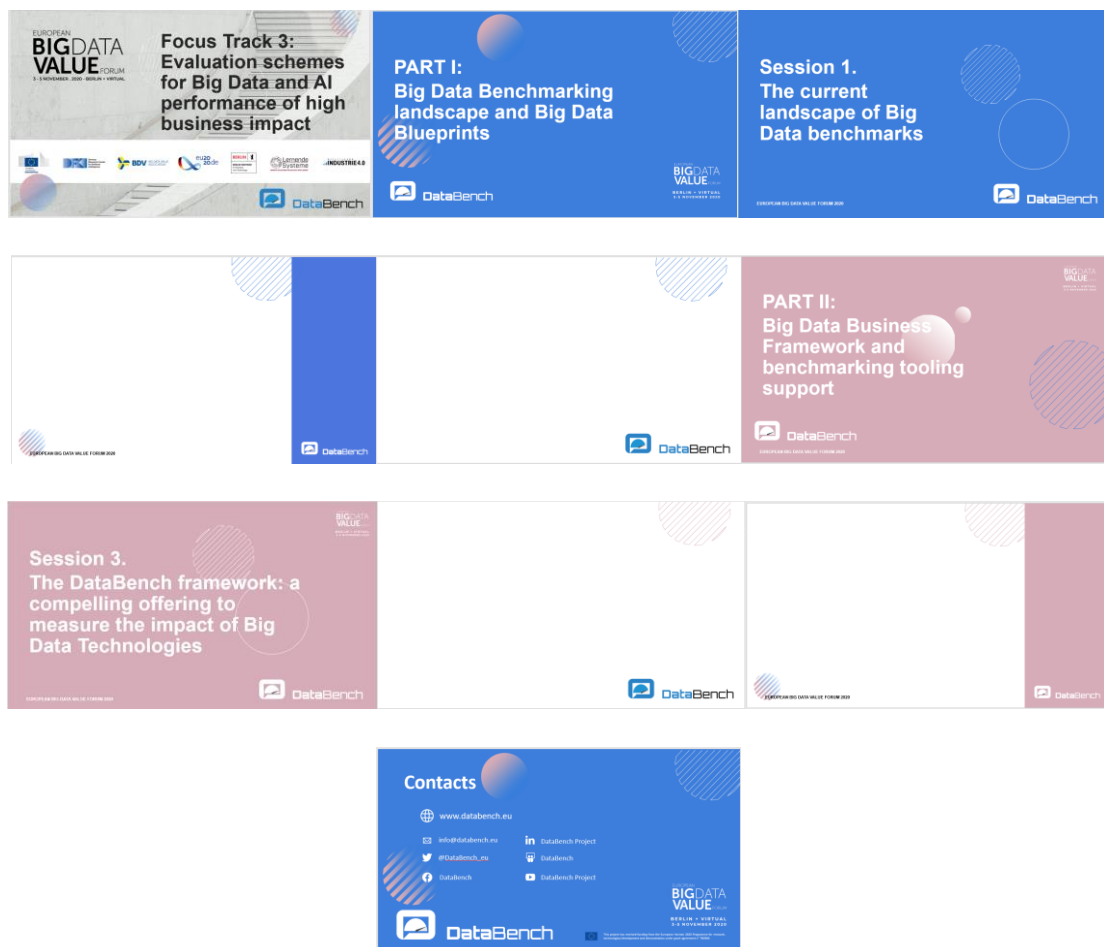

Figure 16: DataBench PPT Template - Final Event - EBDVF2020

- **DataBench Handout:** Given its general approach on the objectives and expected outcomes of the project, this handout was used throughout the life of the project in the physical events where the project had presence.
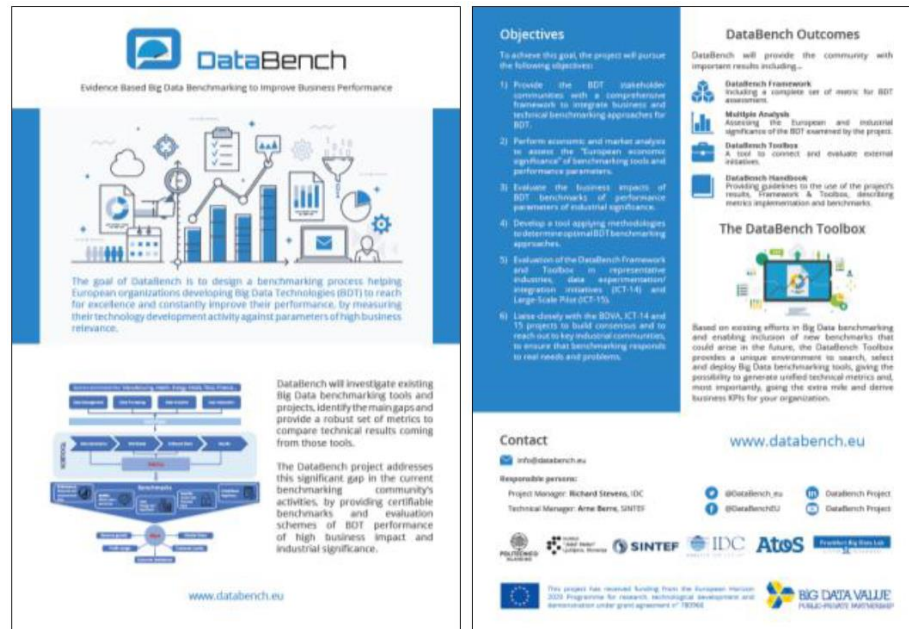
Figure 17: DataBench Handout

- **DataBench Roll-Up:** Showcasing the main benefit of the project and its results. Since this roll-up was used at events, rather than presenting all the objectives of the project with a full description of the results, the idea was to generate interest in the project with a clean and simple design inviting attendees to ask more information about the project or searching for it on our website or social media channels.
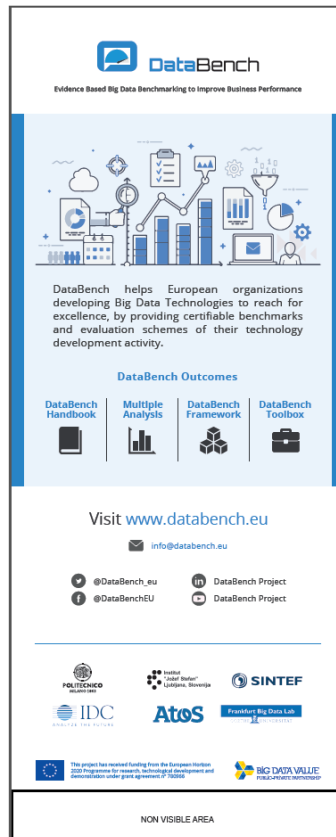
Figure 18: DataBench Roll-up

- **PR and BDV PPP Newsletter contributions template:** To deliver a consistent image in all communications issued by the project, WP6 team also created a specific Word template, following the brand guidelines, for press releases and contributions sent to the BDV PPP ecosystem.
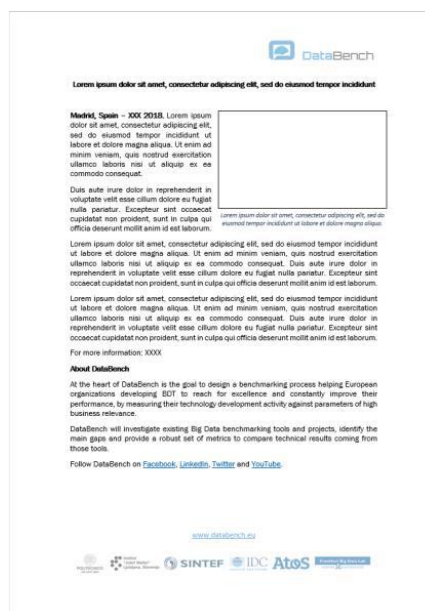
Figure 19: Press Release Template

- **Project Fiche:** It presents the objectives, outcomes, impact and partners that make part of the DataBench project. This material was particularly exploited for promotion purposes among the projects of the BDV PPP.
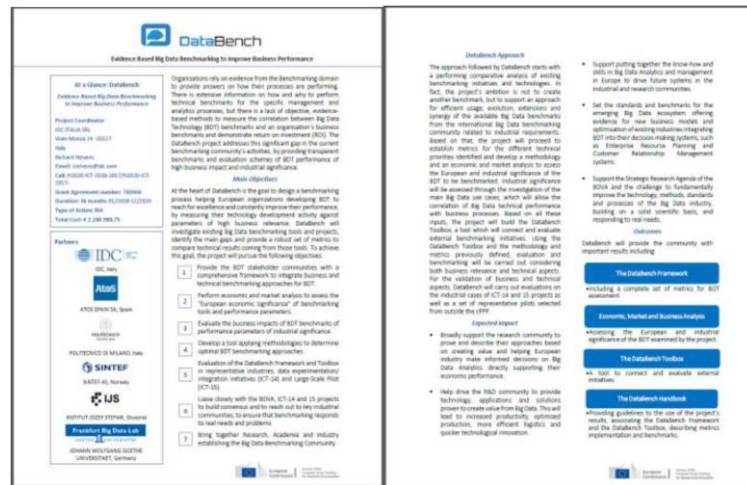
Figure 20: DataBench Project Fiche
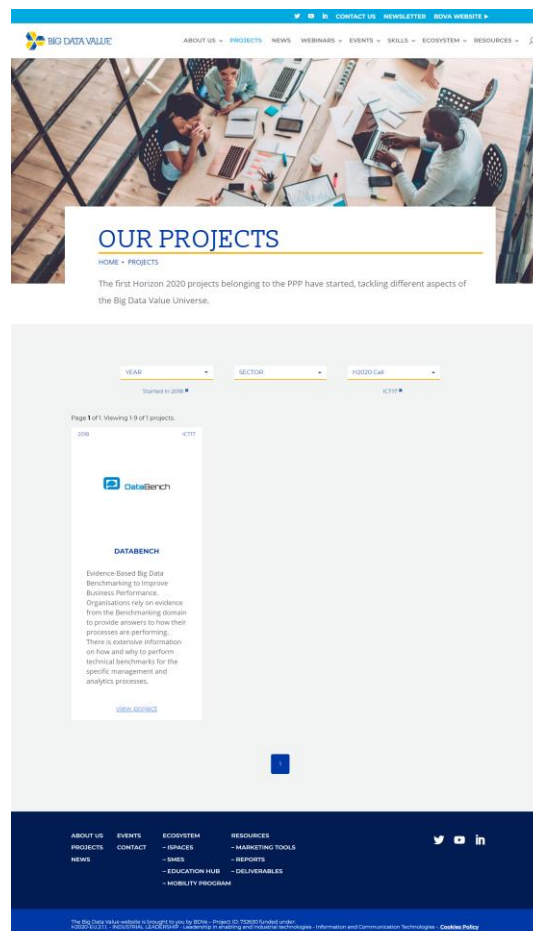
Figure 21: DataBench on BDV PPP Website

- **DataBench Video:** Animated video featuring the objectives, potential users, and expected outcomes of the project. It also showcases an example of a real-life situation where DataBench outcomes could benefit businesses and benchmarking communities because of its easy-to-use ToolBox and framework. The video was shared and promoted through different channels and showcased at several events. The video is available on the project YouTube Channel and to the date has 228 views. Figure 22 presents a screenshot of the video.

Figure 22: DataBench Video

- **DataBench Toolbox Videos:** Animated videos featuring "Benchy" as the main character who explains what the Toolbox is, what are its benefits and how different types of users can leverage it for evaluating Big Data and AI technologies from technical and business perspectives. The full video showcases the use and benefits for each type of user, but given to its length, other three mini videos were produced using the same introduction but presenting only the use and benefits for a specific type of user. These videos were shared on different channels and showcased as well at various events. Also, the videos are included on the DataBench Toolbox as a guide to each user on what are the possibilities according to their profile and needs. The complete video has 38 views, while the shorter versions on Benchmark Providers, Business Users, and Technical User have 93, 77 and 71 views respectively. The figures below present screenshots of each video.
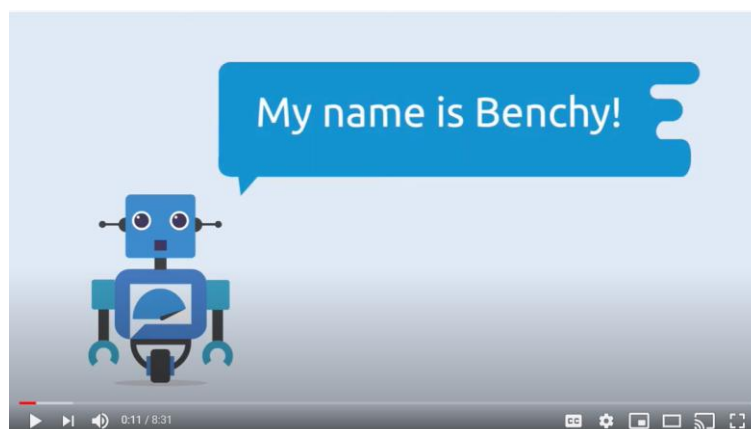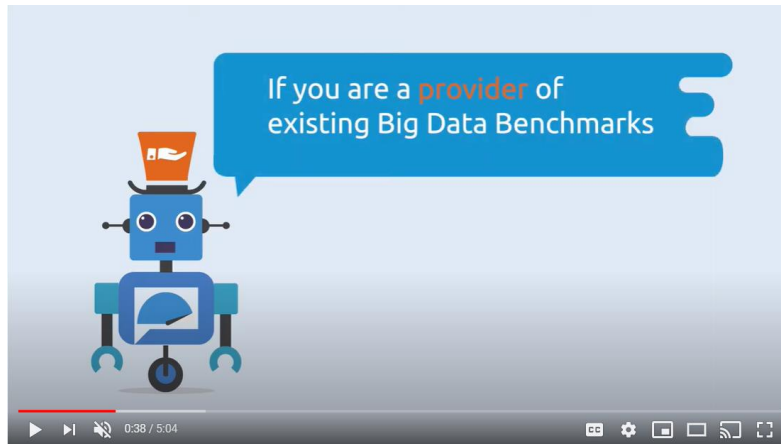

Figure 23: DataBench Toolbox Full video

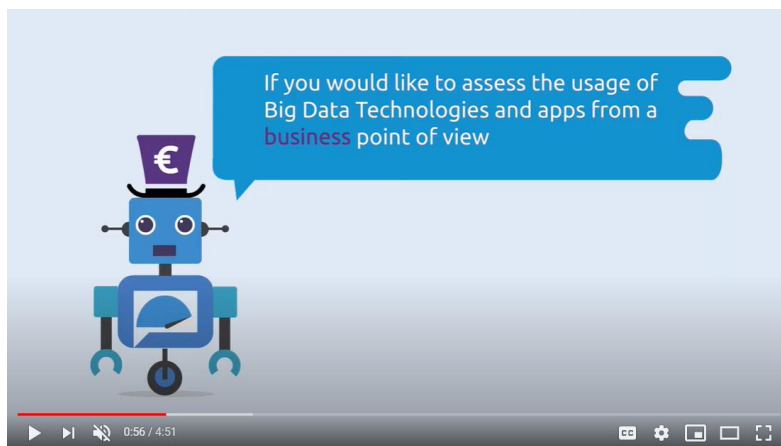**Figure 24: DataBench Toolbox Video
Benchmarking Provider**

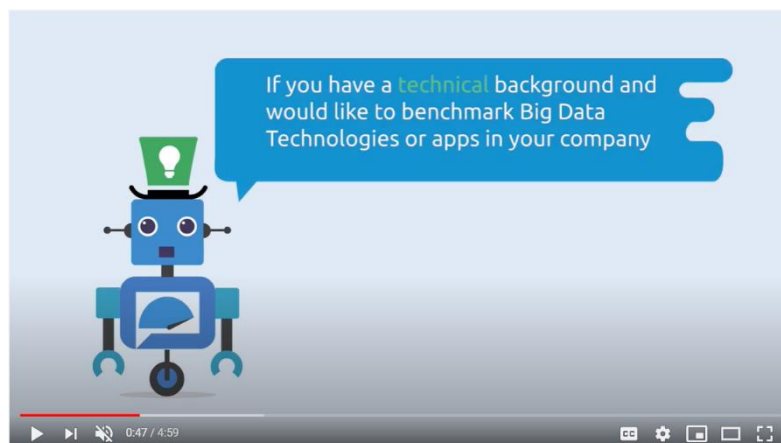**Figure 25: DataBench Toolbox Video
Business Users**

**Figure 26: DataBench Toolbox Video
Technical Users**

- **DataBench Survey Infographics:** The survey conducted by IDC on 700 European Businesses to evaluate the use, level of adoption and benefits of the use of Big Data Technologies, which served as an input for the development of D2.2, is undoubtedly a remarkable work worth sharing with external audiences. DataBench team developed a dedicated press release to promote the findings and an infographic to

show the most relevant numbers. This material was shared on multiple channels and showcased during events.
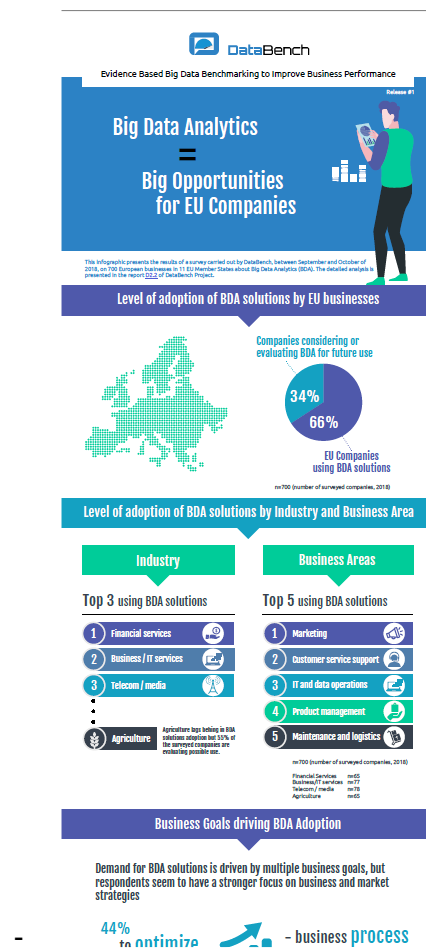

Figure 27: DataBench Survey Infographics

- **DataBench Toolbox Infographics:** In order to reinforce the key messages on the use and benefits that the Toolbox offers, we developed a series of infographics showcasing the User Journey for the three types of user targeted: benchmark providers, technical and business users. The infographics explain what is possible to do with the Toolbox and how it can be used depending on the profile as advanced or beginner user. These infographics were also shared through different channels and highly promoted on DataBench Virtual booths at EBDVF2020. They are also published on the Toolbox as a guide to the users.

Figure 28: Infographic - Benchmark Provider User Journey

Figure 29: Infographic - Business User Journey

Figure 30: Infographic - Technical User Journey

- **Flyer for whitepaper dissemination:** The figure below presents the flyer to promote the download of a whitepaper, built upon D3.1, was produced to support dissemination during EBDVF and ICT events.
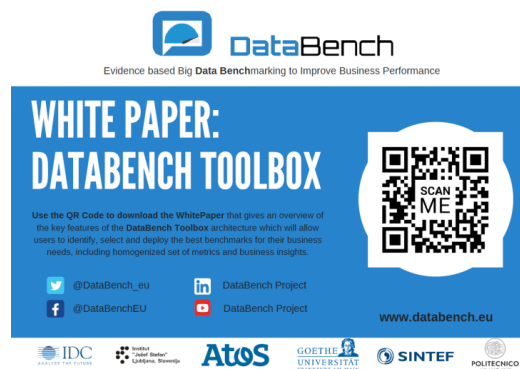

Figure 31: Flyer - Whitepaper - DataBench Toolbox

- **Banners and visuals for Social Media**: In order to reinforce our visual identity on social media posts both from the project and partners ecosystem accounts, special banners and visuals were designed for promoting important topics of the project, such as the Virtual BenchLearning webinars, the sponsorship and Final Event at EBDVF or the Toolbox validation campaign. Studies have shown that images increase engagement on Twitter by 34%.[2]

Figure 32: Banners and visuals for Social Media

- **Emailing templates**: The decision of not developing our own newsletter is supported by the fact that BDV PPP newsletter is already reaching a very wide audience so we should leverage it at maximum. However, for special occasions such as our Final Event and the validation campaign of the Toolbox, it was necessary to reach external audiences directly, hence the development of emailing templates using Mailchimp which were sent by the consortium partners to their contacts, and also to participants of previous DataBench events or webinars. For the Virtual BenchLearnings we used the template provided by GoToWebinar for the registration, reminders and follow-up emails.
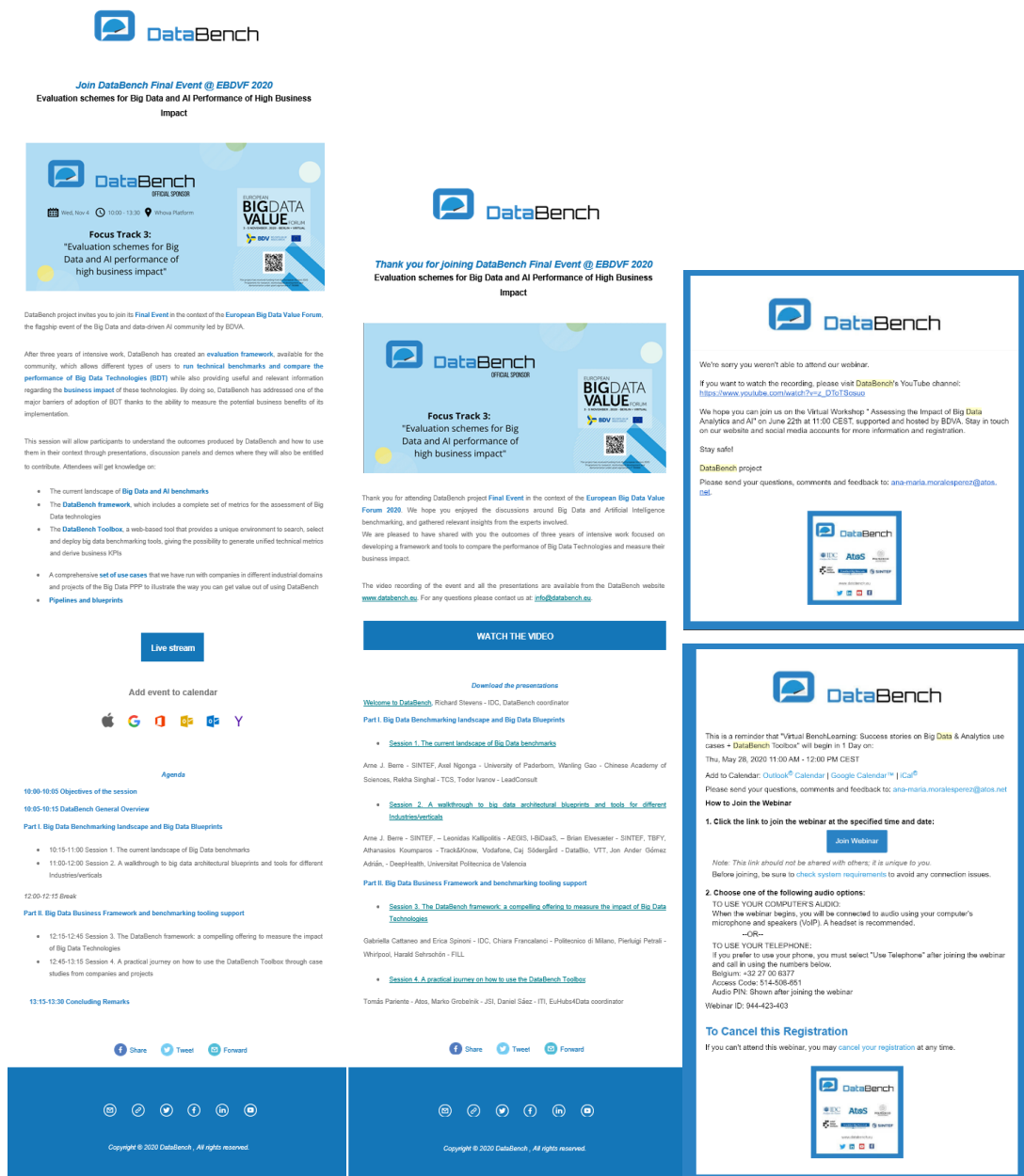
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[2] (Postcron, 2020)

Figure 33: Emailing templates

- **DataBench "Goodies":** As mentioned in previous deliverables, the DataBench "Goodies" consisted of various marketing material aiming to attract the attention of event visitors to our booth or to deliver to participants of DataBench workshops and other activities. The "Goodies" pack included: DataBench T-Shirts, pin badges, coffee mugs, branded M&M's and mobile cardholders.

Figure 34: DataBench "Goodies"

2.6.   Events

The participation and presence of DataBench at several events, targeting various kinds of audiences, and covering a wide range of topics applicable to the project, its technologies and results, was essential for achieving the objectives in terms of awareness, visibility, maximising the potential and impact of results, among others. Not only we were able to demonstrate DataBench capabilities but also, we established several contacts for exploitation and validation purposes.

In total, between physical and virtual events, and webinars, DataBench was present in 30 events, some of them with sessions/workshops co-located within big events, some others with a booth on the exhibitors' area, presentation of papers, among many others. The audience reached was over 1387 people from different key stakeholders' categories.

Because of the relevance of the events, the audience reached, the contents shared, and the feedback gathered from participants/attendees, we can value DataBench participation in events as successful and relevant towards the achievement of KPIs.

Even though WP6 had originally planned for great participation to physical events in 2020, the final year of the project, as it has been stated before, the project managed to overcome the COVID-19 challenges without affecting the visibility of the project and its presence on different important industry and research platforms.

The following list, reported in Table 2, shows all the information with regards to these 30 events:

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
International Conference on Performance Engineering (ICPE 2018)	9-13/04/2018	Berlin	Aims to integrate theory and practice in the field of performance engineering by providing a forum for sharing ideas and experiences between industry and academia.	Presentation: - ABench: Big Data Architecture Stack Benchmark	Todor Ivanov (GUF)	30	Academic & Research Benchmarking Communities	Click HERE
4th International Workshop on Performance Analysis of Big Data System (PABS) at ICPE 2018	09/04/2018	Berlin	Organised in conjunction with ICPE 2018, aims at providing a platform for scientific researchers, academicians and practitioners to discuss techniques, models, benchmarks, tools, case studies and experiences while dealing with performance issues in traditional and big data systems.	Presentation: - Exploratory Analysis of Spark Structured Streaming	Todor Ivanov (GUF)	30	Academic & Research Benchmarking Communities	Click HERE
TheWebConf 2018	23-27/04/2018	Lyon	Aims to provide the world a premier forum for discussion and debate about the evolution of the Web, the standardization of its associated technologies, and the impact of those technologies on society and culture.	Conference attendance, preparation for organization of Web Conference 2021 in Slovenia	Marko Grobelnik (JSI)	50	Industry	No link available

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[3] Descriptions taken from events websites

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
Big Data PPP Meet-up Sofia	14-16/05/2018	Sofia	Organised by the BDV PPP, with the twofold objective of strengthening collaborations among community members and increasing the visibility and awareness about the PPP in East Europe in general, and Bulgaria in particular.	Workshop with the Benchmarking Task Force of BDVA Presentation: - DataBench: Building a bridge between technical and business benchmarking - DataBench Toolbox	Gabriella Cattaneo (IDC) Tomás Pariente (ATOS)	50	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	[Click HERE](#)
3rd Big Data Innovation Conference 2018	08/06/2018	Frankfurt	Aims to help companiesunderstand & utilize data-driven strategies and discover what disciplines will change because of the advent of data.	Presentation: - Improving Business Performance Through Big Data Benchmarking	Todor Ivanov (GUF)	50	Academic & Research Benchmarking Communities Industry	[Click HERE](#)
7th International Workshop on Testing Database Systems (DBTEST) – SIGMOD2018	15/06/2018	Houston, USA	Aims to bring researchers and practitioners from academia and industry together to discuss key problems and ideas related to testing database systems and applications.	Presentation: - Adding velocity to BigBench	Marko Grobelnik (JSI) Todor Ivanov (GUF) Roberto V. Zicari	60	Academic & Research Benchmarking Communities Industry	[Click HERE](#)
SIGIR 2018	08-12/07/2018	Ann Arbor, USA	Premier scientific conference in the broad area of information retrieval.	Presentation: - Data Science for Social Good and Public Policy: Examples, Opportunities, and Challenges	Marko Grobelnik (JSI) Rayid Ghani (JSI)	30	Academic & Research Benchmarking Communities	n/a
KDD 2018 - 24th ACM SIGKDD	19-23/08/2018	London	Premier interdisciplinary conference bringing together researchers and	Presentation: - DataBench: Evidence Based Big Data	Todor Ivanov (GUF)	30	Academic & Research Benchmarki	[Click HERE](#)

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
Conference on Knowledge Discovery and Data Mining			practitioners from data science, data mining, knowledge discovery, large-scale data analytics, and big data.	Benchmarking to Improve Business Performance			ng Communities	
				Moderation of KDD 2018 project showcase	Marko Grobelnik (JSI)			n/a
Bled Strategic Forum	10-11/09/2018	Bled	Brings together over 1000 regional and global actors from the spheres of diplomacy, policy, business, science, and innovation.	Panel Participation: - Being Human in the Age of Technology (in partnership with IBM)	Marko Grobelnik (JSI)	50	Academic & Research Industry	Click HERE
Webinar - BDVe Webinar Series	09/10/2018	Virtual	Webinar series organised by BDVe aiming to give visibility to BVD PPP Projects and discuss different topics related to Big Data.	Presentations: - DataBench: Benchmarking Big Data. Introduction to the webinar - Building a bridge between technical and business benchmarking - Big Data Technical Benchmarking	Tomás Pariente (ATOS) Gabriella Cattaneo (IDC) Arne Berre (SINTEF)	65	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	Presentation 1 Presentation 2 Presentation 3
ItAIS 2018: 15th Conference of the Italian Chapter of AIS – Association for Information Systems	12/10/2018	Pavia	Conference of the Italian Chapter of AIS (Association for Information Systems). AIS Members have access to the Conferences which are the most prestigious gathering of information systems academics and research-oriented practitioners in the world.	Presentation: - Relating big data business and technical performance indicators	Barbara Pernici (POLIMI)	30	Academic & Research	Click HERE

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
EBDVF 2018	12/11/2018	Vienna	Key European event for industry professionals, business developers, researchers, and policy makers to discuss the challenges and opportunities of the European data economy and data-driven innovation in Europe.	Moderation of Benchmarking Session Presentation: - Building a bridge between technical and business benchmarking	Arne Berre (SINTEF) Gabriella Cattaneo (IDC) Mike Glennon (IDC) Tomás Pariente (ATOS)	75	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	[Click HERE]
ICT 2018	05/12/2018	Vienna	Focused on the European Union's priorities in the digital transformation of society and industry. It presented an opportunity for the people involved in this transformation to share their experience and vision of Europe in the digital age.	Presentation: - Impact of data-driven AI in Business Sectors Booth: - BDV PPP Booth	Richard Stevens (IDC)	50	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	[Click HERE]
Workshop 2nd IEEE International Workshop on Benchmarking, Performance Tuning and Optimization for Big Data Applications (BPOD) in 2018 IEEE International Conference on Big Data	10-13/12/2018	Seattle, USA	The aim of this workshop is to bring researchers and practitioners together to better understand the problems of optimization and performance tuning in a big data environment, to propose new approaches to address such problems, and to develop related benchmarks, tools and best practices.	Presentation: - Benchmarking for Big Data Applications with the DataBench Framework	Arne Berre (SINTEF)	30	Academic & Research Benchmarking Communities	[Click HERE]

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
2018 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing (Bench' 18)	11-12/12/2018	Seattle, USA	Oganized by International Open Benchmarking Council (BenchCouncil) and dedicated to benchmarking, measuring, and optimizing complex systems, including (but not limited to) Big Data, AI, chainblock, datacenter, cloud and warehouse-scale computing, high performance computing, Mobile Robotics, edge and fog computing, Big Scientific data, and IoT.	Presentation: - Benchmarking for Digital Platforms with Big Data, IoT, AI, Cloud, HPC and CyberSecurity	Arne Berre (SINTEF)	45	Academic & Research Benchmarking Communities	[Click HERE](#)
AI Governance Forum 2019	23/03/2019	Geneva	A multi-stakeholder's platform, open to all interested parties and dedicated to build Human-Trust in AI for the benefit of all.	Presentation: - Cross-lingual Real-Time Global Media Monitoring	Marko Grobelnik (JSI)	30	Industry Academic & Research Benchmarking Communities	[Click HERE](#)
17th International Conference on Numerical Combustion	06-08/05/2019	Aachen	The goal of the conference is to be a premier venue for researchers and industry practitioners to share new ideas, research results, and development experiences in fields such as integration of theory, modeling and numerical implementation to	Presentation: - DataBench: indicators and metrics to assess benchmarks to evaluate Big Data technologies - A focus on scientific domains	Barbara Pernici (POLIMI)	30	Academic & Research	[Click HERE](#)

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
			perform high-fidelity simulations of fundamental combustion physics and technological applications					
OpenExpo Europe 2019	20/06/2019	Madrid	One of the largest European events on artificial intelligence, cybersecurity, robotics and open technologies applied to the innovation that are changing the world.	Presentation: - Benchmarking Big Data	Tomas Pariente (ATOS)	50	Industry	Click HERE
2019 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing (Bench'19)		Denver, USA	Provides a high-quality, single-track forum for presenting results and discussing ideas that foster the knowledge and understanding of the benchmark community as a whole.	Presentation: - Building the DataBench Workflow and Architecture	Todor Ivanov (GUF)	50	Academic & Research Benchmarking Communities	Click HERE
EBDVF 2019	14-16/10/2019	Helsinki	Key European event for industry professionals, business developers, researchers, and policy makers to discuss the challenges and opportunities of the European data economy and data-driven innovation in Europe.	Booth: - IDC Booth	Richard Stevens (IDC)	150	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	n/a

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
BDV Meet-Up 2019	27/06/2019	Riga	An open day with plenary and parallel sessions, keynotes and speeches from representative actors both at local and European level that will share their insights about data driven and AI based innovation, and a day more focused on the implementation of the strategy of the PPP, with workshops and other activities organized by the PPP stakeholders.	Presentations: - Data benchmark as a Service. Introduction: What is in DataBench for you? - DataBench in a nutshell - The market: Assessing industrial needs - DataBench Toolbox Demo	Nuria de Lama (ATOS) Richard Stevens (IDC) Iván Martinez (ATOS)	50	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	Presentation 1 Presentation 2 Presentation 3
Foro Transfiere	12-13/02/2020	Málaga	Biggest professional and multi-sectoral Forum for knowledge and technology transfer that takes place in Spain, and that gathers the most relevant players in the national and international R+D+i ecosystem.	Booth: - Atos Booth	Nuria Rodriguez (ATOS)	150	Academic & Research Industry	n/a
ICPE 2020	20/04/2020	Edmonton, Canada	The International Conference on Performance Engineering originated eleven years ago from the fusion of an ACM workshop on software and performance prediction and a SPEC workshop focused on	Presentation: - Tutorial on Benchmarking Big Data Analytics Systems	Todor Ivanov (GUF)	30	Academic & Research Benchmarking Communities	Click HERE

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
			benchmarking and performance evaluation.					
Virtual BenchLearning	29/04/2020	Virtual	Webinar series organised by DataBench to present the progress made by the project and its results.	Presentation: - Big Data – Benchmark your Way to Excellent Business Performance	Gabriella Cattaneo (IDC) Erica Spinoni (IDC)	47	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	Recording Presentation 1 Presentation 2
Virtual BenchLearning	28/05/2020	Virtual	Webinar series organised by DataBench to present the progress made by the project and its results.	Presentation: - Success stories on Big Data & Analytics use cases - DataBench Toolbox in a nutshell	Chiara Francalanci (POLIMI) Tomás Pariente (ATOS)	48	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	Recording Presentation 1 Presentation 2 Presentation 3
Virtual BenchLearning	08/07/2020	Virtual	Webinar series organised by DataBench to present the progress made by the project and its results. Organised as part of the workshops planned for the BDV PPP Meet Up Porto 2020 which was cancelled due to COVID-19.	Presentation: - Assessing the performance and impact of Big Data, Analytics and AI - DataBench Framework - DataBench Toolbox	Arne Berre (SINTEF) Tomás Pariente (ATOS) Richard Stevens (IDC)	27	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	Recording Presentation 1 Presentation 2 Presentation 3
DBTest 2020	30/06/2020	Virtual	Aims to bring researchers and practitioners from academia and industry together to discuss key	Presentation: - CoreBigBench: Benchmarking Big Data Core Operations	Todor Ivanov (GUF)	100	Academic & Research Benchmarking	Click HERE

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
			problems and ideas related to testing database systems and applications.				Communities	
EBDVF 2020	03-05/11/2020	Virtual	Key European event for industry professionals, business developers, researchers, and policy makers to discuss the challenges and opportunities of the European data economy and data-driven innovation in Europe.	Final Event Exhibitor and Sponsor Booth Focus Track 3: Evaluation schemes for Big Data and AI performance of high business impact Presentations: - Welcome to DataBench - The Current Landscape of Big Data Benchmarks - A walkthrough to Big Data architectural blueprints and tools for different industries/ verticals - The DataBench Framework: a compelling offering to measure the impact of Big Data Technologies - A Practical Journey on how to use the DataBench Toolbox	Richard Stevens (IDC) Nuria de Lama (ATOS) Arne Berre (SINTEF) Todor Ivanov (LC) Gabriella Cattaneo (IDC) Erica Spinoni (IDC) Chiara Francalanci (POLIMI) Tomás Pariente (ATOS) Marko Grobelnik (JSI)	100	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	Recording Presentation 1 Presentation 2 Presentation 3 Presentation 4 Presentation 5
2020 BenchCouncil International Symposium on Benchmarking,	16/11/2020	Virtual	A multi-disciplinary conference, gathering researchers and practitioners from the architecture, system,	Presentation: - DataBench Toolbox – supporting Big Data and AI Benchmarking	Arne Berre (SINTEF) Tomás Pariente (ATOS)	50	Academic & Research Benchmarking	Click HERE

Name	Date	Venue	Description of the event[3]	Participation	Partner	Audience	Audience Type	Link
Measuring and Optimizing (Bench'20)			algorithms and application communities, to provide a high-quality, single-track forum for presenting results and discussing ideas that further the knowledge and understanding of the benchmark community as a whole.		Todor Ivanov (GUF)		Communities	
Workshop: Benchmark your applications with DataBench	09/12/2020	Virtual	This workshop focused on presenting to the EuHubs4Data consortium partners the assets produced by DataBench after three years of intensive work.	Presentations: - Introduction – DataBench and what's in it for EuHubs4Data - DataBench in a nutshell - DataBench Framework for Benchmarks and Architectural Pipelines & Blueprints - The DataBench Business Framework: A compelling offering to measure the impact of Big Data Technologies - Demo: A practical journey on how to use the DataBench Toolbox - Have your say! DataBench Toolbox Validation Campaigns	Nuria de Lama (ATOS) Tomás Pariente (ATOS) Richard Stevens (IDC) Gabriella Cattaneo (IDC) Chiara Francalanci (POLIMI)	25	Academic & Research Industry BDV PPP Framework and Projects I-Spaces DIHs	n/a

Table 2: DataBench Events

DataBench Final Event

Given that the present document is the final report of the dissemination and communication activities executed by DataBench, this subsection intends to give a more comprehensive explanation of the project Final Event.

The European Big Data Value Forum (EBDVF), is the flagship event of the European Big Data and Data-Driven AI Research and Innovation community organised by the Big Data Value Association (BDVA) and the European Commission (DG CNECT). With the collaboration of DFKI, Platform Industrie 4.0, Plattform Lernende Systeme and Berlin Partner, the 2020 edition took place between the 3rd and 5th of November.

Despite the fact that the event originally was planned to be held in Berlin, Germany, the decision of organisers to hold a hybrid event was recommended because of COVID-19 restrictions and risks. Hence, part of the event on the 3rd of November was physical at Kosmos, Berlin, while the main event during the three days was done on the events' platform Whova.

By combining physical and virtual sessions in order to avoid possible travel disruptions, the event reached a much wider audience, achieving a record in terms of participants from all over Europe with more than 1474 active users who signed in either mobile or web app.

Within the event, DataBench got a project sponsorship package with an extended session to be able to hold the final event. The sponsorship included: Exhibitor booth, Sponsor Booth, and a 3h30min session included in the main programme of the event.

The booths were set-up one month before the start of the event with different information in order to provide a more comprehensive description of the project. While the Sponsor booth provided a general overview of DataBench, the Exhibitor one had a stronger focus on the results and especially the DataBench Toolbox. Closer to the date of the session, new information about this was included on the booths, and WP6 team made use of the Chat feature of Whova for directly contacting and inviting more than 300 attendees with interests on topics such as Big Data, Benchmarking, AI, among others.

DataBench's session "Evaluation schemes for Big Data and AI performance of high business impact" was part of the Focus Track 3: Market uptake: Bringing AI and Data Science to Practice on Wednesday, December 4th, between 10:00 and 13:30 through Zoom and Zoom embedded visualisation feature on Whova.

The session was targeting different audiences: benchmark providers, companies interested in benchmarking Big Data, projects and members of the big data and AI communities, decision-makers of companies that are thinking about their data-driven transformation and policy makers looking for evidence-based decision-support tools. The session was

structured around two parts, one of them focused more on technical and the other one on the business aspects of benchmarking.

The session was led by different speakers from DataBench consortium, but the project also managed to involve other BDV PPP projects as well as representatives from benchmarking communities at an international level, from countries such as China, India and USA. This involvement of external stakeholders into the final event as well as other initiatives organised by the project, demonstrate the relationships build and the collaborative work done with different purposes such as validate technical components, understand their interest for exploitation strategies, as well as, generate awareness through dissemination and communication actions.

The [recording of the session](#) as well as the presentation is available on the project website, YouTube and Slideshare accounts. The agenda and speakers were:

- Welcome, introduction and objectives of the session (Nuria de Lama – ATOS)
- [DataBench General Overview (Richard Stevens, IDC)](#)
- **Part I: Big Data Benchmarking landscape and Big Data Pipelines**
    - o **[Session 1: The current landscape of Big Data benchmarks](#)** (Arne Berre – SINTEF; Axel Ngonga – BDVA TF6 Benchmark Lead, University of Paderborn; Wanling Gao – Chinese Academy of Science; Rekha Singhal – Tata Consulting Services; Todor Ivanov - LeadConsult)
    - o **[Session 2: A project perspective on Big Data and AI architectural pipelines and benchmarks](#)** (Arne Berre – SINTEF; Leonidas Kallipolitis – I-BiDaaS, AEGIS; Brian Elvesæter – TBFY, SINTEF; Athanasios Koumparos – Track&Know, Vodafone Innovus; Caj Södergård – DataBio, VTT; Jon Ander Gómez – DeepHealth, Universitat Politecnica de Valencia)
- **Part II. Big Data Business Framework and benchmarking tooling support**
    - o **[Session 3: The DataBench Business framework: a compelling offering to measure the impact of Big Data Technologies](#)** (Gabriella Cattaneo, IDC; Erica Spinoni – IDC; Chiara Francalanci – Politecnico di Milano; Pierluigi Petrali – Whirlpool; Harald Sehrschön – FILL)
    - o **[Session 4: A practical journey on how to use the DataBench Toolbox](#)** (Tomás Pariente Lobo – Atos; Marko Grobelnik – JSI; Daniel Sáez – ITI, EUHubs4Data)

In terms of promotion WP6 followed a predefined strategy for promoting the event on different channels before, during and after the event.

- Before: Creation of social media campaigns for Twitter, Facebook and LinkedIn project accounts, and creation of a special campaign for partners to be shared on their corporate accounts. Emailing of invitations to consortium partners contacts and attendees to previous DataBench events and webinars. Promotion of DataBench Final Event on BDV PPP Newsletter, website and social media. Promotion of DataBench Final Event through partners' internal channels (company portal, newsletter, etc)
- During: Coverage of the session on social media and general posts inviting to visit the virtual booths. Active engagement with participants and projects invited to the session.
- After: Promotion of recording and slides through social media posts, newsletters, emailing, among others.

In addition, as previously mentioned in this deliverable, different promotional material was developed for this event, especially in terms of visuals for social media and email. Consortium partners included a special signature on their emails for at least one week before the session that is reported in Figure 35:
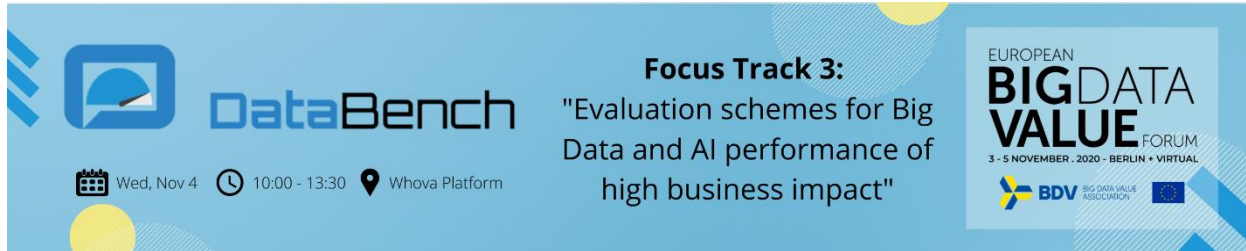
Figure 35: Email signature

Also, the agenda, reported in Figure 36, was uploaded to Whova and sent by Chat to different participants:

Figure 36: Final Event Agenda

The following images show the exhibitor and sponsor booths, as well as the session page. All three are still available on Whova mobile and web app:

Figure 37: DataBench Exhibitor Booth @EBDVF2020

Figure 38: DataBench Sponsor Booth @EBDVF2020

Figure 39: Final Event Page @EBDVF2020

Finally, in terms of results, participation to the project final event was extremely successful not only because of the number of attendees joining the session which in total reached 115, but also for other metrics published by the organisers on the "Event Report" were DataBench is highlighted in different sections.

- Most Popular Agenda Sessions: 14 likes and 91 personal agenda adds[4] (Page 8)
- Most Liked photos[5] (Page 14)
- Top 10 Agendas[6] (Page 22)
- Top 10 Speakers – Erica Spinoni & Nuria de Lama[7] (Page 24)

In addition, the statistics for our sponsor and exhibitor booths are outstanding in comparison to the other research projects:

- Sponsor Page (Impressions – 7348, Visits – 36, Likes – 1)[8] (Page 32)
- Exhibitor Page (Visits – 130, Likes – 8)[9] (Page 37)

2.7. Press Releases, Newsletters, and other content

To communicate the progress of the project among different stakeholders, DataBench leveraged external communities and/or consortium partners channels to amplify the reach of project messages.

The following tables present the different content on BDV PPP newsletter and website, Atos Research and Innovation newsletter, and IDC Survey Spotlight:

Press Releases and/or contributions to BDV PPP Newsletters	Newsletter	Website
The DataBench Project was presented at the KDD Conference 2018 in London	Sept 2018	Link
DataBench Paper "Big Data Key Performance Indicators" accepted at iTAIS Conference	Sept 2018	Link
DataBench Project will host its first Webinar related to Big Data Technologies and Business Insights	n/a	Link 1 Link 2
DataBench Project finishes its first year of activity with successful results	Dec 2018	Link
DataBench Call to Action - Are you working on projects related to Big Data that uses or develop benchmarks?	Jan 2019	Link
BDVE WEBINAR SERIES	n/a	Link

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[4] (Whova Inc, 2020)

[5] (Whova Inc, 2020)

[6] (Whova Inc, 2020)

[7] (Whova Inc, 2020)

[8] (Whova Inc, 2020)

[9] (Whova Inc, 2020)

Great success of the first BDVe Webinar about Benchmarking!	n/a	Link
DataBench Project released the results of its survey on the use of Big Data and Analytics by 700 companies in Europe	Feb 2019	Link
DataBench Infographic based on a survey on 700 European Companies	Apr 2019 – Online version not available	Link
DataBench is looking for industry case studies	May 2019	Link
Follow us: DataBench is now on LinkedIn	July 2019 - Online version not available	Link
Join DataBench project at the European Big Data Value Forum 2019!	Sept 2019 - Online version not available	Link
New public deliverables available at DataBench website	Dec 2019	Link
DataBench: Eager to know more about benchmarking of Big Data Technologies? New deliverables, videos and events available on DataBench Website!	Jan 2020	Link
DataBench Toolbox Videos! – Learn who can use it, how to use it and the benefits you can obtain by using it!	Feb 2020 - Online version not available	Link
Virtual BenchLearning: Big Data - Benchmark your way to excellent business performance	Apr 2020 - Online version not available	Link
Did you miss the 1st Virtual BenchLearning by DataBench? Check the recording and the presentations now!	May 2020 - Online version not available	Link
Virtual BenchLearning: Sucess stories on Big Data & Analytics use cases and DataBench Toolbox	May 2020 - Online version not available	Link
Did you miss the 2nd Virtual BenchLearning by DataBench? Check the recording and the presentations now!	Jun 2020 - Online version not available	Link
Virtual BenchLearning: Assessing the performance and impact of Big Data, Analytics and AI	Jul 2020 - Online version not available	Link
DataBench: Check the recording and presentation of the 3rd Virtual BenchLearning	Sept 2020 - Online version not available	Link
DataBench: Would you like to take part in the validation of our Toolbox?	n/a	Link

DataBench: Join us on our Final Event at the EBDVF2020!	Oct 2020 - Online version not available	Link
DataBench project launched two validation campaign for the DataBench Toolbox: Have your say and give them feedback!	Nov 2020 - Online version not available	Link
Watch the recording of DataBench Final Event at EBDFV 2020	Nov 2020 - Online version not available	Link

Table 3: BDV PPP Content Contributions

The BDV PPP newsletter is sent on a monthly basis to more than 1100 subscribers. In total, 25 contributions about different topics were provided and published on 18 editions of the newsletter. As seen on the table, some of the contributions were only published on the website because of the need to publish the content on a specific date. In addition, BDV PPP used to upload the newsletter to their website but some issues on 2019 and 2020 were only sent by email.

Atos Research and Innovation Internal Newsletter	Issue
DataBench Webinar: "DataBench - Benchmarking Big Data"	October 2018
DataBench Paper Presentation @itAIS Conference	October 2018
DataBench participation at the European Big Data Value Forum	November 2018
DataBench @ICT2018	December 2018
DataBench - Feel like reading some awesome Papers!?	February 2019
DataBench General Meeting @Madrid!	March 2019
DataBench Project most voted #Call4Papers @OpenExpoEurope	April 2019
DataBench Presentation @OpenExpoEurope2019	June 2019
DataBench Workshop @BDV PPP Meet Up	
Cast your VOTE for #OpenAwards2019 at Open Expo Europe	
DataBench Project in Madrid and Riga!	July 2019
DataBench @EBVDF 2019	October 2019
VirtualBenchLearning DataBench	May 2020
2nd Virtual BenchLearning by DataBench	June 2020
DataBench Workshop @BDVA Summit	
DataBench Workshop @BDVA Summit	July 2020
DataBench @PPPVirtual	August 2020
ARI Projects at #EBDVF2020! DataBench Final Event	November 2020
Validation campaigns for the DataBench Toolbox: Have your say and give them feedback!	December 2020
DataBench - Final Event @EBDV2020 + Invited Talk @Bench'20	

Table 4: ARI Newsletters Content Contributions

In total, 20 contributions were published on 16 issues of the Atos Research and Innovation internal newsletter which is sent monthly to more than 180 members of this department in Atos who are based in different areas of Spain. The newsletters are not available for external

audiences but in case you are interested in checking some of them, please contact ATOS team participating on WP6.

IDC Survey Spotlight	Views
How Far Have European Organizations Embedded Big Data and Analytics in their Business Processes?	38
How Do European Organizations Measure BDA Performance?	11
How European Organizations are Benefitting from Big Data and Analytics	74
To What Extent are European Companies Combining BDA and Innovation Accelerators?	10
European Businesses' Approach to Big Data Storage and Management	42
The Art of Mastering Data: A European Perspective	115

Table 5: DataBench @IDC Survey Spotlight

Regarding IDC Survey Spotlight, the content produced was based on the survey conducted by IDC, so it is basically short posts highlighting specific findings on this. The publications are only available for IDC affiliates and have reached over 290 views.

Title	Website	Link
DataBench Toolbox	Marketplace BDV	Click HERE
DataBench Project	Frankfurt Big Data Lab	Click HERE
Building a Bridge Between Technical and Business Big Data Benchmarking	IDC Italy	Click HERE
DataBench Project	Politecnico Milano	Click HERE
DataBench is launching two validation campaigns to evaluate the usage of the DataBench Toolbox, a one-stop shop for BigData and AI benchmarking.	ODBMS.org	Click HERE
DataBench: Evidence Based Big Data Benchmarking to Improve Business Performance	ODBMS.org	Click HERE
DataBench: Evidence Based Big Data Benchmarking to Improve Business Performance	Atos Research and Innovation Booklet	Click HERE

2.8. Engagement of Key Industrial Communities

Even though most of the activities and tactics executed throughout the life of the project were targeting industrial and benchmarking communities, in this section we highlight the participation in webinars organised by the BDV PPP and the Virtual BenchLearnings initiative. Mainly, because the promotion had a special focus on industrial and benchmarking communities.

1. **DataBench – Benchmarking Big Data**
   October 9, 2018 – 12:00-13:00 CET
   Organised by BDVe project in collaboration with BDV PPP, this webinar presented the DataBench project. Arne Berre (SINTEF) explained the efforts to characterise and reuse big data benchmarking frameworks from a technical perspective, and shared details of the degree of support that DataBench will provide to other projects and big data practitioners to benchmark big data tools and applications. Gabriella Cattaneo (IDC) provided ideas on how big data benchmarking could help organizations to get better business insights and take informed decisions.
   - Registered: 55
   - Attended: 37
   - Presentations:
       o BDVe Webinar Series - DataBench: Benchmarking Big Data - Introduction to the Webinar. Tomás Pariente (ATOS) – 146 views on BDVA SlideShare account / 119 views on DataBench SlideShare account
       o BDVe Webinar Series: Building a bridge between technical and business benchmarking. Richard Stevens and Gabriella Cattaneo (IDC) – 192 views on BDVA SlideShare account / 97 views on DataBench SlideShare account
       o BDVe Webinar Series: Big Data Technical Benchmarking. Arne Berre (SINTEF) – 150 views on BDVA SlideShare account / 124 views on DataBench SlideShare account
   - Registered and attending participants belong to the following companies, communities, and institutions: AVL, IDC, Karlsruhe Institute for Technology, University of Rome Tor Vergata, University of Rome Tor Vergata, University of Manchester, Athena RC, Aristotle University of Thessalonikk, Goethe University Frankfurt, UBITECH, Research Studies Austria, Eurecat, Technipfmc, University of Oslo, Boeing, Istituto Superiore Mario Boella, Cefriel, SINTEF, ATLANTIS Engineering, Universita Politecnica Delle Marche, SIEMENS, NTUA, UGR, VTT, Know Center, ERTICO - ITS Europe, JOT Im, Universidad Politecnica de Madrid, F6S, CERTH, Insurance Europe, ITI.

2. **Virtual BenchLearning: "Big Data – Benchmark your Way to Excellent Business Performance"**
   April 29, 2020 – 11:00-12:30CET
   Organised by DataBench, Gabriella Cattaneo and Erica Spinoni from IDC, presented the results of the research on Big Data business impacts by European industries. Webinar attendees had the opportunity to understand how different industries implement Big Data Technologies and benchmark activities, for measuring business-related KPIs such as revenue growth, profitability and cost savings, customer

satisfaction, among others, based on a survey conducted by IDC to 700 EU-industry-representative companies.
- Registered: 82
- Attended: 47
- Presentations:
    o DataBench Virtual BenchLearning "Big Data - Benchmark your way to Excellent Business Performance" – Introduction. Ana María Morales (ATOS) – 70 views on DataBench SlideShare account
    o DataBench Virtual BenchLearning "Big Data - Benchmark your way to Excellent Business Performance" Gabriella Cattaneo and Erica Spinoni (IDC) – 59 views on DataBench SlideShare account
- Recording: 90 views on DataBench YouTube account
- Registered and attending participants belong to the following companies, communities, and institutions: SIVECO - Software Imagination & Vision, University of the Aegean, PBN, SAP Labs France, CeADAR, ATC International, FORTH, TECO, GMV Aerospace and Defence, INRIA, IBV, EIT Digital, European Commission, KPN, CINECA, IIT, Microsoft, GFT Technologies, University of Frankfurt, POLIMI, ITML, AEGIS Research, ATOS, University of Nottingham, Vodafone, Tilde, ALLBESMART, T-Systems, Martel Innovate, dataprotection.gov.sk, Leading Edge Ltd, FIWARE, Technopolis Group, Tecnoalimenti, TNO, Telecom Italia, Commission for Personal Data Protection, I-BiDaas Project, Pannon Business Network, Aix-Marseille University, Goethe University, Karlsruhe Institute for Technology, CreAIte, Social Innovation & Entrepreneurship Center SiNC, SIMAVI, NCSR Demokritos, Eurideas, Techedge, Ecole Des Ponts, CaixaBank.

3. **Virtual BenchLearning: "Success stories on Big Data & Analytics use cases + DataBench Toolbox"**
May 28, 2020 - 11:00-12:30 CET
The speakers and participants of the DataBench Project, Chiara Francalanci from Politecnico di Milano and Tomás Pariente from Atos Research and Innovation, presented the most relevant use cases and success stories in the Retail and Manufacturing sectors implementing Big Data, Analytics and Benchmarking tools. The session included a demonstration of the main outcome of the project, the DataBench Toolbox, which allows different types of users from both technical and business roles, to search, select and deploy Big Data benchmarking tools to generate unified technical metrics and derive business KPIs.
- Registered: 75
- Attended: 48
- Presentations:
    o DataBench Virtual BenchLearning "Success stories on Big Data & Analytics use cases & DataBench Toolbox" – Introduction – Ana María Morales (ATOS) – 73 views on DataBench SlideShare account
    o "Success Stories on Big Data & Analytics" – Chiara Francalanci (POLIMI) – 238 views on DataBench SlideShare account
    o "DataBench Toolbox in a Nutshell" – Tomás Pariente (ATOS) – 65 views on DataBench SlideShare account
- Recording: 64 views on DataBench YouTube account

- Registered and attending participants belong to the following companies, communities, and institutions: AEGIS Research, Beia Consult International, Hellenic Telecommunications Organization (OTE), CINECA, Cherry Data, Software AG, SAP Labs France, Grupo Inmark, PALUNO - University Duisburg, ORBIT, PBN, POLIMI, ATOS, IDC, FORTH, IIT, ATC International, Industrial Systems Institute – ISI, ATHENA Research & Innovation Center, STANTEC Consulting Engineers, European Commission, University of Athens, GRADIANT, APODISSI, Municipality of Patras, CENTRIA, LCL Data Centers, T-Systems, CONTROLAR, University of Frankfurt, AUTH, Deutsche Telekom AG, Epam.

4. **Virtual BenchLearning "Assessing the Performance and Impact of Big Data, Analytics and AI"**

July 8, 2020 – 14:00-15:30 CET

Organised in collaboration with BDVA, as part of the workshops that should have taken place during the BDV Meet-up in Porto, different speakers from DataBench project provided the audience with a framework and tools to assess the performance and impact of Big Data and AI technologies from the technical perspective, by providing real insights coming from DataBench and other projects active in the benchmarking domain in various industrial sectors. In addition, representatives from other projects part of the BDV PPP such as DeepHealth and I-BiDaaS participated to share the challenges and opportunities they have identified on the use of Big Data, Analytics, AI.

- Registered: 44
- Attended: 27
- Presentations:
  - DataBench Framework. Arne Berre (SINTEF) – 33 views on BDVA SlideShare account
  - DataBench Toolbox Demo. Tomás Pariente Lobo (ATOS) – 27 views on BDVA SlideShare account
  - DeepHealth Needs and Requirements for Benchmarking. Jon-Ander Gómez Adrián (Universitat Politecnica de Valencia) – 22 views on DataBench SlideShare account
  - I-BiDaaS: Dusan Jakovetic (University of Novi Sad) – 29 views on BDVA SlideShare account
- Recording: 30 views on BDVA YouTube Channel
- Registered and attending participants belong to the following companies, communities, and institutions: Dayalbagh Educational Institute, Teknopar, POLIMI, SAP, I-BiDaaS project, TNO, UNIPI, Karlsruhe Institute for Technology, MarineTraffic, FORTH, Inlecom Systems, Workday, Mastercard, Huawei, University of Oslo, AEGIS Research, IBM, Software AG, Slovak DPA, SINTEF, European Commission, TU Delft, ARTEA, Team Consulting, SCB, Data Protection Authority SR, TUBITAK, SMC.

Last but not least, this is the metrics analysis for the Final Event held on December 4, 2020 within EBDVF2020.

- Registered: 255
- Attended: 115

- Presentations:
    o Welcome to DataBench. Richard Stevens (IDC) – [15 views on DataBench SlideShare account](#)
    o Session 1 - The Current Landscape of Big Data Benchmarks – [21 views on DataBench SlideShare account](#)
    o Session 2 - A Project Perspective on Big Data Architectural Pipelines and Benchmarks – [15 views on DataBench SlideShare account](#)
    o Session 3 - The DataBench Framework: A compelling offering to measure the Impact of Big Data Technologies – [31 views on DataBench SlideShare account](#)
    o Session 4 - A practical journey on how to use the DataBench Toolbox – [19 views on DataBench SlideShare account](#)
- Recording: [53 views on DataBench YouTube channel](#)

As described, the webinars targeting industrial and benchmarking communities, as well as the final event were quite successful in terms of participation and views of the material made publicly available. For GDPR reasons we cannot share any names of key people who joined, but the general metrics demonstrate the high impact of these actions:

- 511 registered
- 274 attended
- 55% attendance rate
- 599 views BDVA SlideShare account
- 927 views DataBench SlideShare account
- 207 views DataBench YouTube channel
- 30 views BDVA YouTube channel

In addition to the Virtual Benchlearnings described before, this task has leveraged the knowledge and content developed by the project to reach out to key industrial communities and make sure that the benchmarks developed are described and classified through the DataBench Toolbox.

The task 6.2 has in particular interacted with a number of the prominent Big Data and AI Benchmarking communities, in particular with TPC with BigBench, BigDataBench, Linked Data Benchmarking Council (LDBC), Hobbit and BenchCouncil – with the aim to continue the Toolbox support and interaction with these communities after the end of the project.

The DataBench project has contributed to the yearly Bench´18, Bench´19 and Bench´20 conferences with an international audience from China, USA and Europe.

Arne J. Berre is now a member of the Executive board of BenchCouncil and General co-chair for the Bench´21 conference for the fall of 2021.

The task has also supported the establishment of a Benchmarking group in BDVA – as TF6 SG7 Benchmarking under the lead and co-chairing of DataBench partner SINTEF through Arne J. Berre.

The task has also supported the interaction with ICT-13 and ICT-14 projects in this context – and in particular interacted with the following projects.

- I-BiDaaS
- TBFY – They-Buy-For-You
- DeepHealth
- DataBio

- Track&KNow

This has involved direct bilateral meetings and also joint presentations during EBDVF 2020 and at BDVA Activity Group meetings.

In addition to these, a number of other projects have been involved in interactions around the BDV Reference model and the relationship to the suggested Architectural pipeline steps and potentially associated benchmarks. These include the following.

- Boost 4.0
- CLASS
- LEXIS
- SYNERGY
- EW_Shopp
- COGNITWIN
- IoTwins
- Track&KNow

Further interaction is also going on with additional projects in the context of the ongoing ReachOut campaign.

The task has also had an interaction with various Big Data and AI standardisation communities and in particular ISO SC42 AI (and Big Data) and the previous JTC1 WG9 Big Data group where Arne J. Berre has participated as member and contributed with input from the BDV Reference Model and pipeline approach.

There has been further interaction with the BDVA iSpaces, in particular also through the new EUHubs4Data project since 2020.

Here is a list of concrete meetings/interactions/presentations with the international benchmarking communities.

BenchCouncil

Bench´18

Bench 2018 (December 10th-13th, 2018, Seattle, WA, USA)

[Bench18 | 2018 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing](#)

https://www.benchcouncil.org/bench18/

Tuesday December 11th, 2018 - 10:05-10:35 Invited talk: Dr. Arne Berre, SINTEF Digital, Benchmarking for Digital Platforms with Big Data, IoT, AI, Cloud, HPC and CyberSecurity - The European Horizon 2020 project DataBench www.databench.eu aims at supporting a Benchmarking Community of existing benchmarks and benchmarking initiatives that together can be a foundation for both business oriented and technical benchmarks within the digital platforms areas of Big Data and AI.

Bench´19

2019 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing (Bench'19), Denver, Colorado, USA, November 14-16, 2019

[Bench19 | 2019 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing](#)

https://www.benchcouncil.org/bench19/program.html
Thursday November 14th, 2019 – 16:20 – 17:10, Paper presentation by Todor Ivanov: **Building the DataBench Workflow and Architecture** - Todor Ivanov, Timo Eichhorn (Goethe University Frankfurt) and Arne Berre (SINTEF AS)

Bench´20

[Bench20 | 2020 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing](#)

https://www.benchcouncil.org/bench20/index.html

2020 BenchCouncil International Symposium on Benchmarking, Measuring and Optimizing (Bench'20), Nov 15-16, 2020, Atlanta, USA (Virtual conference)

Monday November 16th, 11:30 - 12:00am - **Invited Talk: DataBench Toolbox – supporting Big Data and AI Benchmarking** Dr. Arne J. Berre (Chief Scientist, SINTEF Digital), Tomás Pariente Lobo (Associate Head of AI, Data & Robotics Unit, Atos), Dr. Todor Ivanov (Senior consultant at Lead Consult)

Bench´21

Bench´2021 is planned for November 2021 (Exact dates and place to be decided, pending the Corona virus development) – Arne J. Berre is General Co-chair for Bench´2021. Arne J. Berre is also member of the BenchCouncil Executive Committee, https://www.benchcouncil.org/organization.html

BenchCouncil Benchmarks

(1) BenchCouncil Big Data Benchmarks - BigDataBench: a Scalable Big Data Benchmark Suite [HPCA'14] - The current version BigDataBench 5.0 provides 13 representative real-world data sets and 25 benchmarks.

(2) BenchCouncil AI Benchmarks - BenchCouncil AI benchmarks cover four scenarios including datacenter (AIBench), high performance computing (HPC AI500), edge computing (Edge AIBench), and AIoT (AIoTBench). The relationship of these four AI benchmarks is as follows. Find the details from https://www.benchcouncil.org/aibenchmark.html.

(3) BenchCouncil Incubator Projects - The Incubator Project is the entry path into BenchCouncil for projects and codebases wishing to become part of the BenchCouncil's efforts. 1) A Benchmark Suite for Medical AI, 2) BenchCPU, 3) EChip, 4) A Benchmark Suite for Smart Grid

SPEC RG Big Data Working Group (2018-2019)

The RG Big Data Working Group is a forum for individuals and organizations interested in the big data benchmarking topic. Members of this group are interested in activities towards the development of industry-standard benchmarks for big data. These benchmarks would model "end-to-end" scenarios for big data, and would cover different data genres, e.g. graphs, streams, unstructured data, structured records, etc. This group focuses on specifying and classifying big data systems, developing rules and tools for big data benchmarking, and fostering collaboration between benchmarking efforts.

Abench Benchmark developed in collaborations with the SPEC group and presented paper at ICPE 2018.

ICPE 2018, Wednesday (April 11th), 16:25-17:40 -paper presentation by Todor Ivanov: **ABench: Big Data Architecture Stack Benchmark** - Todor Ivanov, Rekha Singhal

4th International Workshop on Performance Analysis of Big data Systems (PABS 2018) collocated with ICPE 2018, April 09, 2018, 12:00pm - 12:30pm, paper presentation by Todor Ivanov: Exploratory Analysis of Spark Structured Streaming - Todor Ivanov and Jason Taaffe (the proposed benchmark is related to the streaming extension of BigBench V2 implemented in Spark Structured Streaming)

ICPE 2020, April 20, 2020, Morning Session 9 am - 1 pm, Tutorial - Benchmarking Big Data Analytics Systems - Rekha Singhal, Todor Ivanov

Summary: There is need to understand how to benchmark systems used to build AI based solutions. AI based solutions have a complex pipeline of pre-processing, statistical analysis, machine learning and deep learning on data to build prediction models. The performance metrics may be data pre- processing time, model training time, model inference time or model accuracy. We do not see a single benchmark answering all questions of solution architects and researchers. This tutorial covers both practical and research questions on relevant Big Data and Analytics benchmarks.

DBTest collocated with SIGMOD conference

DBTest 2018, June 15th 2020, 9:15 – 10:10 am, paper presentation by Todor Ivanov: Adding Velocity to BigBench - Todor Ivanov, Patrick Bedué, Ahmad Ghazal and Roberto V. Zicari (the proposed benchmark is extending BigBench V2 and will be integrated in the Toolbox)

DBTest 2020 , June 19th 2020, starting 5pm CET, paper presentation by Todor Ivanov: CoreBigBench: Benchmarking Big Data Core Operations - Todor Ivanov, Ahmad Ghazal, Alain Crolotte, Pekka Kostamaa and Yoseph Ghazal

BIgBench V2 presented @ ICDE 2017

Available in the DataBench Toolbox: Databench Platform (ijs.si)

Hobbit (Axel Ngonga) + BDVA TF6 SG7 Benchmarking

Hobbit benchmarking framework and community – continuous dialogue.

[HOBBIT: Holistic Benchmarking of Big Linked Data (project-hobbit.eu)](project-hobbit.eu)

Including also the **Iguana** benchmark. [Iguana - Intelligent Suite for SPARQL Benchmark (iguana-benchmark.eu)](iguana-benchmark.eu) ,

LDBC – Linked Data Benchmark Council – involvement with the European lead Linked Data - involvement in earlier EBDVF presentations and dialogue

http://ldbcouncil.org/

[[2011.15028] The LDBC Graphalytics Benchmark (arxiv.org)](https://arxiv.org/abs/2011.15028)

https://arxiv.org/abs/2011.15028

The interactions with the Benchmarking Communities have included presentations and discussions at BDVA Activity Group meeting and also presentations and discussions at the yearly EBDV – European Big Data Value Forum meetings – most recently at EBDVF 2020 with the following presentations.

DataBench Final Event @EBDVF 2020 – November 3rd, 2020

https://www.european-big-data-value-forum.eu/agenda/

- **Hobbit, LDBC and AI Benchmarks**, Axel Ngonga, BDVA TF6 Benchmark Lead, University of Paderborn
- **BenchCouncil Big Data and AI Benchmarks**, Wanling Gao, Chinese Academy of Sciences
- **MLPerf AI and ABench**, Rekha Singhal, Senior Scientist and Head of the Computing Systems-Software Research area at TCS

2.9. Scientific Papers

With a strong focus on the scientific and research communities, the publication of papers on conferences and journals is key for maximising the impact of any research activity. In total, 11 publications were produced between M1 and M36. The following table lists all the publications produced, accepted and published on different sources:

Title	Date	Conference / Journal	Authors	Link
"Relating Big Data Business and Technical Performance Indicators"	12/10/2018	XV itAIS Conference	Barbara Pernici, Chiara Francalanci, Angela Geronazzo, Lucia Polidori, Leonardo Riva, Stefano Ray, Arne Berre, Todor Ivanov	Click HERE
"DataBench: Evidence Based Big Data Benchmarking to Improve Business Performance"	19-23/08/2018	KDD 2018	Todor Ivanov, Roberto V. Zicari, Tomás Pariente Lobo, Nuria de Lama Sanchez, Arne Berre, Volker Hoffmann, Richard Stevens, Gabriella Cattaneo, Helena Schwenk, Cristopher Ostberg-Hansen, Cristina Pepato, Barbara Pernici, Chiara Francalanci, Angela Geronazzo, Lucia Polidori, Paolo Giacomazzi, Marko Grobelnik, James Hodson	Click HERE
"ABench: Big Data Architecture Stack Benchmark"	9-13/04/2018	ICPE 2018	Todor Ivanov, Rekha Singhal	Click HERE
"Exploratory Analysis of Spark Structured Streaming"	9-13/04/2018	ICPE 2018	Todor Ivanov, Jason Taaffe	Click HERE
"Adding Velocity to BigBench"	15/06/2018	DBTest@SIGMOD 2018	Todor Ivanov, Roberto V. Zicari, Ahmad Ghazal, Patrick Bedué	Click HERE
"Analytics Benchmarks"	10/03/2018	Encyclopedia of Big Data Technologies	Todor Ivanov, Roberto V. Zicari	Click HERE
"Building the DataBench Workflow and Architecture"	01/06/2020	2019 BenchCouncil International Symposium on Benchmarking,	Todor Ivanov, Tomás Pariente, Arne Berre, Iván Martinez, Ricardo Ruiz, Barbara Pernici, Chiara Francalanci	Click HERE

Title	Date	Conference / Journal	Authors	Link
		Measuring and Optimizing (Bench'19)		
"Tutorial on Benchmarking Big Data Analytics Systems"	20/04/2020	ICPE 2020	Todor Ivanov, Rekha Singhal	[Click HERE](#)
"CoreBigBench: Benchmarking Big Data Core Operations"	30/06/2020	DB Test '20	Todor Ivanov, Ahmad Ghazal, Alain Crolotte, Pekka Kostamaa, Yoseph Ghazal	[Click HERE](#)
"Subchapter: 2.2. KPIs of BDA business impacts in Manufacturing"	01/07/2020	BIG DATA CHALLENGES IN SMART MANUFACTURING INDUSTRY A Whitepaper on Digital Europe Big Data Challenges for Smart Manufacturing Industry Version 2020	Gabriella Cattaneo Sergio Gusmeroli	[Click HERE](#)
"Big Data and AI pipeline patterns - Technology selection from a Benchmarking perspective"	25/11/2020	TABDV2021: Technologies and Applications for Big Data Value	Todor Ivanov Arne Berre Tomás Pariente	To be publis hed – Q2 2021

Table 6: DataBench Scientific Publications

3. KPIs and Monitoring

The monitoring of communication and dissemination activities performed by DataBench consortium always followed a collaborative approach from all partners but was mainly led by ATOS and IDC as main partners responsible for the strategy. The tool "EuresTools Tracker" provided by IDC was indeed very useful for partners to report the activities done and for WP6 to retrieve the information for reporting and deliverables.

The following table presents the target KPIs by activity and the information on what was achieved between M1 and M36:

Activity	Indicator	Target KPI	Achieved until M36
Technical papers	Number of papers and number of conferences where papers are presented	At least 5 papers presented in at least 3 international Big Data conferences	**11** achieved
Project website	N. of unique visitors to the website (average per year)	Min. 2000	**7,114 unique visitors** **17,405 page views**
Social media - Twitter	N. of followers New followers per year	Y1 - 300 +100	**527** achieved
Social media - Facebook	N. of followers New followers per year	Y1 - 50 +100	**230** achieved
Social media - LinkedIn	N. of followers New followers per year	Y1 - 100 +100	**834** achieved
Social media - YouTube	N. of videos published N. of views	Min. 4 100 views per video	**8** achieved **750** achieved
Social media - SlideShare	N. of overall views	200	**2,563** achieved
Newsletter***	N. of subscribers per year Number of newsletters***	100 3 per year	**+1.500** achieved **+20** achieved
Webinars	N. of webinars	Min. 4 10	**4** Achieved

	N. of participants per webinar		159 achieved ✅
Events	No indicator set	No indicator set	30 events 1387 stakeholders reached

Table 7: DataBench KPIs M1-M36

***WP6 team decided not to issue an exclusive DataBench newsletter, but instead to regularly provide content to the BDV PPP newsletter which has a higher impact and number of subscribers, and to other Newsletters in the research area such as Atos Research and Innovation monthly newsletter**

As seen on the previous table, DataBench project achieved all the KPIs defined without any deviation. The latter is the reflection of a coordinated work between ATOS and IDC as task leaders, and of course, the rest of the consortium partners who were very active on looking for new opportunities to disseminate project results. Based on the work carried out during the past three years, we would like to highlight the following lessons learned which could be useful for other research projects on their definition of communication and dissemination strategies:

- Set feasible and achievable objectives aiming to generate awareness of the project and maximise the impact of the results.
- Define a complete and consistent branding for the project considering other elements than just the logo, such as font, colours, imagery, icons, templates, etc.
- Identifying the target audiences and messages is a collaborative work with exploitation tasks and the rest of the consortium. Also, it is important to identify the communities and contacts of the partners that the project could leverage for maximising its outreach.
- Graphic design for social media and creative dissemination material boost the engagement with target audiences.
- Communication among partners is essential for reporting purposes, and to understand which opportunities each one has and how the dissemination and communication tasks can support specific activities.
- Regular monitoring is key to identify any potential deviation or adjustment that should be made on the strategy.

4. Conclusions

According to DataBench Description of Action[10], the principal objective of this deliverable is to describe the results of the dissemination and liaison activities in the second 18-month period of the project and provide an overview of major achievements during the project. Moreover, the deliverable has aimed to provide a complete record of all events, dissemination materials, scientific papers and links to web-based content.

All the activities and information presented is related to the work performed within WP6 on Task 6.1 Develop and implement communication and exploitation strategy, Task 6.2 Build consensus and reach out to key industrial communities, Task 6.3 Create and maintain a project portal and online presence and Task 6.4 Liaise with ICT-14, ICT-15, and new BDBC communities.

In this sense, D6.4 provides the complete overview of the dissemination activities implemented in the scope of the DataBench project from M1 to M36, in accordance with the provisions of the Dissemination and Communication strategy defined in deliverable D6.1 submitted in M3, and based upon intermediate deliverables such as D6.2 and D6.3.

The success of the dissemination and communication actions has been directly related to the reach out and engagement of main targeted audiences with the most appropriate messages through different and creative content based on the progress and results achieved on the technical side.

During the first phase of the strategy, the aim was focused on raising awareness about the general project objectives. In the second year, the approach shifted to show the project achievements so far and its potential benefits in order to increase the potential impact. From M25 to M34 the goal was to maximise the results, with a special focus on showcasing project results of different scenarios. Although the project was not able to do so in physical events, WP6 team worked on the participation and organisation of virtual events.

In conclusion and considering the success criteria and KPIs defined and presented in chapter 3 of this deliverable, it can be stated that dissemination was successful during the whole life of the project.

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[10] (DataBench Description of Action, 2017)

5. References

(2017). *DataBench Description of Action.*

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