D 6.5

Optimized FBD_BModel digital platform

Public version

Project Information

Grant Agreement Number	761122
Project Full Title	A Knowledge-based business model for small series fashion products by integrating customized innovative services in big data environment *(Fashion Big Data Business Model)*
Project Acronym	FBD_BModel
Funding scheme	RIA
Start date of the project	December 1st, 2017
Duration	36+3 months
Project Coordinator	Xianyi Zeng (ENSAIT)
Project Website	http://www.fbd-bmodel.eu

Deliverable Information

Deliverable n°	D 6.5
Deliverable title	Optimized FBD_B Model digital platform
WP no.	WP6
WP Leader	Fitizzy
Contributing Partners	DSS, UoM, ENSAIT, GZE, BIVOLINO, KUVERA SPA
Nature	**R:** Document, report (excluding the periodic and final reports) **DEM:** Demonstrator, pilot, prototype, plan designs **OTHER:** Process
Authors	Fitizzy
Contributors	ENSAIT, UoM, DEL, HB
Reviewers	Project Coordinator
Contractual Deadline	M36
Delivery date to EC	M36+3

Dissemination Level

PU	Public	x
PP	Restricted to other programme participants (incl. Commission Services)	
RE	Restricted to a group specified by the consortium (incl. Commission Services)	
CO	Confidential, only for the members of the consortium (incl. Commission Services)	

Document Log

Version	Date	Author	Description of Change
1.1	**M30-M34**	Fitizzy	After an overall review of the actual work provided by the partners (UoM, HB, Ensait), a decision has been made by Fitizzy and Premaccess to fully rebuild a second platform for better efficiency, connectivity through API, enhance security and reinforce engagement with the scalability of the platform in mind, better the workflow of the users within the platform. Design of the front has been fully improved using best practices of UI/UX in relation to a SaaS platform. Latest features integrated to the platform. Check that the best practice standards in the cloud industry (Well architected framework) is respected.
1.2	**M35- M36+1**	Fitizzy	With the work of the first platform, architecture, security concept, build of the platform, creation of a new full workflow for better design. Update of situation with partners in regards to progress made. Connectivity with the mobile app Full security check throughout the platform to ensure all is in order
1.3	**M36+2**	Fitizzy/All	Presentation to the partners of the second and final version of the platform for an overall review with integration of all features and exchanges with partners on improvement, connectivity with dedicated features
1.4	**M36+3**	Fitizzy/ Premaccess/DSS/ HB/UoM /Ensait	Final FBD_B Model platform up and running. Presentation made to the public on the 19th of February 2021.

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1 Executive Summary

In this deliverable, specific focus will be given to the different steps that have been taken to ensure the actual optimization of the FBD_B Model platform. This task focuses on implementing the system with real product examples identified in the four business cases in WP7 by inputting all the relevant information and performing computations and developing and filling contents to the interfaces and databases. (2) You will find the **links to the demonstration** of the FBD_B Model platform, (3) **optimization with real case examples** on desktop and mobile app). In reference to the task 6.6: Identify weakness and optimize FBD_BModel digital platform (M31-M36+3). For this task, we focused on identifying the weakness from the feedback and results of the partners (4) **Feedbacks from partners**. The FBD_BModel digital platform improved and/or optimized as much as possible within the project duration thanks to the **identification of challenges, risks and mitigation strategies implemented**

<u>For more detailed information</u>, please refer to **deliverable 6.3** about integration including technical choices taken, deliverable 6.4 for all the questions about well architected framework, respect of best practices in the cloud computing area, choices for architecture, security improvement throughout the project. Please refer to WP7 and associated deliverables for all information in relation to the case studies.

2 Demonstration of the FBD_B Model platform

Results of the deliverable

The result of this deliverable is a highly performant SaaS Platform designed for Fashion Retail and Textile Industry integrating IDS and SCPMS**.**

A Software as a service (SaaS) is a method of software delivery and licensing in which software is accessed online rather than bought and installed on individual computers. The FBD_BModel platform enables the dynamic interactions among consumers, designers and producers by setting up multi-user interactive interfaces and virtual product demonstration platforms, which are able to channel personalised smart orders of high value fashion textile products to the production networks.A demo is available on request for the authorized persons.

3 Optimization of the platform with real case examples on desktop, mobile application and widget

The optimization of the platform has been done with the use of real case examples available in the final version ibn the desktop version and on the mobile app.

## 3.1 FBD_B model desktop version real case studies integration

You will find below examples of real case studies implemented within the current version of the FBD-B Model platform. Those saved projects demonstrate how the process flow works from beginning to end. The technical path has been done so that all information can be increased and connected to other real case examples in the future. For the purpose of the demonstration, you will find below the example for the bivolino shirt.
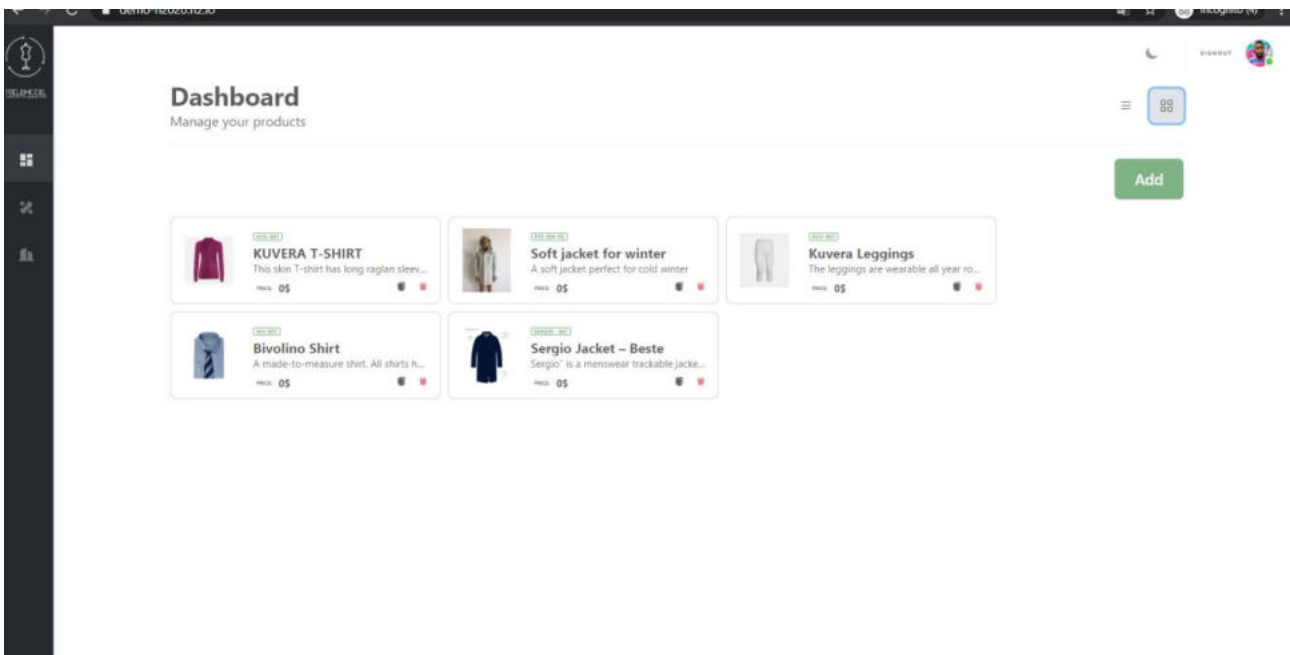
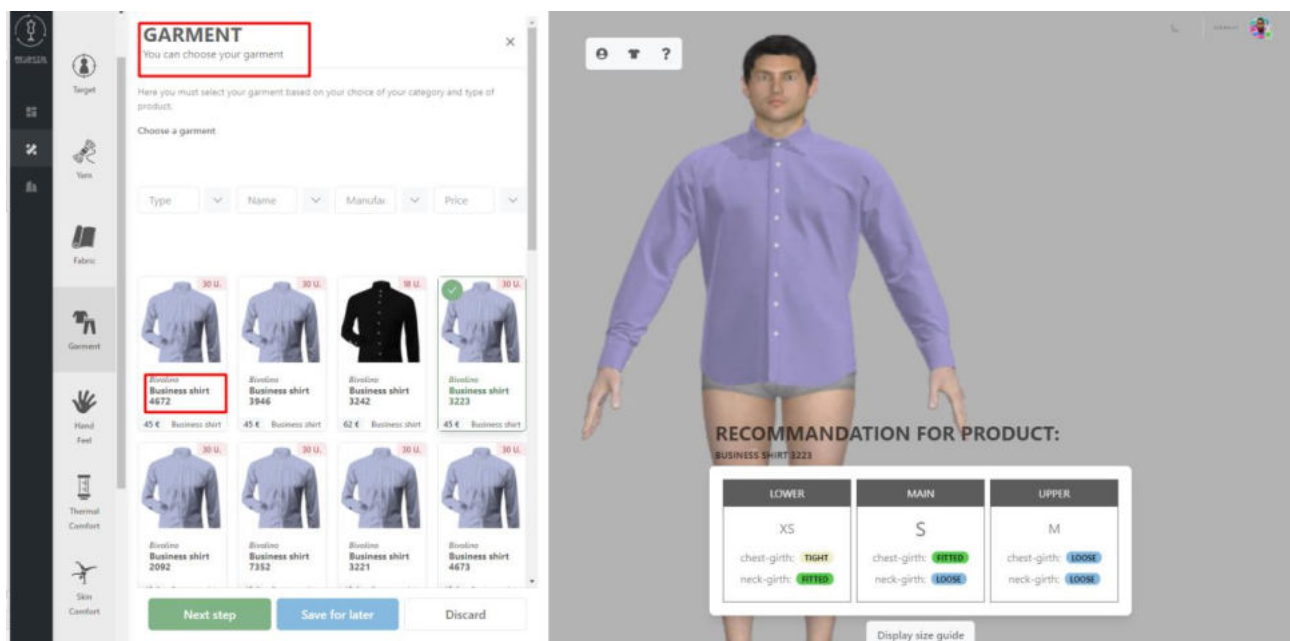Example of the Bivolino shirt with 3D view
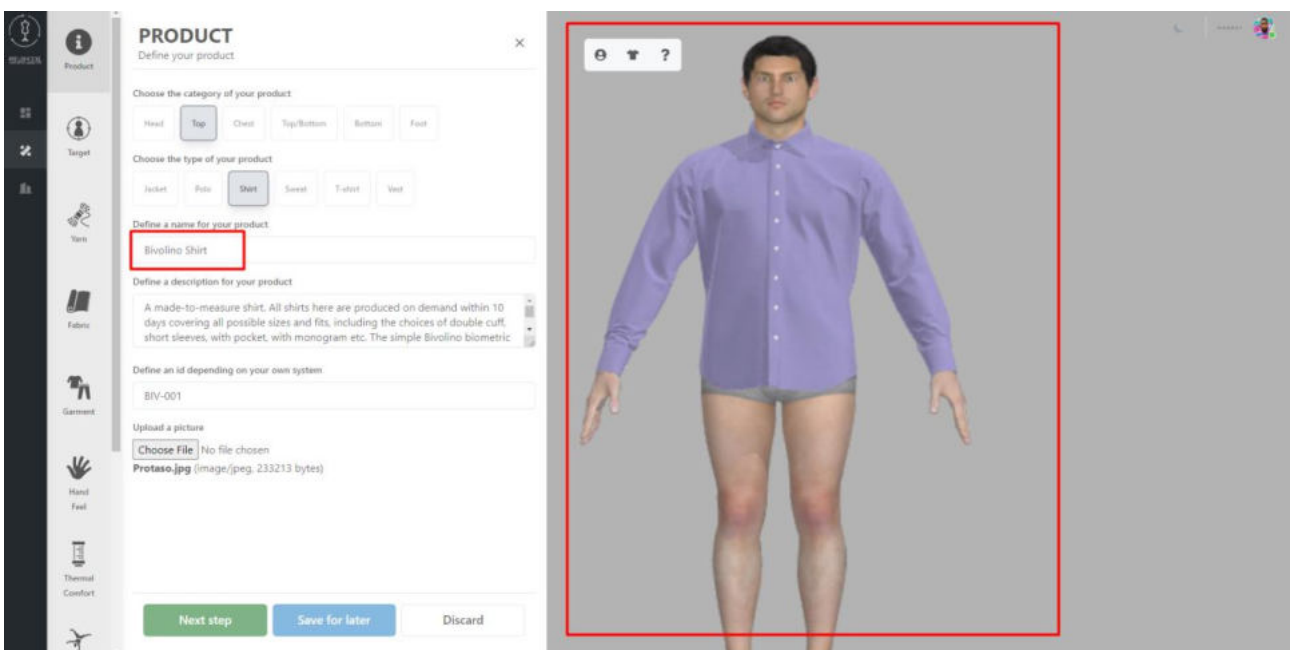
Example of real data from Bivolino case study integrated with the fabric data service:
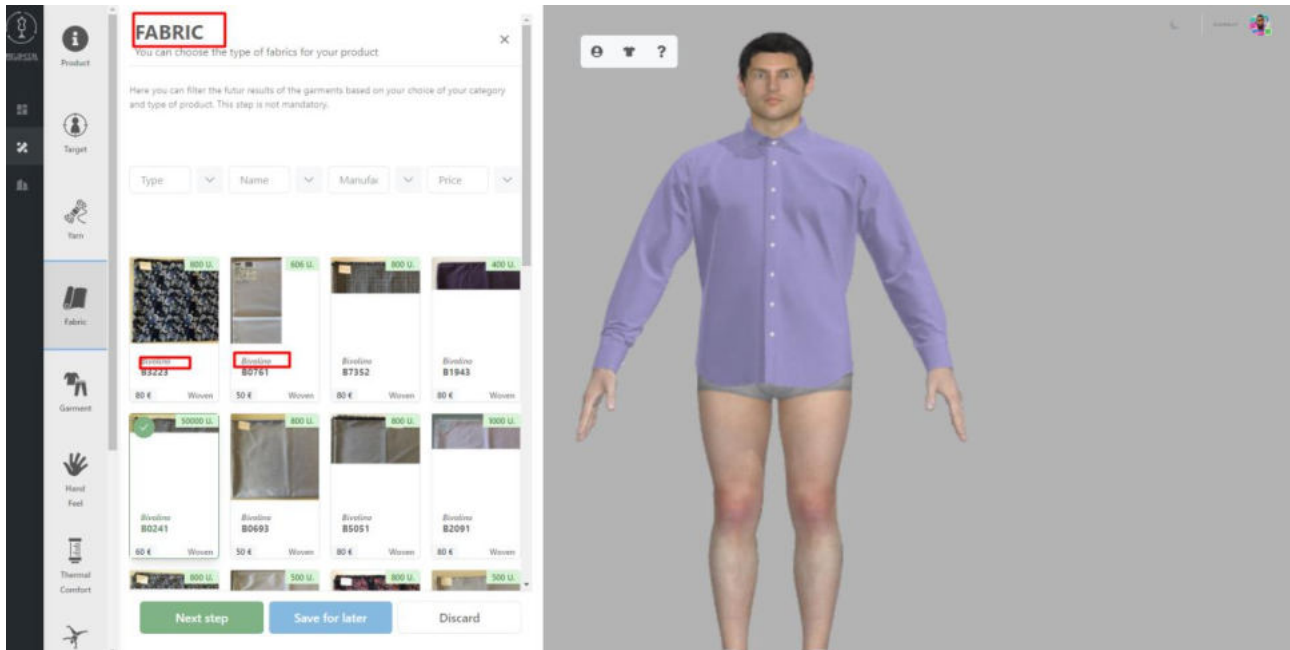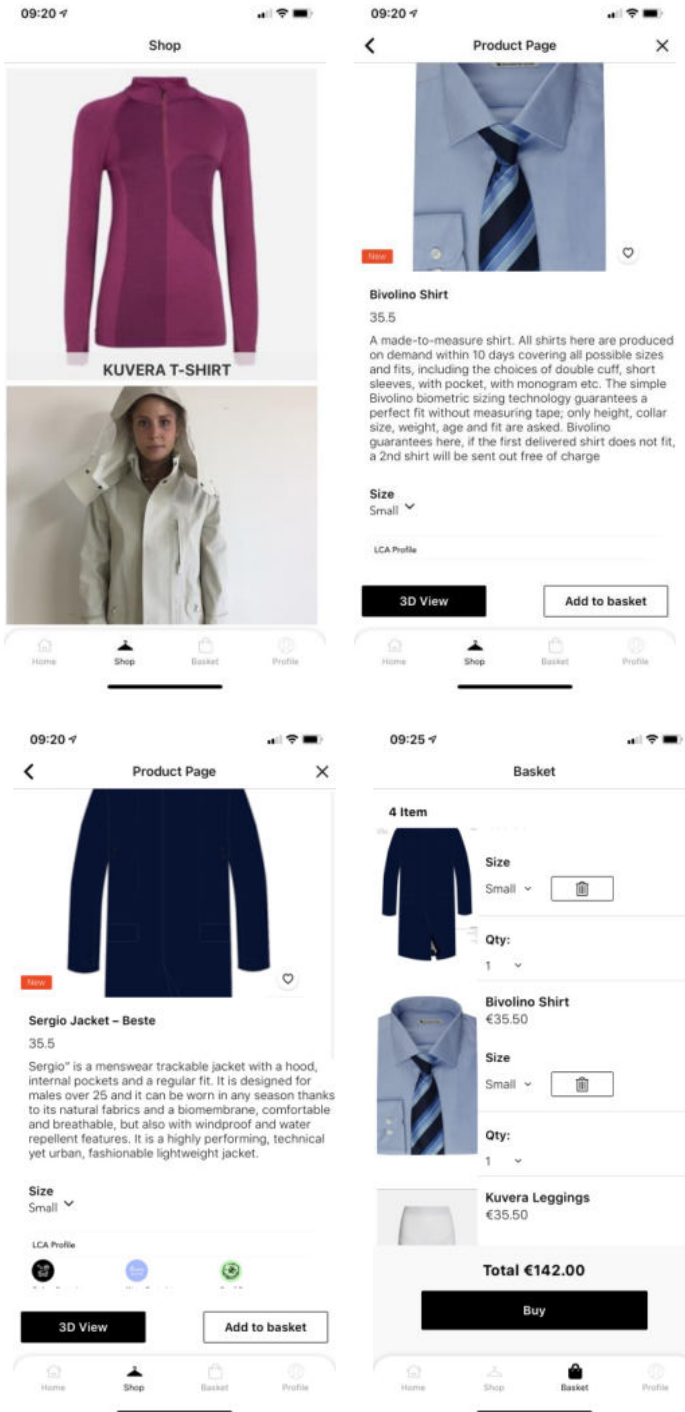

Technically, the information on display on the FBD B Model is directly interrogating the UoM API, which is then connected to the information from Bivolino, all happening in real time.

Same goes for the garment data service.
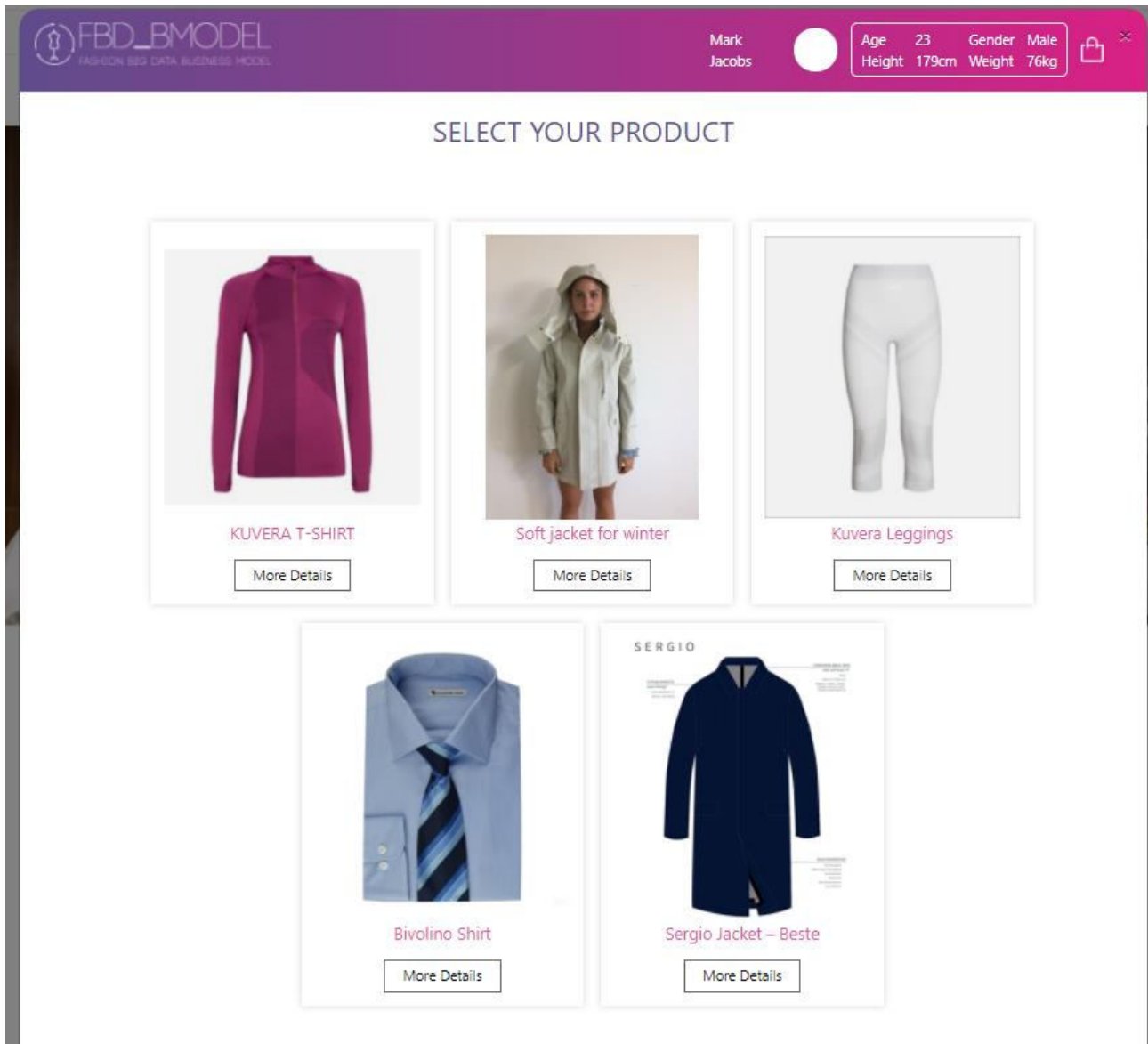
3.2 FBD B model mobile app case study integration

3.3 FBD B Model widget case study integration

See below the captions of the BtoC widget integrating real case studies from partners : examples below : Bivolino, Kuvera, Beste

KUVERA T-SHIRT

This skin T-shirt has long raglan sleeves and a high neck, has a practical zip closure under the chin and a maxi contrast print on the front. The wrist openings for thumbs ensure comfort and practicality. The material, the patented NILIT® fabric, becomes a second layer of the skin, guaranteeing warmth and natural insulation, as well as having antibacterial properties with a strong deodorant effect and continuous dry feeling.

LCA profile

Carbon footprint
88.2 kg CO2 OR 277.4 km
in medium-size EUROS car

Water footprint
88.2 kg CO2 OR 277.4 km
personal daily water consumption(days)

Fossil Energy
88.2 kg CO2 OR 277.4 km

Selected Cradle-to-gate LCA results (EF v3 method). For more details see full report of deliverable D7.3

Size **S**   Material **NILIT@**   Colour

Sensory Comfort — Low / Medium / High

Thermal Wear Comfort — Low / Medium / High
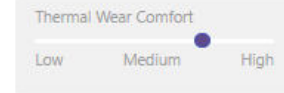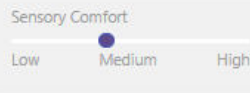
Size	**S**	Fit	**Loose**	Collar	**Round**
Length	**S**	Breast	**Loose**	Sleeve	**Round**

PRICE: **$150**

🛒 **Add To Cart**   **Edit Product Details**

< BACK TO PRODUCTS

Mark Jacobs
Age 23 Height 179cm Gender Male Weight 76kg
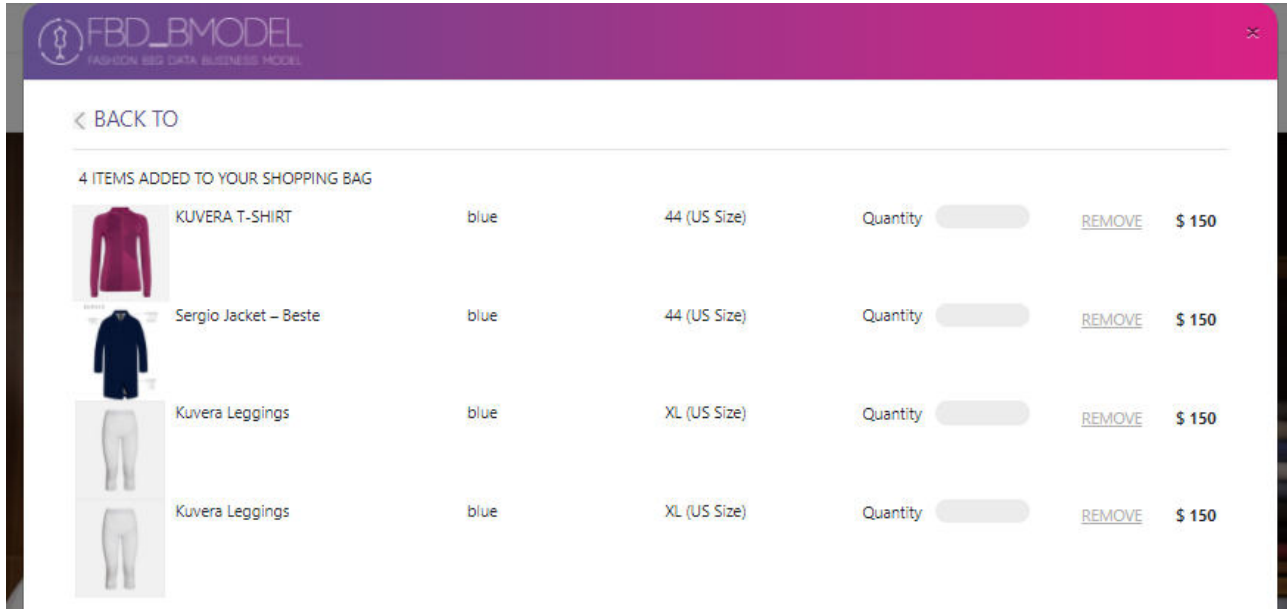
4 Continuous improvement based on feedbacks from partners, strategic technical choices, identification of challenges and mitigation strategies

4.1 Interconnectability of diverse IT environments and real time data visualization

Throughout the project, it has been one of the main challenges to ensure that all the work realized by all partners was coherent all together and connectable with one another. There are many different ways to run technical projects, and this interconnectability had to be at the heart of the technical considerations. All partners already had existing IT systems in place, their own procedures, technologies preferred and it was very important to ensure that all was connected at the end of the project. Similarly, some data provided by different partners were sometimes in competition with one another.

The solutions provided were as follows: Use of Json files as a referential and the use of API connectors. A lot of attention was also given to a workflow of data to ensure coherence and unicity. For more information, see deliverable 6.4 and 6.3.

4.2 Review from partners, feedbacks and technical meetings

Another key principle the consortium has adopted is regular meetings. Initially, most of them were in presentiel but then virtual meetings with the Covid situation. Those meetings were the opportunity to report on progress and plan for the next steps. Main turning points for the technical meetings were in M30 after the full review of the technical environments of all partners. Then the platform was upgraded into a SaaS model giving more autonomy to the users.

4.3 Keeping the price of the infrastructure manageable while performant

Another challenge to overcome within this scope was to respond to the needs of all partners while staying on budget. Technically, all is possible but it was very key for the overall project to ensure that the infrastructures costs were reasonable and manageable going forward. This is why the main component of the platform is serverless technologies allowing the price to be in adequation with the usage. It is the concept of pay as you go. Moreover, the use of serverless technology is an innovation in itself as it is the state of the art technologies available on the market in terms of using native private cloud computing tools.

4.4 Security of the platform and compliance with regulatory frameworks

Throughout the project, security has been one of the cornerstones of the consortium concerns.

Different steps have been taken throughout the project on this specific topic:

- Encryption process throughout the platform
- Multi Factor authentication on the platform
- Security of the cloud and security in the cloud
- Respect of legislation including GDPR
- Security of the data throughout the system including on the partner's platform
- Security check at different key stages of the platform development especially at the end of the project
- Respect of the rules of architecture through the security pillar of the Well architected framework
- Reducing human errors thanks to automation

4.5 Design choices and consistency of the FBD

To create a clear path of instruction for users, a lot of consideration was given to the UI/UX design. One of the challenges was to offer a clear path for users while using very complex and specific algorithms with easy navigation.

One of the solutions was the adoption of a SaaS model.

For more information, see Deliverable 6.3

4.6 Scalability and evolutivity: going to market, opportunity to industrialize the FBD_B Model in the future

Last but least, another challenge was to ensure that the delivered FBD_ B Model platform could be relevant past the lifetime of the project. Technical choices were made in this direction. The second version of the platform was actually thought to use **components and drop down menus** rather than hard code. More information on this topic here. As such, this choice implied more time to develop the platform but was actually a massive improvement in terms of its resilience. It ensures that no matter where the consortium decides to go with the platform, everything can be **incremented** and **customized** very quickly. Serverless and APIs are also supporting the evolutivity and scalability in the future.

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