



DELIVERABLE D3.1

WHITE-LABEL SHOP FOR DIGITAL INTELLIGENT ASSISTANCE AND HUMAN-AI COLLABORATION IN MANUFACTURING

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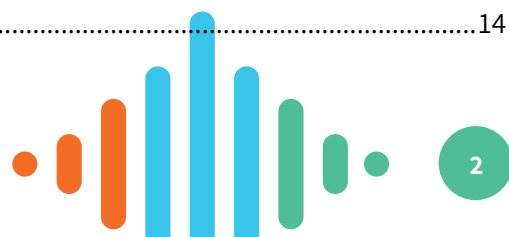


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1. EXECUTIVE SUMMARY

The overarching goals of WP3 of Wasabi encompass configuring PrestaShop software for digital assistance and designing a federation extension (T3.1), implementing NFT-based skill royalty distribution (T3.2), assessing legal considerations, and adapting learning concepts for digital assistance in manufacturing (T3.3 and T3.4).

The core goal of T3.1 is to provide the Wasabi White Label Shop (WWSL), a versatile platform allowing rapid creation of custom instances tailored to diverse applications, to support the implementation of Wasabi pilots, including the ones from the future open call winners. The added value of WWSL lies in its agnostic platform, empowering instance owners to swiftly create customized instances. This flexibility fosters tailored solutions, diverse business models and decentralized data control, ensuring a dynamic and responsive tool for the wide array of applications and services.

More in detail D3.1 describes the development carried out in T3.1 from M4 to M9 of the federated WWSL and provides a summary of interactions with end users, encompassing aspects such as applications, data management, business models, and technical constraints. This document includes also the description of the activities carried out to synchronize WP3 activities with other work packages (WPs) and tasks, emphasizing collaboration with WP1 to align with end-user requirements.

The WWSL structure is outlined, detailing PrestaShop adaptations to support physical and virtual products, skills, and services. Integration with the NFT-based royalty management framework and the federation module is explained, showcasing the interconnected nature of the Wasabi project components.

The document concludes with a comprehensive guide for administrators, customers, and sellers, offering insights into the functionalities of the WWSL.

2. INTRODUCTION

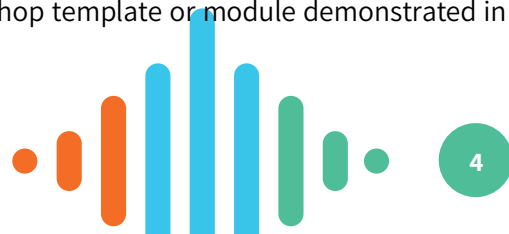
2.1 Purpose and scope of the deliverable

The purpose of WP3 is to provide the federated white-label shop (OKR 3.1) and supportive services to facilitate the adoption of advanced user interfaces in manufacturing. Goals:

- 1) Configure and adapt existing open-source shop software for digital assistance (T3.1)
- 2) Design, develop, and demonstrate a federation extension for the adapted shop (T3.1)
- 3) Design, develop, and demonstrate an NFT-based skill royalty distribution (T3.2)
- 4) Identify and assess the legal situation of applying digital assistance solutions (T3.3)
- 5) Adapt learning and training concepts for digital assistance in manufacturing (T3.4)

Task 3.1: Federated shop for digital assistance solutions is expected to last from M4 to M15, is led by IDEAL and supported by the contribution of ATL, BIBA and ICCS.

This task adapts the PrestaShop software to support digital assistance solutions. IDEAL is expected to adapt the software to be capable of presenting software, hardware, services, and assistant skill packages to buyers. This includes designing the offers' pages, collecting offer descriptions from partners, creating a pricing mechanism and preparing an area for the legal terms. The result will be a PrestaShop template or module demonstrated in D3.1.



Based on the activities of T3.1, the current deliverable D3.1 provides the first template of PrestaShop to support digital assistance solutions and will support the follow up deliverables D3.3 and D3.4.

2.2 Relation to other WPs and tasks

The activities of T3.1 are coordinated with the input from T1.4 and will support the activities of WP4 and WP5. Related deliverables are D3.1 (due at M9), D3.3 and D3.4 both due at M15.

SYXIS coordinates the creation of a software deployment mechanism to create assistance solution instances in a public/private cloud or edge device (D3.3), focussed on cloud services provided by, e.g., Amazon or Google, and TTTECH's edge devices.

ATLANTIS will develop a federation module (D3.4) for the adapted shop aligned with standards and guidelines from organizations, such as IDSA. ICCS will extend PrestaShop to provide a Web3 enabled layer and will contribute to the federated module with their knowledge of the IDSA specification and concepts.

2.3 Structure of the deliverable

This document is divided into three sections:

- the summary of the activity of synchronisation with WP1: this section summarizes the definition of the common understanding with the end users about the WWSL and the response to the requirements expressed in WP1 (par. 2.4).
- the demonstrator of the first version of Wasabi While Label Shop (WWLS) in PrestaShop: this section shows the first demonstrator of the shop (par.3)
- the conclusions and next steps will drive the next activities of T3.1 and of the other related ones (par.4).

2.4 Synchronization with WP1

The vision of WASABI is that: «Digital assistance and conversational AI become standard practices to reach sustainability goals in manufacturing» and access to these benefits will be as simple as selecting and configuring Applications from an online store, and interoperability minimizes vendor lock-in and maximizes information valorization. New AI-focused training services for employees will be a general practice too.”

In the project, this key goal is to be realized:

- RO 3.1: Federated white-label shop for digital assistance solutions: an online shop built with open source software and in-built shared dataspace for shop instances. Grants access to a wide range of software, hardware, and non-technical services needed for sustainability and resilience-oriented assistance solutions.
- RO 3.2: Skill-interoperability demonstrator: a prototype presenting how different digital assistant frameworks could use the same skill. This result will suggest how standardization could increase the adoption of digital assistants in the industry (KER 6).

On the technical side, the WWLS can be introduced as in **Figure 1.**:



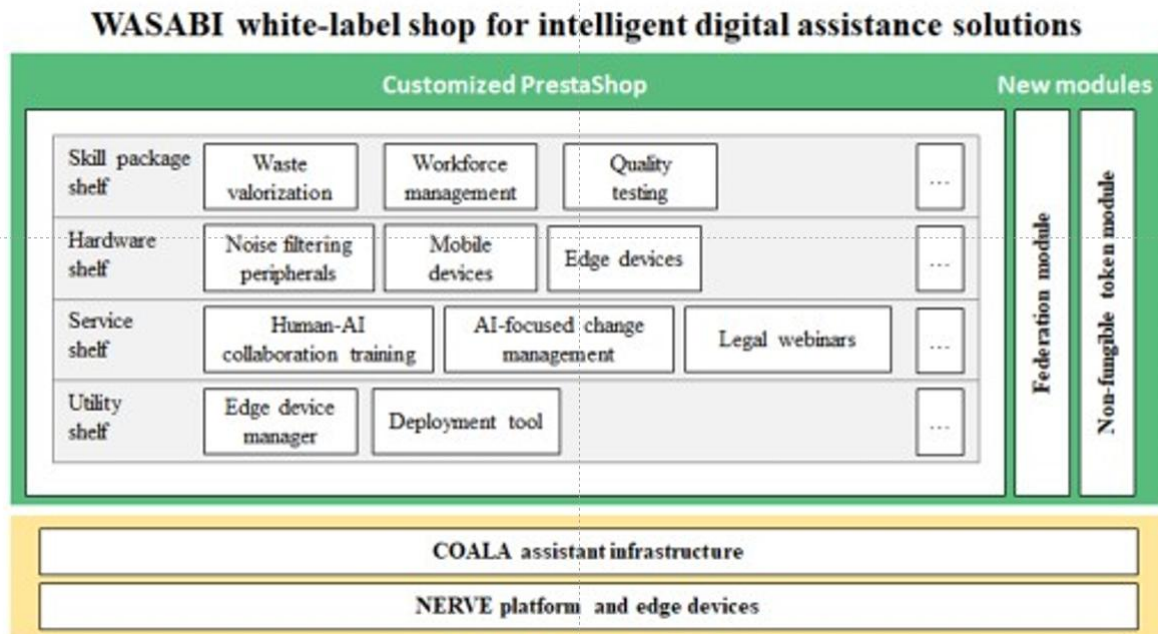


Figure 1: Wasabi White Lable Shop (from the DoA)

On the basis of these definitions, WP1 and WP3 have been deeply collaborating in order to align the requirements expressed by the end users and the potentialities of the white label shop.

In fact, since the kick off meeting in April 2023 and then in the calls to define the requirements by the end users it has been clear that the definition of a common understanding of the meaning of WWLS, in that moment missing, was the first goal of WP3. More in detail, WP1 expressed a list of questions by the end users:

Results of initial white-label shop exercise

Apps:

- Tailor-made or existing solutions?
- What kind of apps will the shop contain?
- How can it involve customers? Preliminary survey to suggest apps?
- How to order a new product?
- How to communicate the value of apps from the development point of view?
- How to choose the right apps/services from the shop?
- Will the shop offer any guidance on what to buy?
- Will there be pre-defined packages (functions, devices) available in the shop?
- Who is in charge of the maintenance of the marketplace?
- Who will develop the IA services?
- What are the shop instances? Is it related to the different digital assistant frameworks?
- Who decides who has access to each shop instance?
- Will there be demo versions available before buying?
- Will suggestions for apps that are realized be partly credited to the ones who ask for that particular functionality?

Data:

- How to establish connectivity with data sources?
- How to assess the usability of internal data for AI?
- Does the solution need a Learn Management System (LMS)?
- How will the data be integrated or changed to fit in the shared database?
- Do we need a LMS for training?

To be classified:

- How to pay (invoices) with procurement systems?
- What would be the value of a functionality that could automatically create a training program based on a written procedure?

Business Model:

- How should non-technical services be made available for the white-label shop?
- Focus on particular sectors? (manufacturing services, healthcare)
- Propose a service pay per use or subscription?
- Will the shop aim only at companies? B2B or B2C?
- How is customer support working?
- Will it be possible to order totally new services?
- Does the shop suggest additional services like "training" after an assistant is chosen?
- What is the business model behind the store?
- Is there any possibility of making B2B connections through the store and maybe selling customizations?
- The store should minimize the vendor lock-in, but how can one use our application which is tailored to our use case?
- Which indirect benefits can companies draw from the shared dataspace?
- Who will be the user of the shop?
- Is the application going to be published after the name of the specific company that designed it?
- Will all services involve COALA software?
- How will the shop be funded? (Apple App store takes percentages of app sales)
- Will there be any refund possibilities if the purchased solution doesn't work as intended?
- Will it be possible to ask for new products/services?

End-users:

- What skills would be most valuable for AI training?
- How to establish trust in the customer business?
- How to know which vendor to trust?
- How to create trust in end-users?
- Who orders something from the shop?
- What does the shop user need to know? (technical background)
- How should training be carried out? (job site, online, computer-based training?)
- Should the training be individual or generic. (scope: shop or COALA)?
- What is the minimum requirement of personal training for workers? (scope: shop or COALA)
- The customer will have the possibility to choose the developer company?
- Training how? In-house, online, synchronous/asynchronous, web-based/computer-based/device-based?

Generic:

- What is the aim of the white-label shop?
- Why a totally new white-label shop and not an existing one? What will be the differences?
- What is the language of the white-label shop?
- What other assistant will be offered apart from COALA?
- How should we integrate the open-call results into the white-label shop?
- How will the use cases be integrated into the white-label shop?
- How can others benefit from my experience stored in the shop instances?
- How will white-label shop increase company X productivity?

Requirements:

- Will there be technical constraints/requirements for developers concerning the store?
- Needed certificates or guarantees? (medical sector)
- How should we place orders for "future" solutions? Is it possible?



Figure 2: questions from initial WWLS workshops.

To create this common understanding i-Deal, as leader of WP3 and responsible of D3.1, organized **5 workshops dedicated to introduce the WWLS** and to answer to the questions introduced in WP1 by the end users: two workshops took place in coincidence with the monthly general calls of August and September 2023, the third one in WP3 general call in September while the last two ones have been specifically organized for the end user and took place in October 2023.

This set of presentations reached all the partners of the project and created a clear and shared vision of what is the WWLS, of what are its instances and finally what is put at disposal of the end users to implement their pilots.

More in detail, each of the questions expressed in WP1 has been addressed as follows:

Applications

- **Tailor-made or existing solutions?** The white label shop is agnostic about what is on sale. It is pure a channel of sale, then the answer is both ones.
- **What kind of Applications will the shop contain?** See the first question.
- **How can it involve customers? Preliminary survey to suggest Applications?** This does not involve the white label instance
- **How to order a new product?** Putting it in the cart of the shop.
- **How to communicate the value of Applications from the development point of view?** It is up to owner of the shop instance. The white label shop is not involved and gets a commission from each sale for its service. The collection of the commission is managed by NFTs, managed by ICCS is T3.2
- **How to choose the right Applications/services from the shop?** By reading its description on its instance
- **Will the shop offer any guidance on what to buy?** Yes, each shop instance must provide its own (for ex video, images, etc...)
- **Will there be pre-defined packages (functions, devices) available in the shop?** In general each instance owner can decide
- **Who is in charge of the maintenance of the Shop?** Of the white label shop infrastructure is up to i-Deal, of each content it is up to each instance owner
- **Who will develop the IA services?** The developer of that specific skill.
- **What are the shop instances?** They are clones of the white label shop customised by the use case owner with its offer of: physical products, virtual products and skills
- **Is it related to the different digital assistant frameworks?** This does not affect the white label shop but the specific instance content.
- **Who decides who has access to each shop instance?** In terms of security, the shop instance owner approves the single shop and customers (for example the policy as regards the purchases by guest or by registered customers).
- **Will there be demo versions available before buying?** If they want to put a demo of the skill in the instance, yes: it can be put in the description
- **Will suggestions for Applications that are realized be partly credited to the ones who ask for that particular functionality?** PrestaShop offers the possibility to show the related products, for example a skill can be related with a physical product to which it is related.

Data

These questions are referred to the contents of the single instances while the WWLS is not directly involved in the management of data but is dedicated to the creation of the infrastructure to enable the deployment of the usecases. Their understanding has been significantly important to provide the use cases with a clear vision about what is managed by the WWLS and what is under the control of the instance managers.



- **How to pay (invoices) with procurement systems?** The skills (or products) are paid by standard method (credit card, etc...) to the shop instance owner. For the skills, every developer receives royalties on the basis of the sales of its product by Crypto transfer, ruled by the Skills Json Files. For the physical and virtual products, by the procedure of withdraw on the basis of predefined agreements.
- **What would be the value of a functionality that could automatically create a training program based on a written procedure?** This is a skill which might support the training provider, which is expected to pay for it.

Business model

- **How should non-technical services be made available for the white-label shop?** The white label shop is agnostic towards the contents. Any content can be sold.
- **Focus on particular sectors?** (manufacturing services, healthcare). This does not affect the white label shop
- **Propose a service pay per use or subscription?** PrestaShop does not manage subscriptions or pay per use
- **Will the shop aim only at companies?** B2B or B2C? It is up to the instance owner to decide
- **How is customer support working?** It is up to the instance owner to decide
- **Will it be possible to order totally new services?** It is up to the instance owner to decide
- **Does the shop suggest additional services like “training” after an assistant is chosen?** Related products, up to the instance owner to decide
- **What is the business model behind the store?** It is up to the instance owner to decide
- **Is there any possibility of making B2B connections through the store and maybe selling customizations?** Not automatically, must be managed manually
- **The store should minimize the vendor lock-in, but how can one use our application which is tailored to our use case?** Each instance can have many vendors, in general there is no lock in
- **Which indirect benefits can companies draw from the shared dataspace?** Not involving the white label shop
- **Who will be the user of the shop?** Of the white label, it is the instance owner
- **Is the application going to be published after the name of the specific company that designed it?** It is up to the instance owner to decide
- **Will all services involve COALA software?** Not involving the white label shop
- **How will the shop be funded?** (Apple App store takes percentages of app sales). Each seller account, on each instance can have its specific commission on its sold products. It depend on the specific agreements between the instance owner and the content creator
- **Will there be any refund possibilities if the purchased solution doesn't work as intended?** It is up to the instance owner to decide
- **Will it be possible to ask for new products/services?** It is up to the instance owner to decide

End users and IT service providers

All these question do not involve the white label shop, which is agnostic and only used to create the instances for the uses cases. Generic:

- **What is the aim of the white-label shop?** To provide the replicable tool to create the shop instances
- **Why a totally new white-label shop and not an existing one? What will be the differences?** “White” means agnostic, it is the basis to create the instances. An existing one is an instance.
- **What is the language of the white-label shop?** PHP, the CMS is PrestaShop as indicated in the proposal
- **What other assistant will be offered apart from COALA?** Not involving the white label shop
- **How should we integrate the open-call results into the white-label shop?** They are not integrated into the white label shop but into the instances.

- **How will the use cases be integrated into the white-label shop?** The use case will create their own instances
- **How can others benefit from my experience stored in the shop instances?** This does not involve the white label shop
- **How will white-label shop increase company X productivity?** Because it supports the creation of an instance in few minutes by using an existing white label Shop, instead of creating it from scratch.

Constraints/Requirements by the WWLS

- **Will there be technical constraints/requirements for developers concerning the store?** Yes, for example the specific requirements of PrestaShop (PHP > 8.0, MySQL, etc...)
- **Needed certificates or guarantees?** (medical sector). It depends on the use case, not managed by the shop or by the functionalities of the instance. It regards the single instance compliance.
- **How should we place orders for “future” solutions? Is it possible?** After the end of the project, it depends on the definition of the subject in charge of maintain the white label shop and/or the single instances.

This set of questions and answers will be used also to define the FAQs for the participant to the open calls of Wasabi.

To **summarize the Q&A** discussed with the end users, the white label shop concept revolves around providing a versatile platform for creating custom instances tailored to various applications. It remains agnostic about the specific content or solutions being sold, acting purely as a channel for sales. The overarching theme is flexibility, allowing instance owners to choose between tailor-made or existing solutions. The shop instances, essentially clones of the white label shop, are customized by the use case owner to offer physical products, virtual products, and skills. Several key aspects and questions guide the framework:

- **Content and Applications:** The shop instances can contain a wide range of Applications, and the decision on whether to offer tailor-made or existing solutions is at the discretion of the instance owner. Customers can be involved through preliminary surveys, although this does not directly impact the white label shop. Ordering new products is simplified by adding them to the cart.
- **Value Communication:** Communicating the value of Applications is left to the instance owner, and the white label shop receives a commission for its service. The commission collection is managed through NFTs, specifically by ICCS in T3.2.
- **Choosing Applications/Services:** Customers can choose Applications or services by reading their descriptions on the instance. Each shop instance must provide guidance in the form of videos, images, etc. There is the possibility of related product suggestions.
- **Maintenance and Security:** Maintenance responsibility differs; i-Deal manages the white label shop infrastructure, while each instance owner handles content maintenance. Security measures, including access control, are under the purview of the instance owner.
- **Data Management:** The white label shop is not directly involved in data management. Understanding the division between what is managed by the WWLS (White-Label Shop) and the instance managers is crucial for clear vision and operation.
- **Payment Methods:** Skills or products are paid to the shop instance owner through standard methods, while developers receive royalties via Crypto transfer. The value of functionalities, like automatic training program creation, is determined by the market, with the expectation that training providers will pay for such skills.

- **Business Model:** The business model for the shop instances is customizable by the instance owner. It can cater to B2B or B2C, offer additional services, and minimize vendor lock-in by allowing multiple vendors.
- **Customer Support and Refunds:** Customer support, refund policies, and additional services are at the discretion of the instance owner.
- **End Users:** The end user of the white label shop is the instance owner. The aim is to provide a replicable tool for creating shop instances. The choice of a new white-label shop over an existing one lies in its agnostic nature.
- **Integration and Requirements:** Integration of open-call results and use cases is into the instances, not the white label shop. Technical constraints for developers include meeting specific requirements of PrestaShop. Certificates and guarantees depend on the compliance of the single instance, not the shop.

At the end of this exercise the end users and the other participants of the project have been trained about the significance of the WWLS, of the instances and of the potential of the instrument provided to them.

2.5 The added value of WWLS

In essence, the WWLS is a **foundational tool for Wasabi deployment**.

Its first unique value lies in its **agnostic platform**, empowering instance owners to swiftly create customized instances. It offers unparalleled flexibility, allowing tailored solutions, diverse business models, and decentralized data control. This adaptable framework fosters rapid deployment, ensuring a dynamic and responsive marketplace for a wide array of applications and services.

In addition, its **open integration** (fig.1) **with the NFT-based** royalty management framework for skill developers provided by ICCS and with the **federation module** by Atlantis enables the **open and flexible deployment of Wasabi concept in the use cases** already provided by the end users of the consortium and, in the future by the open call winners and third parties.

3. STRUCTURE OF WASABI SHOP

3.1 PrestaShop features and limits

PrestaShop is one of the most used Open Source CMS for e-commerce websites.

Started in 2005 as a student project in Paris, has been widely adopted through years by companies, gaining a significant global presence with more than 300.000 instances worldwide with more than 25B of turnover.

PrestaShop has evolved into a robust and versatile e-commerce solution, driven by its commitment to open-source principles, user-friendly design, and a responsive community. Its continuous updates and feature enhancements reflect the platform's dedication to staying relevant in the competitive e-commerce landscape. The latest major version is the 8.x family, that has been used for WASABI Shop.

3.1.1 Main features of PrestaShop

Open-Source and Community-Driven



PrestaShop's Open Source nature fosters a vibrant community of developers, designers, and users who contribute to its evolution. This community-driven approach ensures continuous improvement and adaptability.

Modular Architecture

PrestaShop's modular architecture allows users to extend the platform's functionality with additional modules and themes. This flexibility enables merchants to tailor their online stores to specific needs without expensive development efforts.

User-Friendly Interface for Merchants and Customers

The platform offers an intuitive and user-friendly interface, making it accessible to individuals with varying technical expertise. From product management to order processing, PrestaShop strives to simplify the e-commerce experience for merchants. PrestaShop also recognizes the importance of mobile commerce and ensures that online stores built on the platform are responsive and optimized for various devices. This responsiveness contributes to a seamless shopping experience for customers on smartphones and tablets.

SEO¹-Friendly

The platform includes features to optimize online stores for search engines, enhancing visibility and discoverability. Merchants can customize URLs, meta tags, and other SEO elements to improve their website's ranking in search engine results.

3.1.2 Adaptations needed

Shop transformation

PrestaShop is an e-commerce solution, made for a single merchant that wants to sell its products.

WWLS has been designed to be an **agnostic platform**, empowering instance owners to swiftly create customized instances.

This feature has been added with a Shop module that has been selected, installed, configured and customized to give these extra functionalities:

- Merchants can register to WWLS and make an application for creating their own shop;
- Shop admins can approve or decline an application request, maybe after a validation of provided documents;
- Merchants and admins can edit single shops features and behavior like logo, name, description, cover image, contact links;
- Merchants can manage their products, features, quantities;
- Merchants can manage stocks and manage quantities for each products, also in bulk mode;
- Merchants can manage messages, commissions, discounts, carriers used for physical products shipment;
- Merchants can check membership status (if applicable) and make withdrawal requests to Shop admins.

Product types

PrestaShop comes with full support to physical and virtual products. To satisfy WASABI requirements we also added two specific types of products: skills and services.

¹ SEO means Search Engine Optimization and is the process used to optimize a website's technical configuration, content relevance and link popularity so its pages can become easily findable, more relevant and popular towards user search queries, and as a consequence, search engines rank them better.

Skill product is the main innovation of Wasabi Shop, and PrestaShop needed to be adapted to support additional fields necessary for skills purchase and description.

The main extra field is the JSON field that hosts skills info like dependencies, developers, royalties etc. This field in the PrestaShop Backoffice also contains an embedded validator to ensure that JSON syntax is correct.

User types

PrestaShop comes with many types of users already configurable. We added a particular kind of users called “Developer” that needed to be integrated in Shop module to see how many skills of the specific developer have been sold and the amount of royalties gained by developer.

Its integration with the NFT-based royalty management framework for skill developers provided by ICCS (T3.2) and with the federation module (T3.1) by Atlantis enables the open and flexible deployment of Wasabi concept in the use cases already provided by the end users of the consortium and, in the future by the open call winners and third parties.

3.2 Wasabi White Label Shop (WWLS) STRUCTURE

3.2.1 WWLS instance

The first Shop created is the WWLS and the first instance for demonstration. This demo instance is for testing purposes only and will be used to showcase features and capabilities.

It has been branded with Wasabi logo and colors, with demo shops and products inside. This first instance is the base software that will be cloned for each subsequent instance.

Each instance owner will clone this WWLS instance into a new domain and web server under its own management, in order to create the new customized instance that will have real shops, products, customers and will be focused on a specified topic with specific marketing strategies.

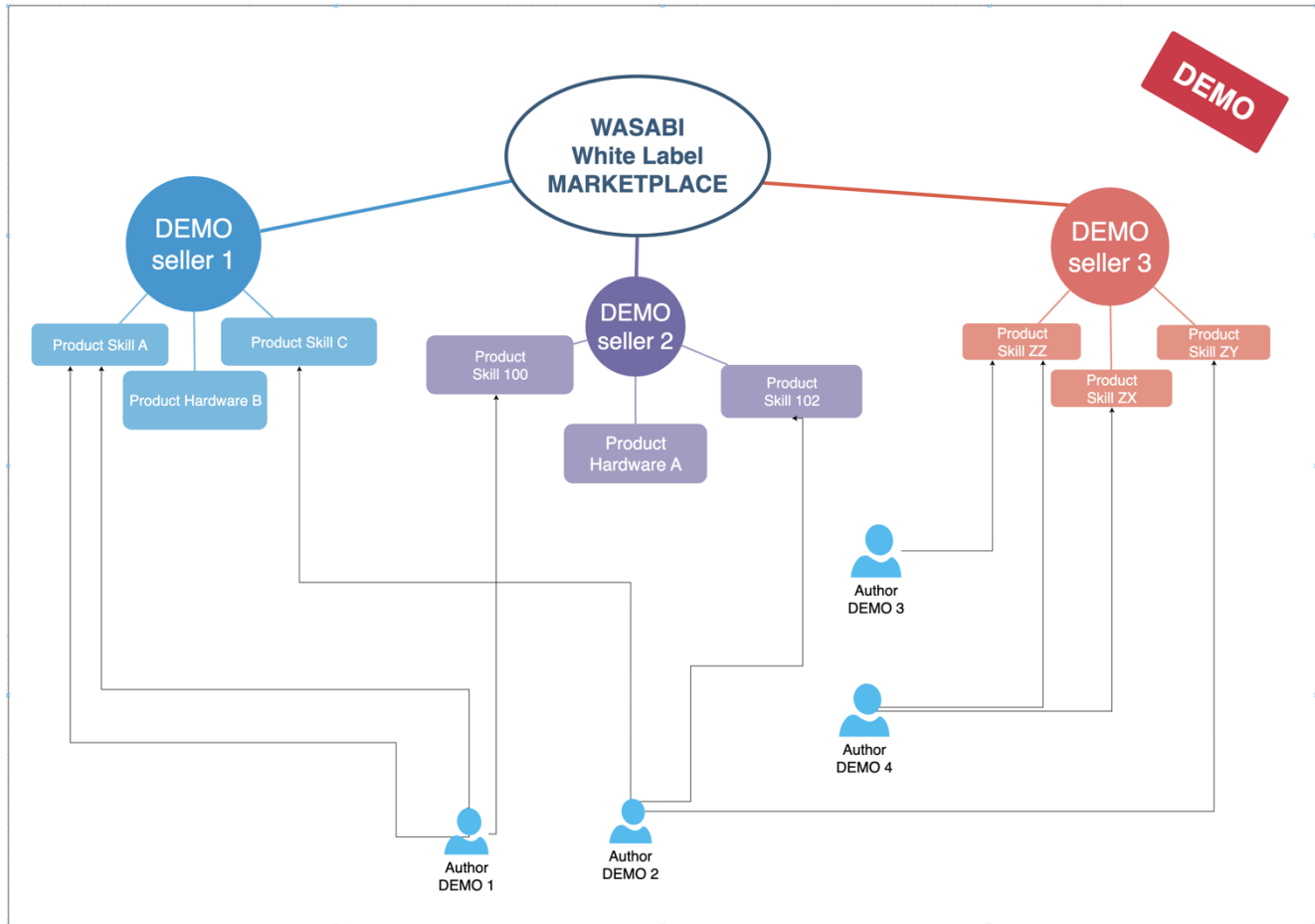


Figure 3: White Label Shop DEMO Instance.

3.2.2 Shop instances

Each use case represents a new instance of the base WWLS.

New instances will be the result of a “fork” of the WWLS, that will be made following a specific technical step-by-step guide.

The source repository is: <https://gitlab.com/orangepix/wasabi.git>

and contains base PrestaShop files, Market Place module, various customizations, and installation instructions.

That strict separation brings many advantages to each use case project, and also means each instance will have:

- Its own administrator
- Its own domain
- Its own server / hosting provider
- Name, brand, layout, marketing strategies
- Merchants, shops, products, developers etc.
- Fees, commissions etc.

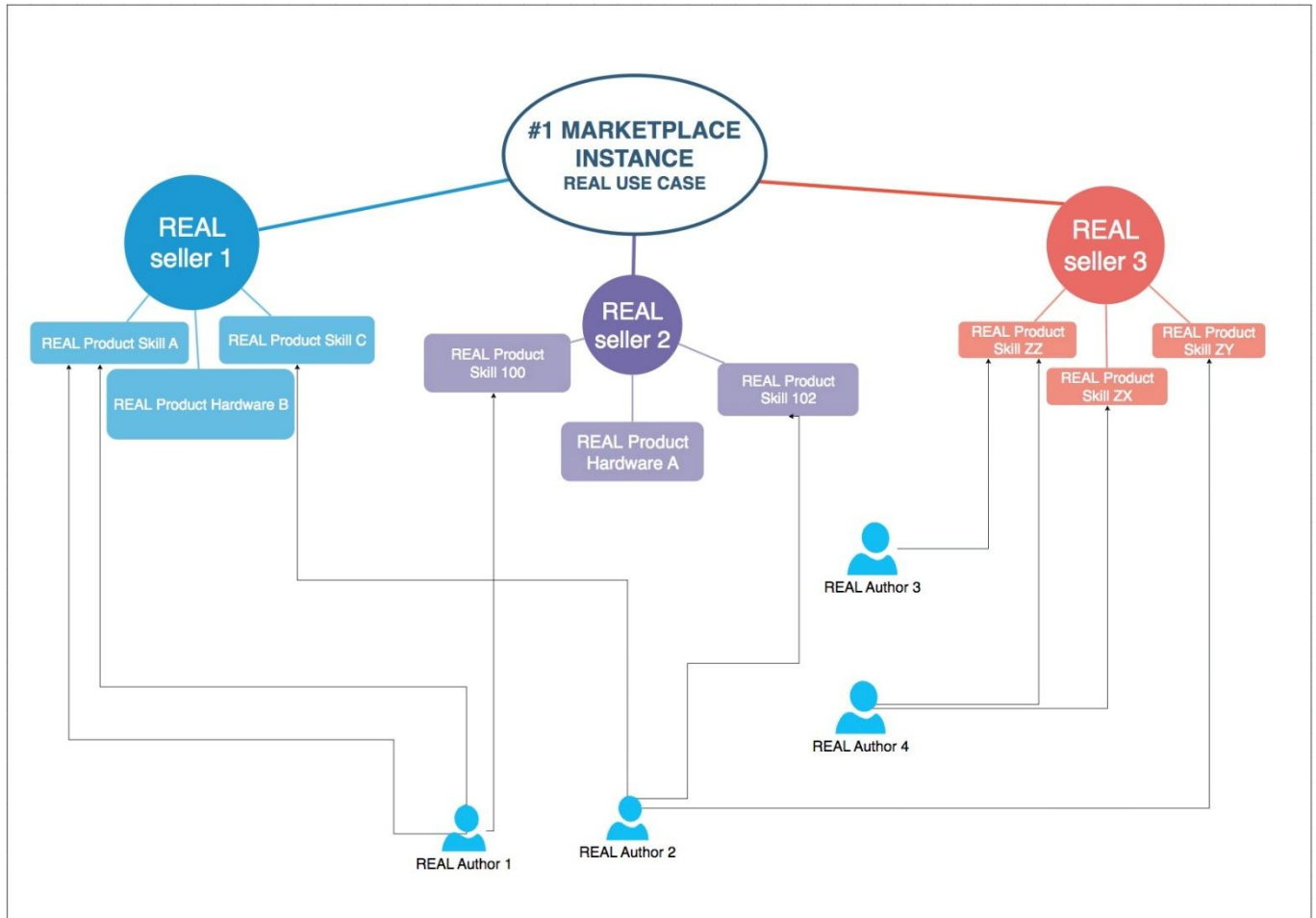


Figure 4: clone for new Shop instance

3.2.3 Federation Module

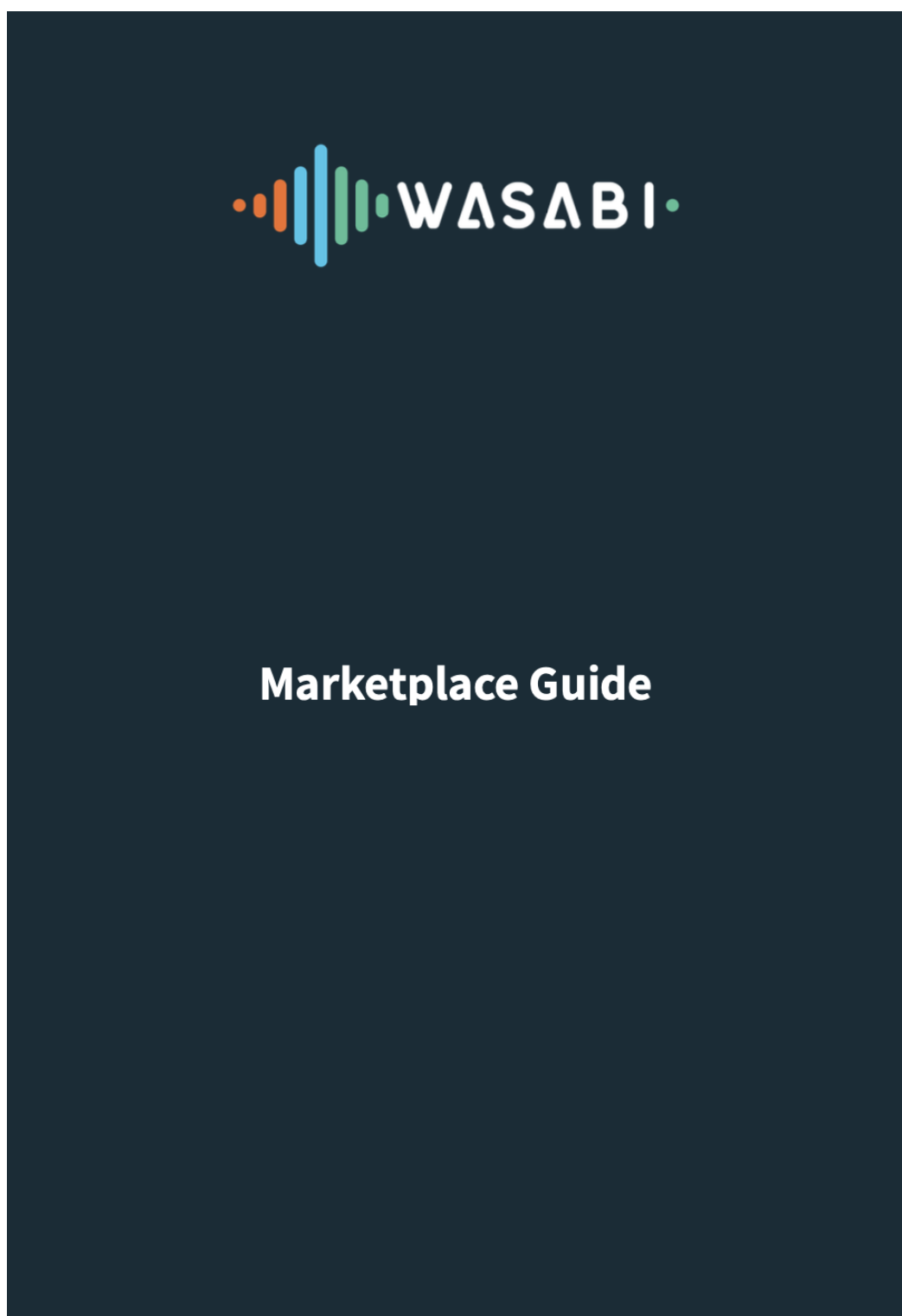
The Federation Module is designed to ensure secure data exchange between the different instances of the White Label Shop. To achieve the creation of secure data transfer, sharing and sovereignty, the module will follow IDSA specifications. With the addition of the Federated Module, each individual WLS instance can be aware of the rest, and it will be able to communicate and share information with them. The exchange of information can involve catalogues of shop offers, as well as user information. The Federation Module will utilize the available PrestaShop Web Service APIs to establish communication with individual instances. The Module will also specify its own endpoints for the instances in order to set up their registration and perform the federated queries. Internally, an architecture that corresponds to the IDSA standards is designed to be set up. The operations of the API endpoints can be categorized as implementing the following functionalities: WLS Registration, Federated Querying and Auditing.

3.3 WASABI WHITE LABEL SHOP GUIDE

The Guide reported in this chapter serves as a guideline for product and skills developers and end users to navigate and use the Wasabi Shop. It has been shared from the early phases of the project to the whole Wasabi consortium, in the shared folder that can be accessed at these links:

<https://wasabi.i-dealsrl.com/repository/Wasabi-guide-v01.pdf>

<https://wasabi.i-dealsrl.com/repository/WASABI-video-d31.mp4>



3.3.1 Administrator

1.0 - HTTP Authentication

To avoid crawlers and SEO issues for this evaluation stage, we added an HTTP authentication that prevents site access without credentials. This authentication works for all websites.

Credentials: please contact federico.tonin@i-dealsrl.com to obtain the credentials: the ones shown in the deliverable are only for demo purposes and not working.

USER: ideal

PSW: *****

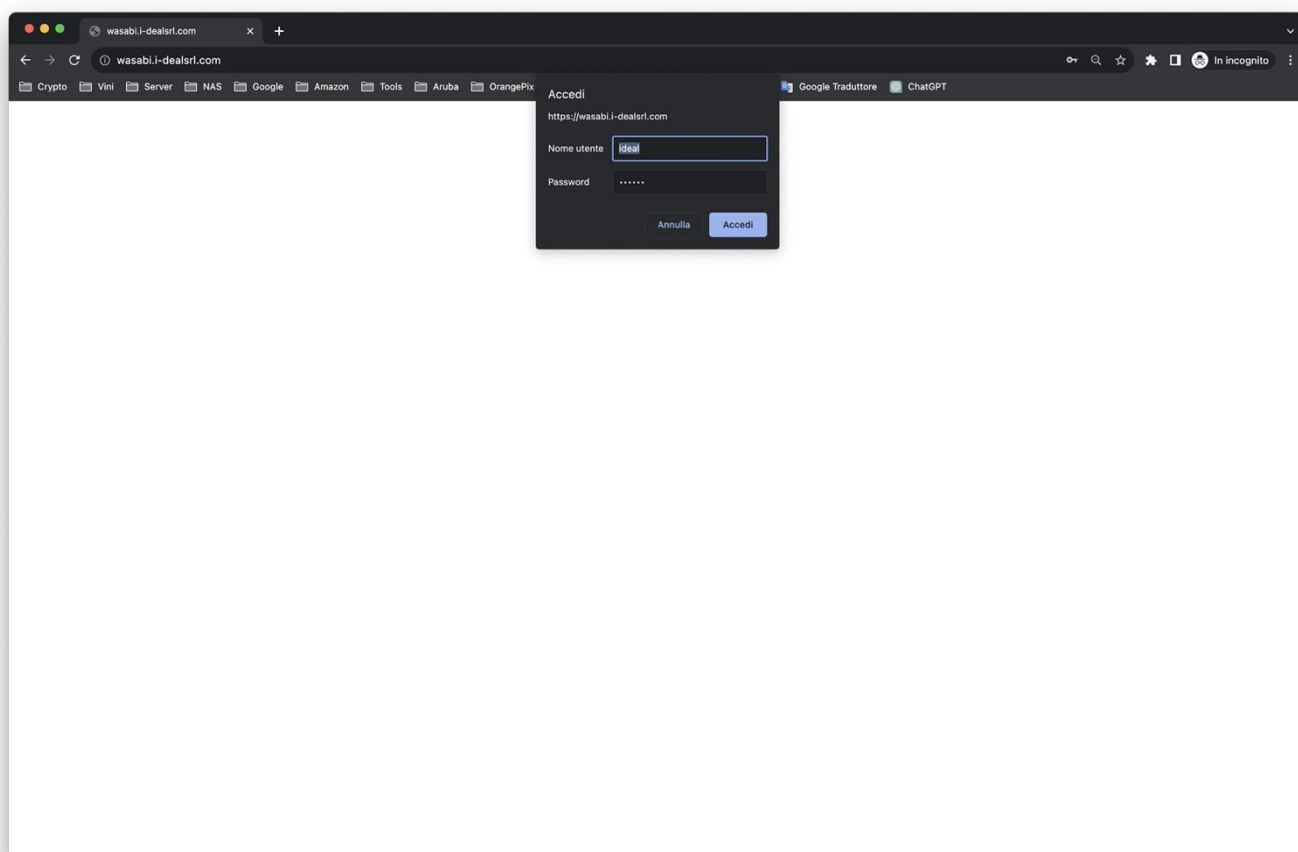


Figure 5: authentication

1.1 Login

Credentials: please contact federico.tonin@i-dealsrl.com to obtain the credentials: the ones shown in the deliverable are only for demo purposes and not working.

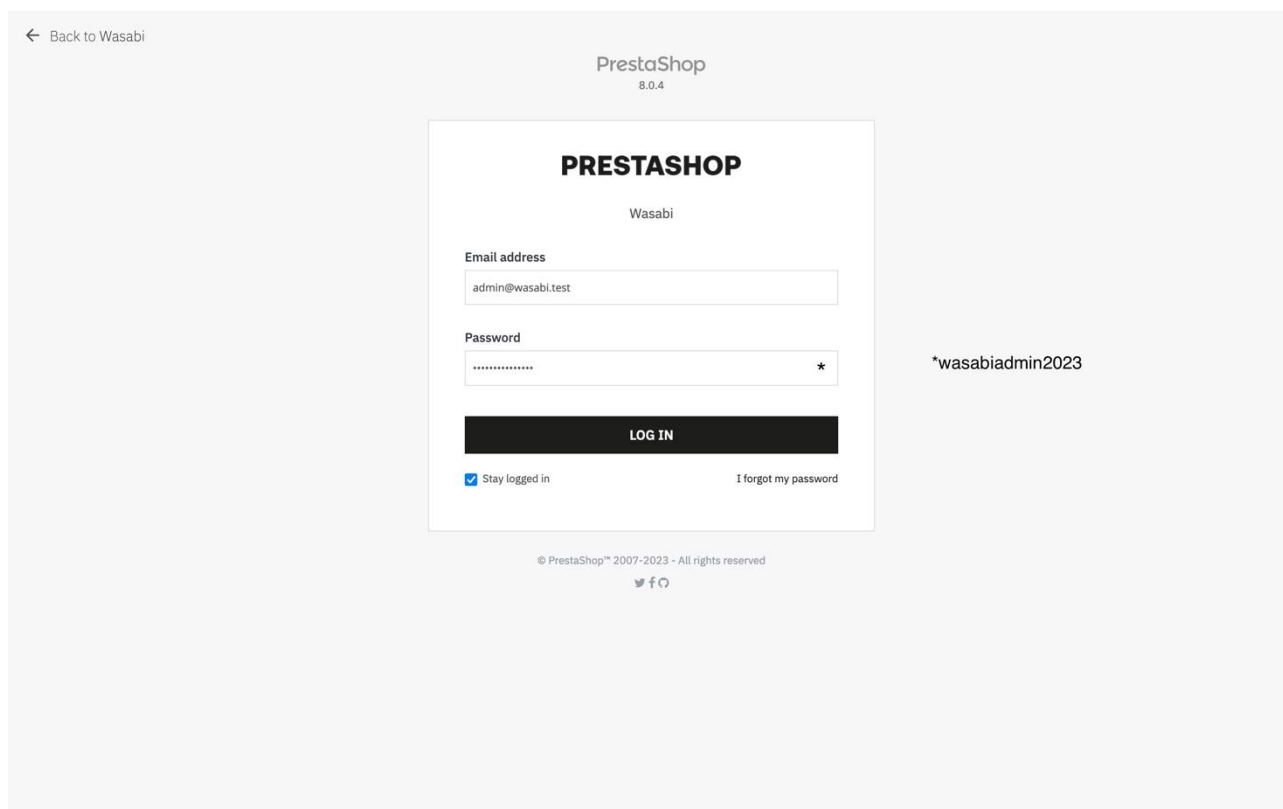


Figure 6: Login

1.2 Manage sellers

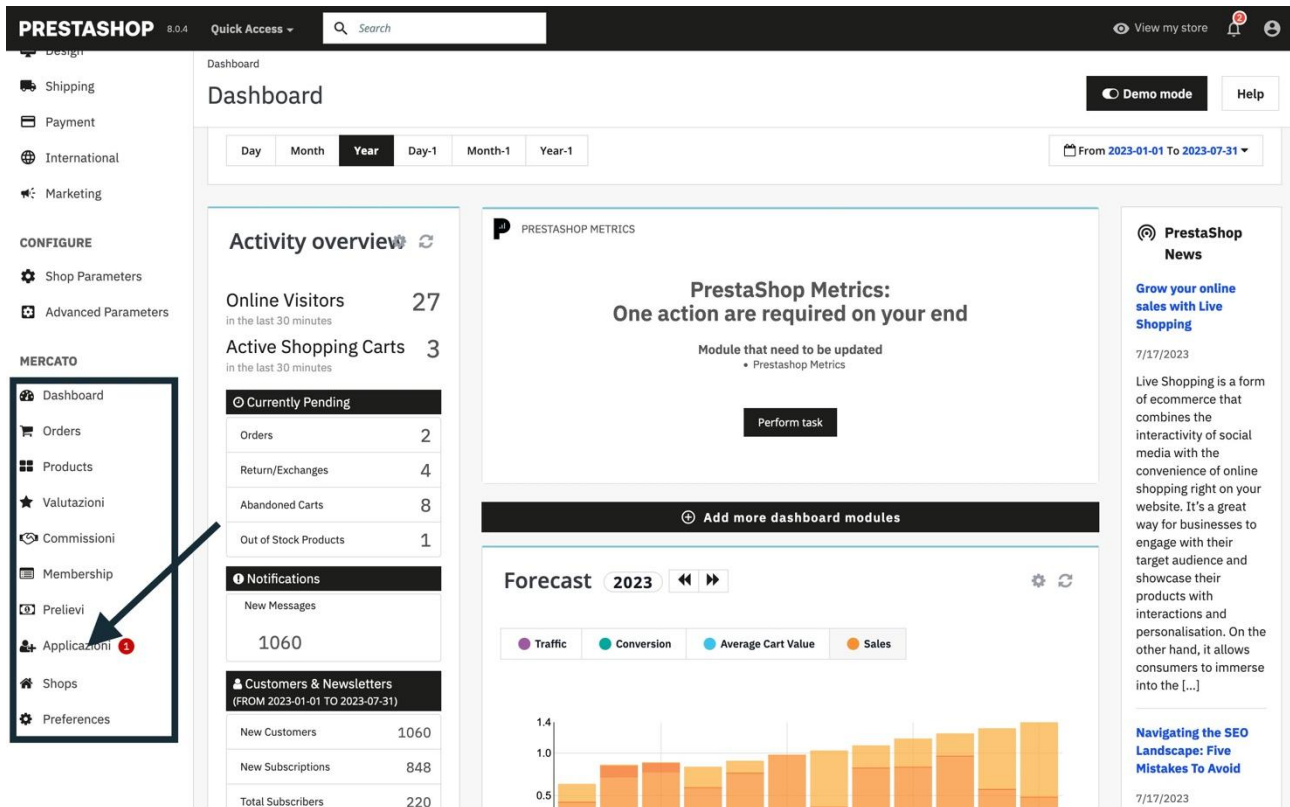
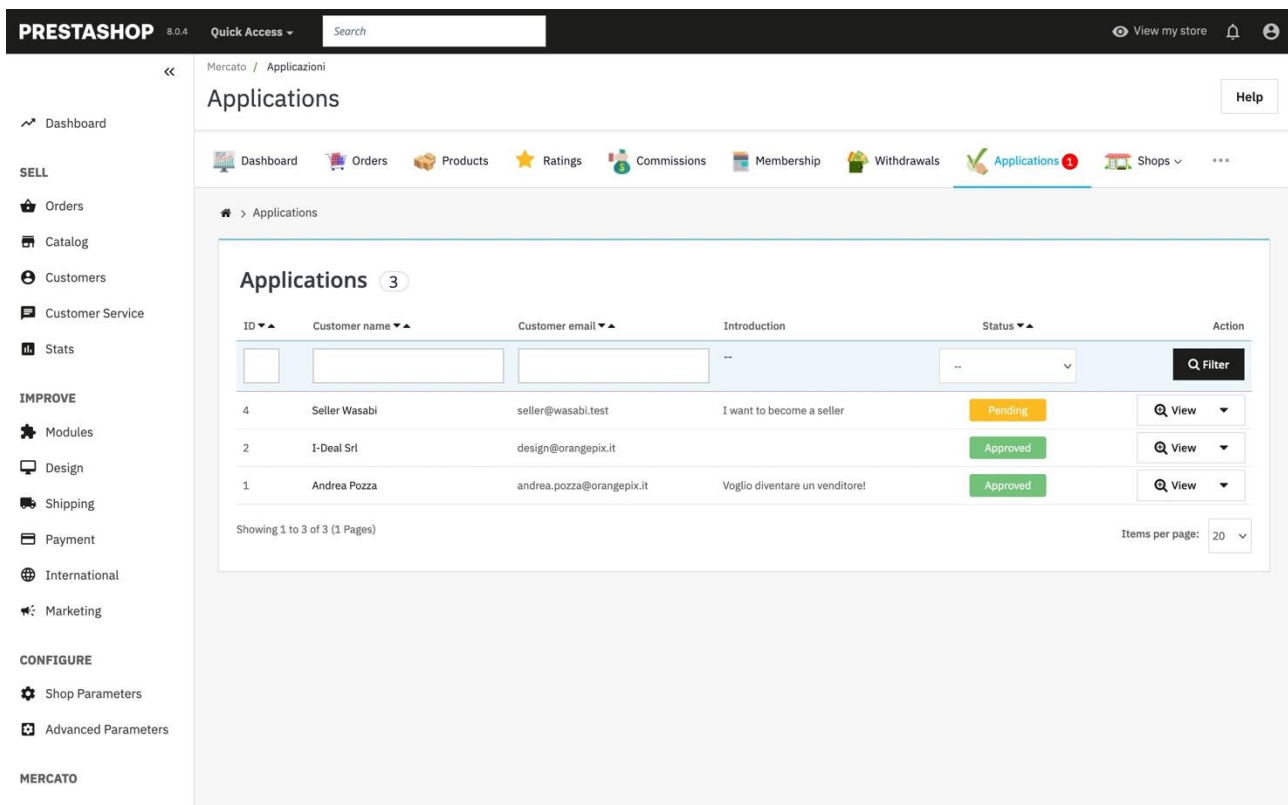
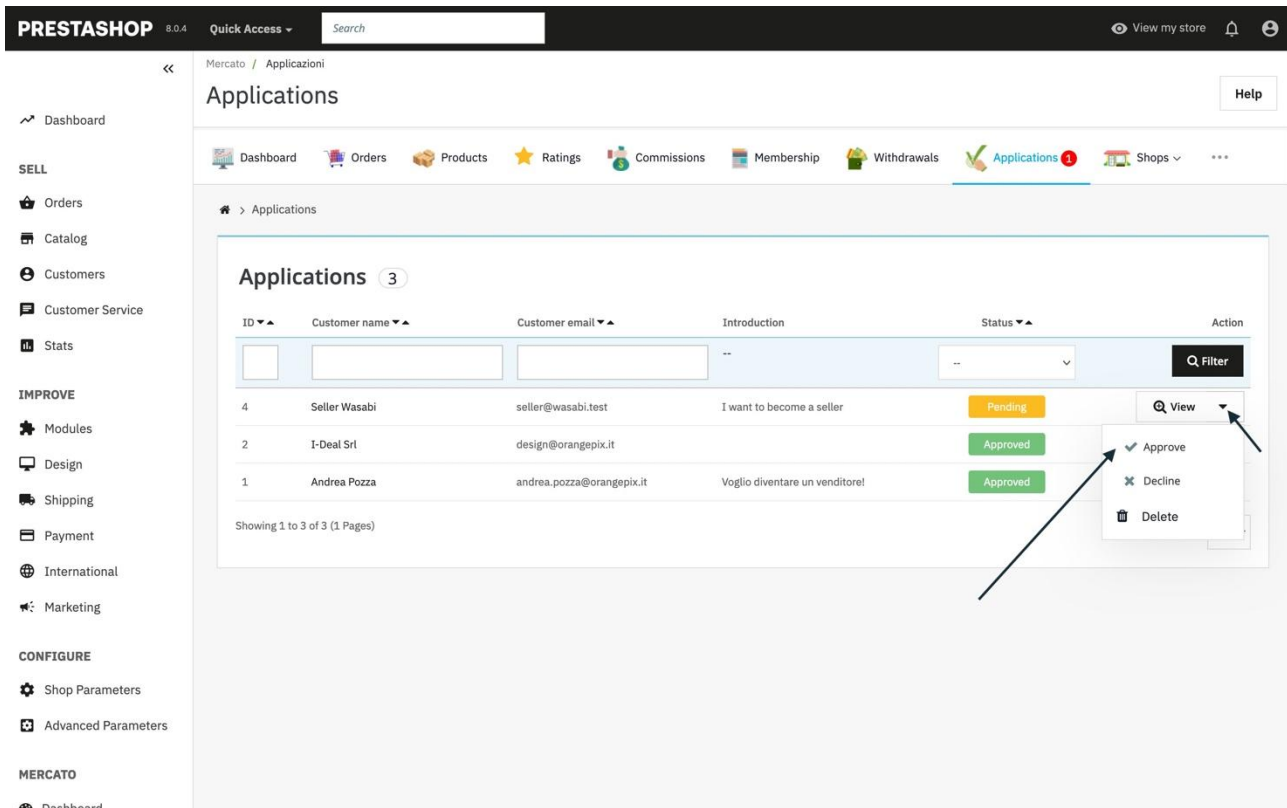


Figure 7: Dashboard

- Open the Shop Applications from PrestaShop admin panel
- Check all the request and approve or decline a seller.





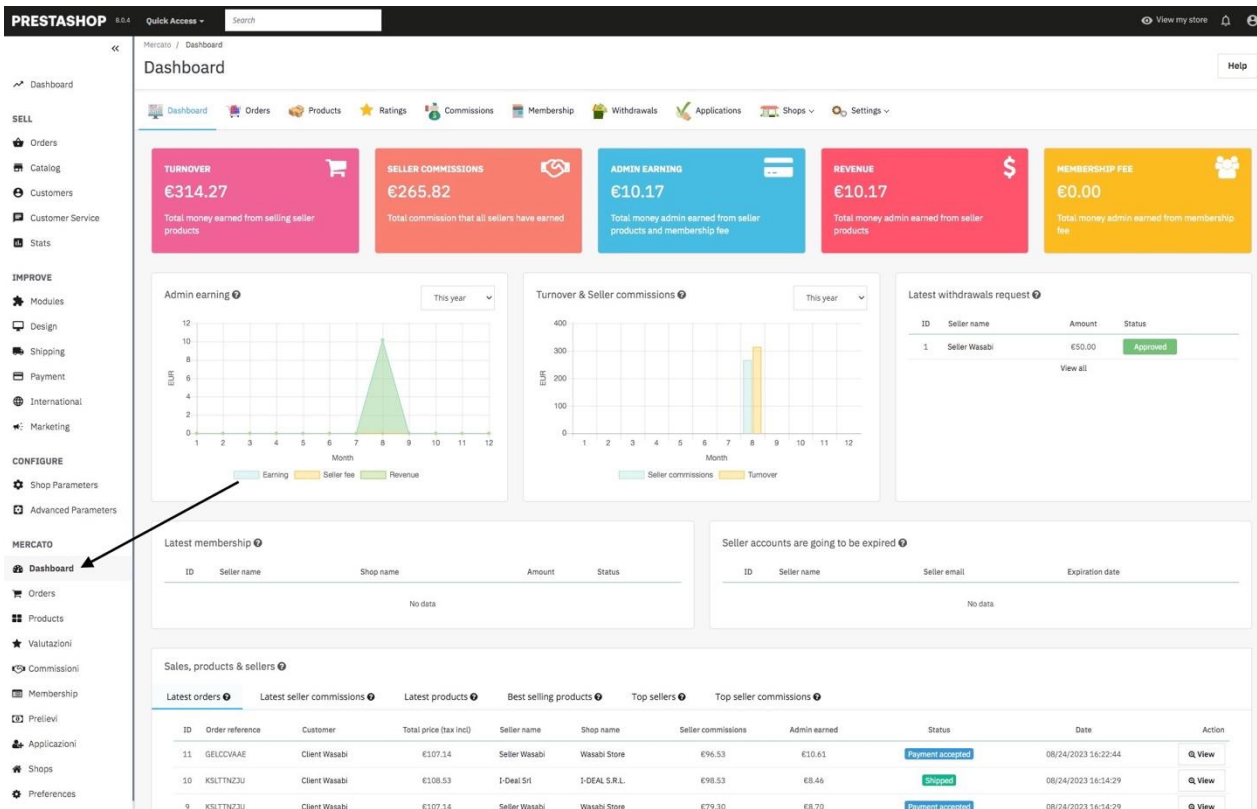
The screenshot shows the Prestashop 8.0.4 back office interface. The top navigation bar includes 'Dashboard', 'Orders', 'Products', 'Ratings', 'Commissions', 'Membership', 'Withdrawals', 'Applications' (with a red notification badge), and 'Shops'. A sidebar on the left lists various management categories: Dashboard, SELL (Orders, Catalog, Customers, Customer Service, Stats), IMPROVE (Modules, Design, Shipping, Payment, International, Marketing), CONFIGURE (Shop Parameters, Advanced Parameters), and MERCATO (Dashboard). The main content area is titled 'Applications' and shows a table with 3 items. The table columns are ID, Customer name, Customer email, Introduction, Status, and Action. The first row (ID 4) is 'Seller Wasabi' with status 'Pending'. The second (ID 2) is 'I-Deal Srl' with status 'Approved'. The third (ID 1) is 'Andrea Pozza' with status 'Approved'. A 'View' dropdown menu is open for the first row, showing options for 'Approve', 'Decline', and 'Delete'. Arrows point from the 'View' button to the dropdown menu.

ID	Customer name	Customer email	Introduction	Status	Action
4	Seller Wasabi	seller@wasabi.test	I want to become a seller	Pending	View
2	I-Deal Srl	design@orangepix.it		Approved	
1	Andrea Pozza	andrea.pozza@orangepix.it	Voglio diventare un venditore!	Approved	

Figure 8: Applications

1.3 Shop dashboard

1. Open the Shop Dashboard from PrestaShop admin panel.



The screenshot shows the PrestaShop Marketplace dashboard. At the top, there are five summary cards: Turnover (€314.27), Seller Commissions (€265.82), Admin Earning (€10.17), Revenue (€10.17), and Membership Fee (€0.00). Below these are three charts: 'Admin earning' (line chart), 'Turnover & Seller commissions' (bar chart), and 'Latest withdrawals request' (table). The 'Latest membership' section shows a table with no data. The 'Seller accounts are going to be expired' section also shows no data. At the bottom, there is a 'Sales, products & sellers' section with a table of latest orders.

ID	Order reference	Customer	Total price (tax incl)	Seller name	Shop name	Seller commissions	Admin earned	Status	Date	Action
11	GELCCVAE	Client Wasabi	€107.14	Seller Wasabi	Wasabi Store	€96.53	€10.61	Payment accepted	08/24/2023 16:22:44	View
10	KSLTINZJU	Client Wasabi	€108.53	I-Deal Srl	I-DEAL S.R.L.	€98.53	€8.46	Shipped	08/24/2023 16:14:29	View
9	KSLTINZJU	Client Wasabi	€107.14	Seller Wasabi	Wasabi Store	€79.30	€8.70	Payment accepted	08/24/2023 16:14:29	View

Figure 9: Marketplace dashboard

3.3.2 Customer

1.1. Login

Credentials: please contact federico.tonin@i-dealsrl.com to obtain the credentials: the ones shown in the deliverable are only for demo purposes and not working.

USER: user@wasabi.test

PSW: wasabiuser2023

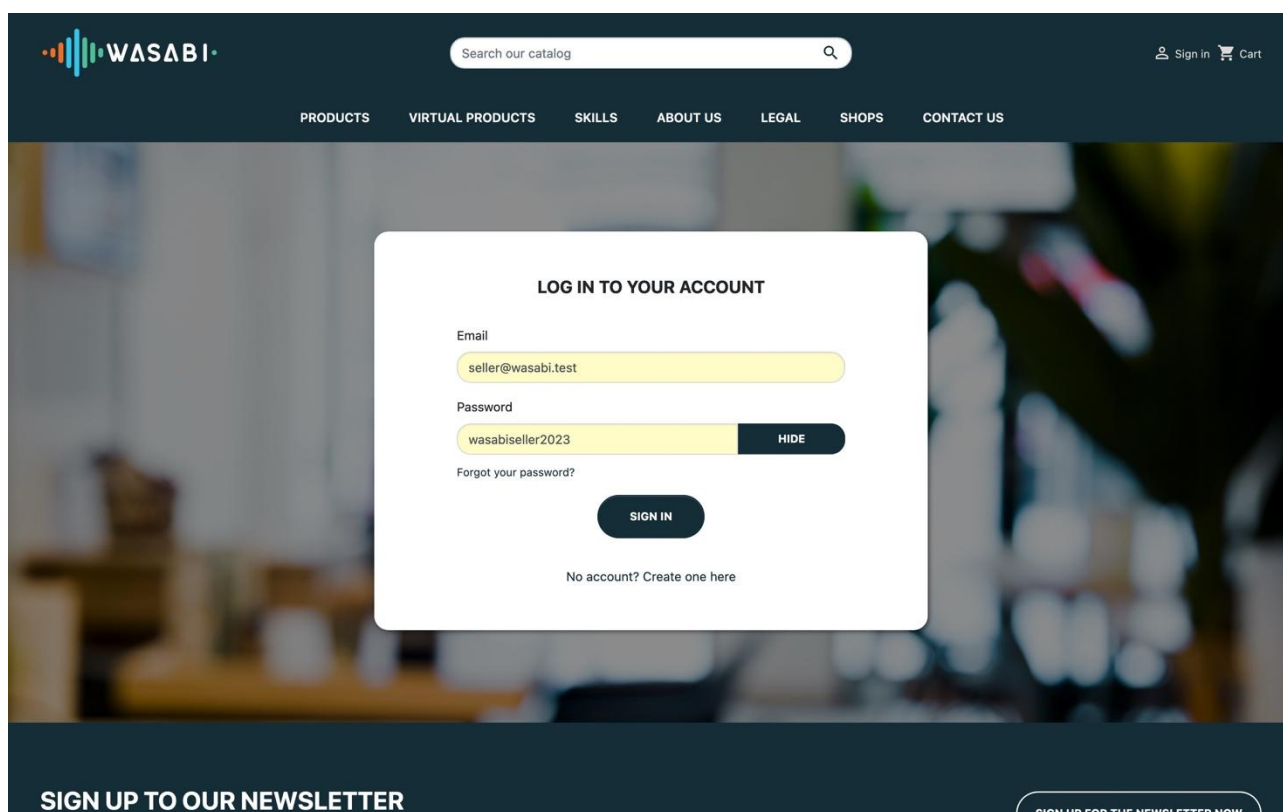
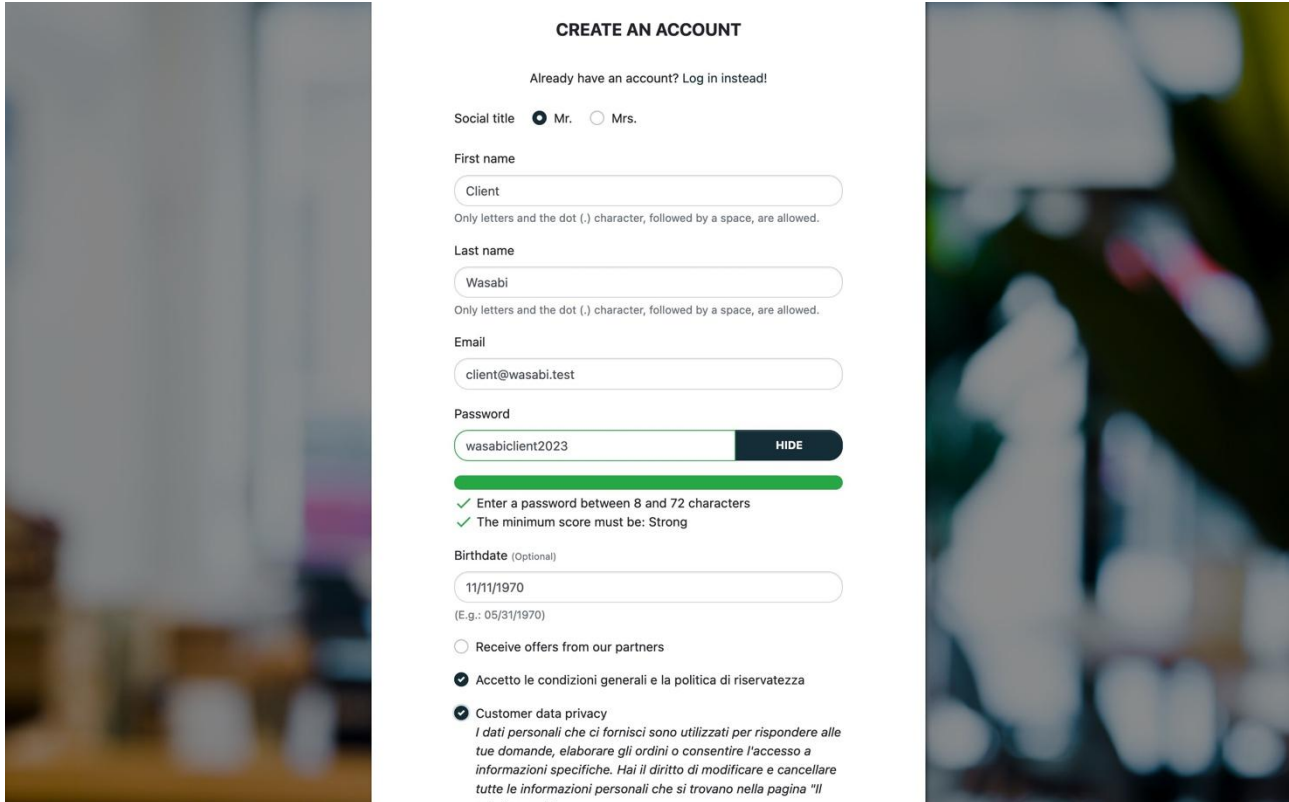


Figure 10: Customer login

1.2. Register

Credentials: please contact federico.tonin@i-dealsrl.com to obtain the credentials: the ones shown in the deliverable are only for demo purposes and not working.

Insert required data.



CREATE AN ACCOUNT

Already have an account? Log in instead!

Social title Mr. Mrs.

First name
Client
Only letters and the dot (.) character, followed by a space, are allowed.

Last name
Wasabi
Only letters and the dot (.) character, followed by a space, are allowed.

Email
client@wasabi.test

Password
wasabiclient2023 HIDE
Enter a password between 8 and 72 characters
The minimum score must be: Strong

Birthdate (Optional)
11/11/1970
(E.g.: 05/31/1970)

Receive offers from our partners

Accetto le condizioni generali e la politica di riservatezza

Customer data privacy
I dati personali che ci fornisci sono utilizzati per rispondere alle tue domande, elaborare gli ordini o consentire l'accesso a informazioni specifiche. Hai il diritto di modificare e cancellare tutte le informazioni personali che si trovano nella pagina "Il mio account".

Figure 11: Account creation

Confirm the registration.

3.3.3 Seller

1.3. Login

Credentials: please contact federico.tonin@i-dealsrl.com to obtain the credentials: the ones shown in the deliverable are only for demo purposes and not working.

USER: seller@wasabi.test

PSW: wasabiseller2023

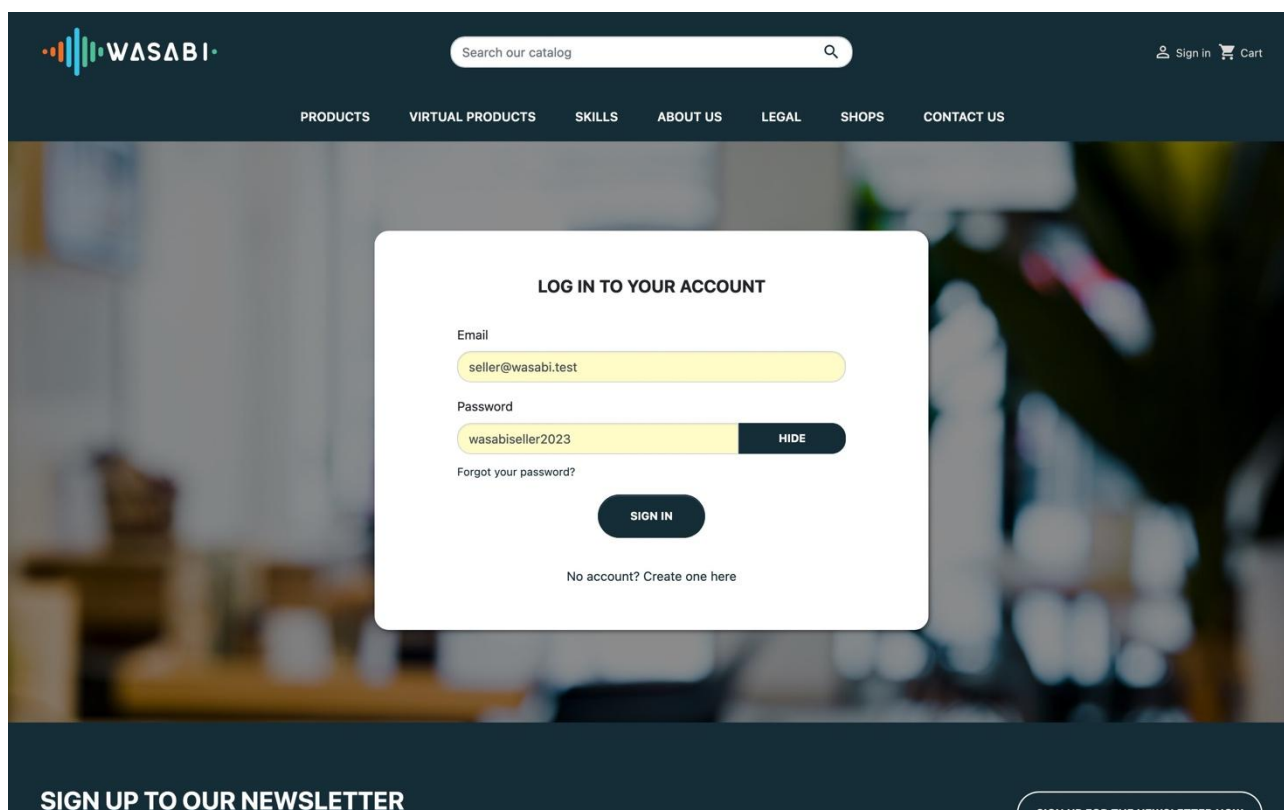


Figure 12: Login to account

3.2 Register

Credentials: please contact federico.tonin@i-dealsrl.com to obtain the credentials: the ones shown in the deliverable are only for demo purposes and not working.

1. Register an account as seen in 2.1.2, search for <https://wasabi.i-dealsrl.com/registration-2>.
2. Open user area <https://wasabi.i-dealsrl.com/my-account>, /my-account.

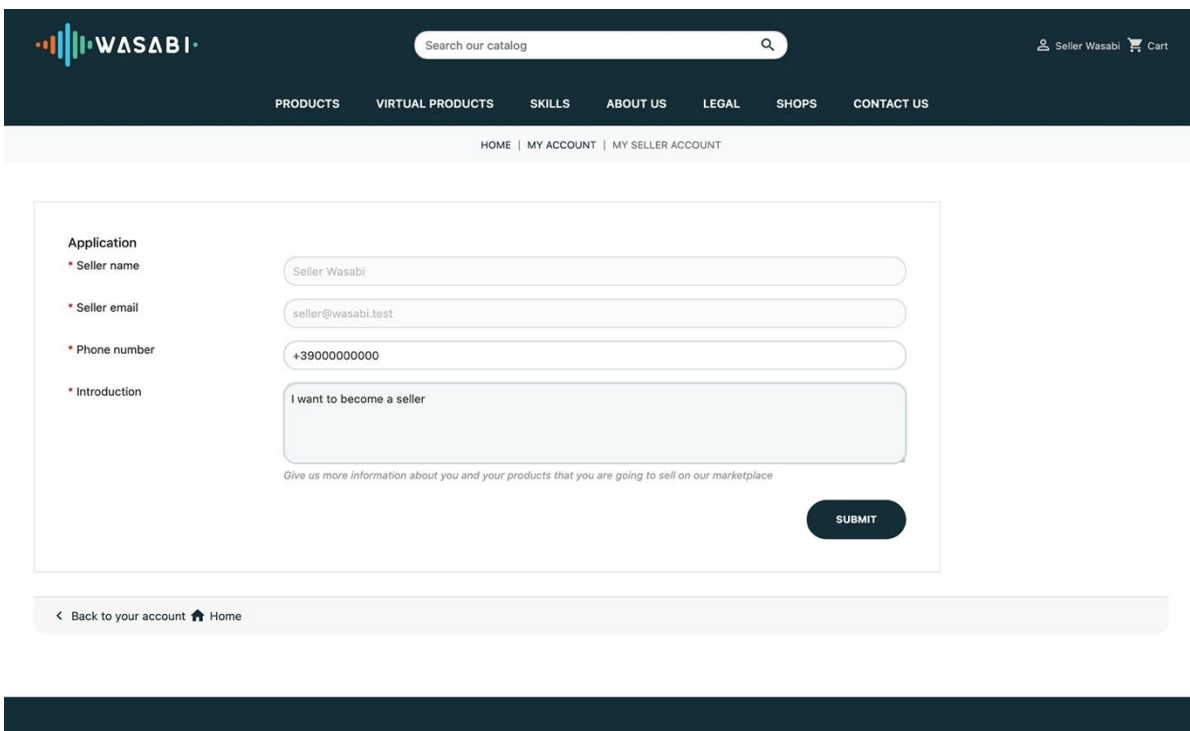
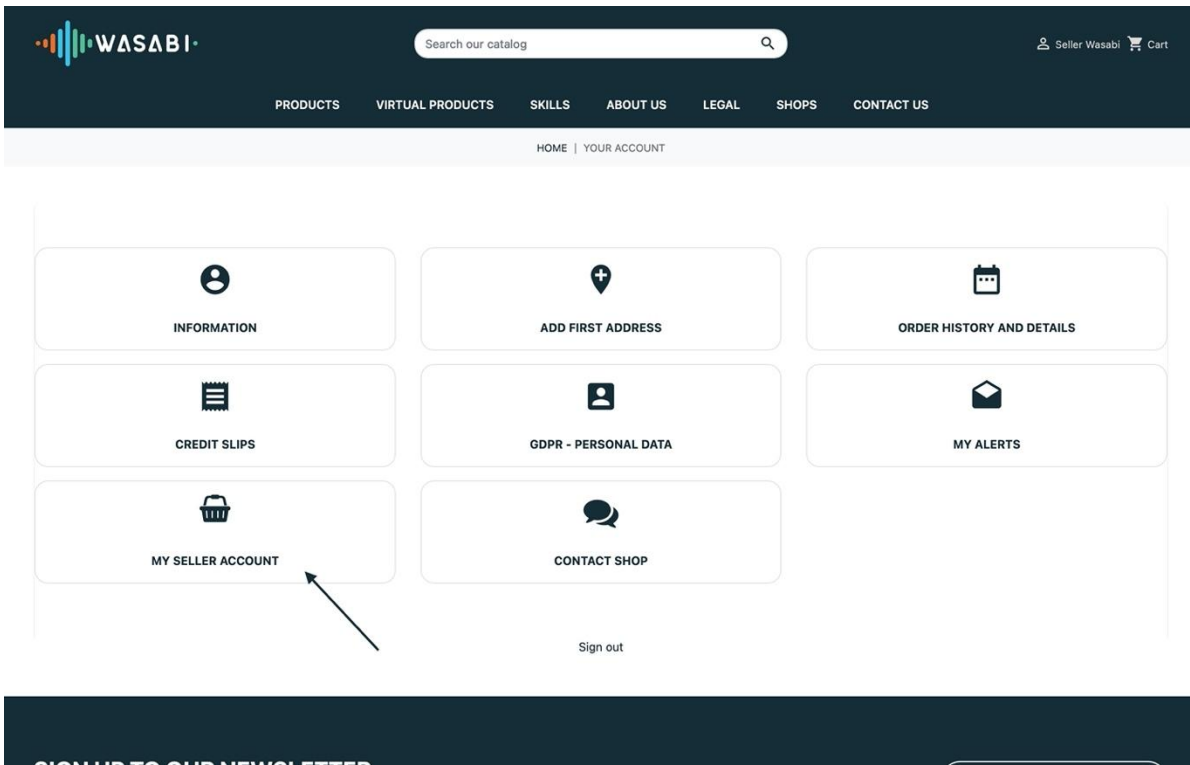
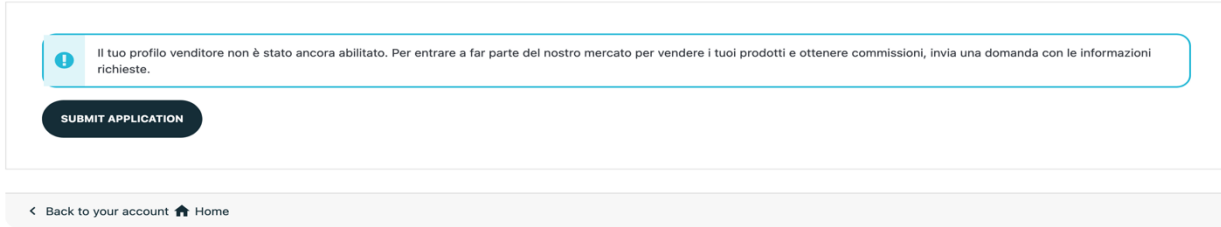
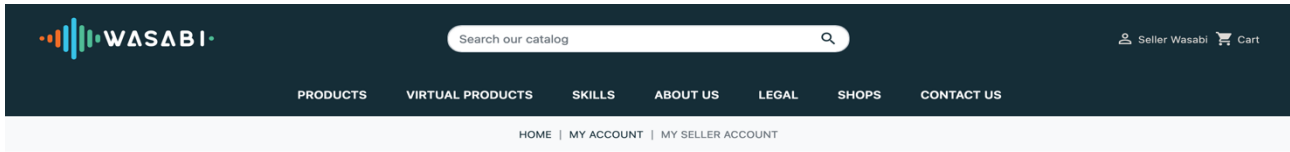


Figure 13: Seller account creation



Send a seller request

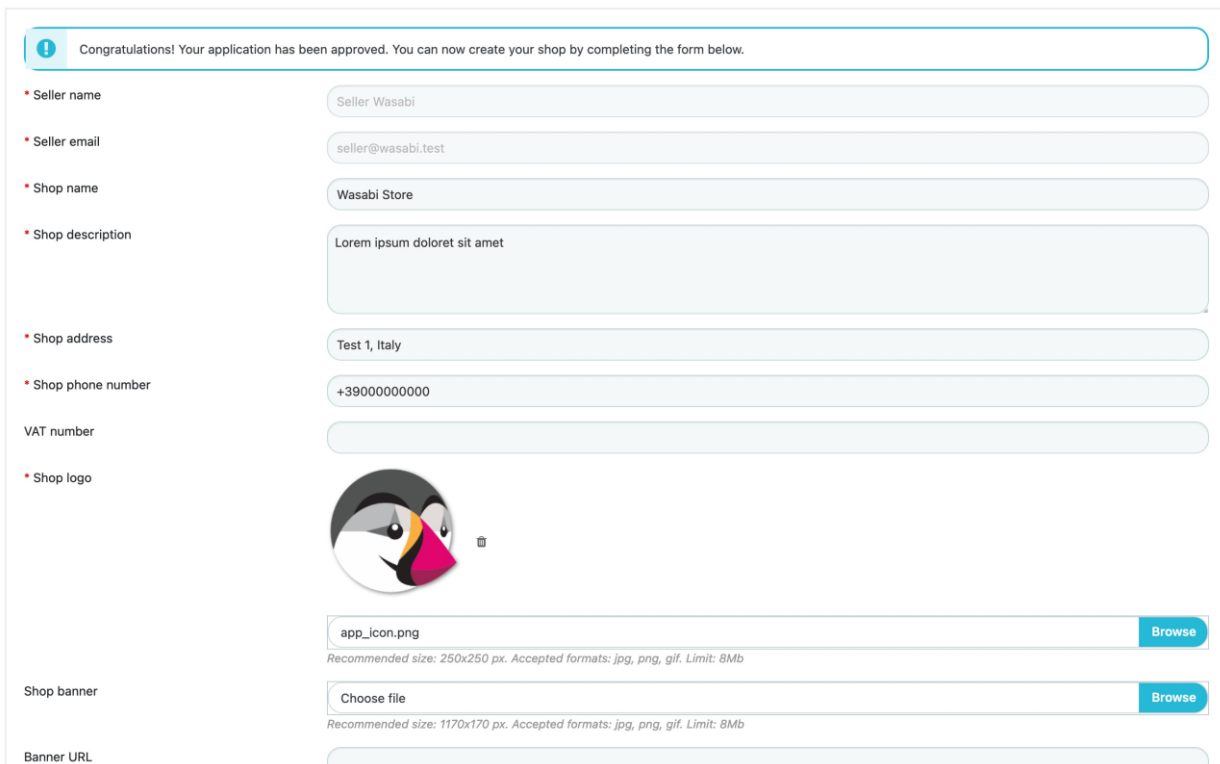


Figure 14: Seller creation

3.3 Manage your store.

Open the seller dashboard:

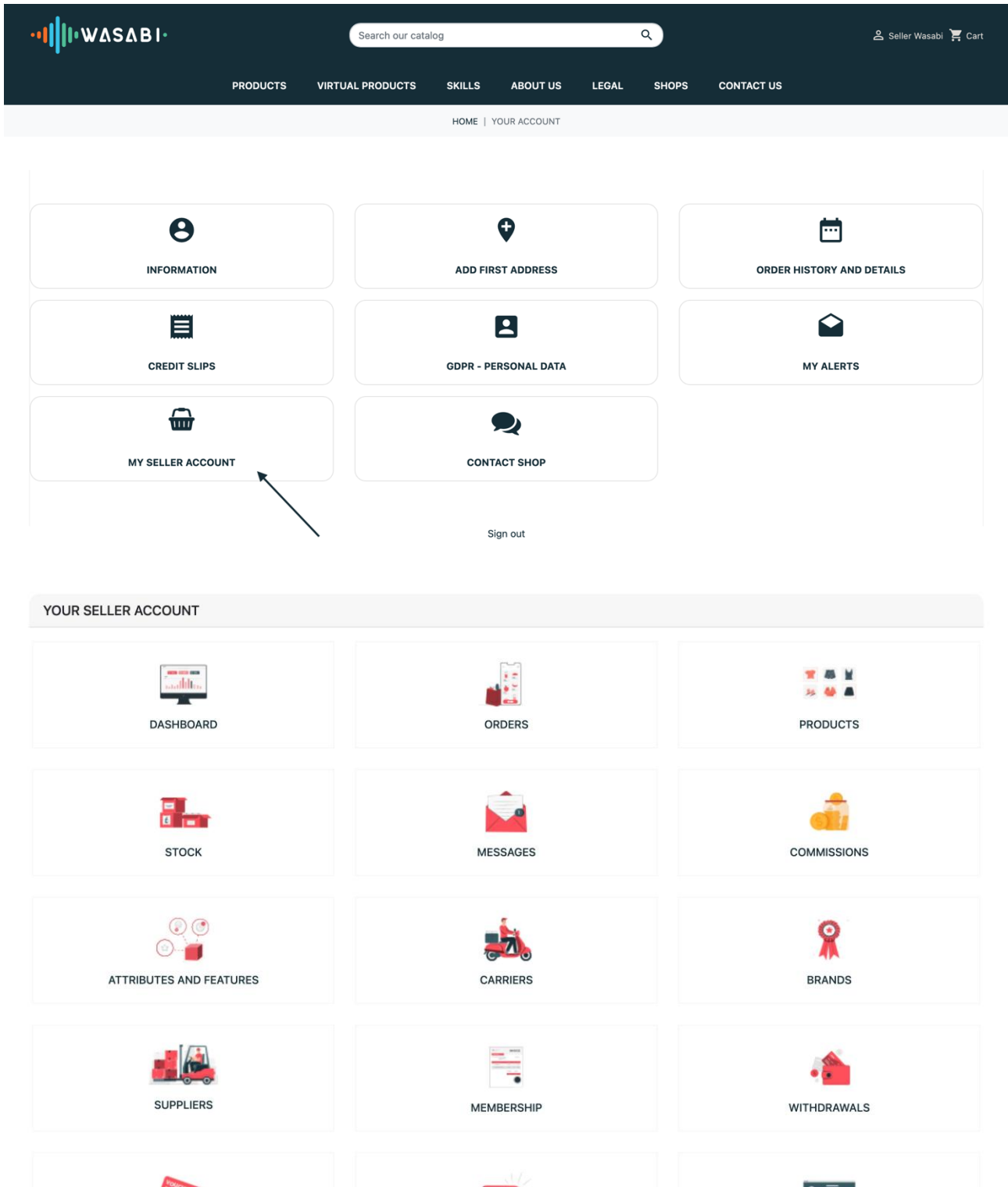


Figure 15: Seller dashboard management

Check the seller dashboard for an overview of your store.

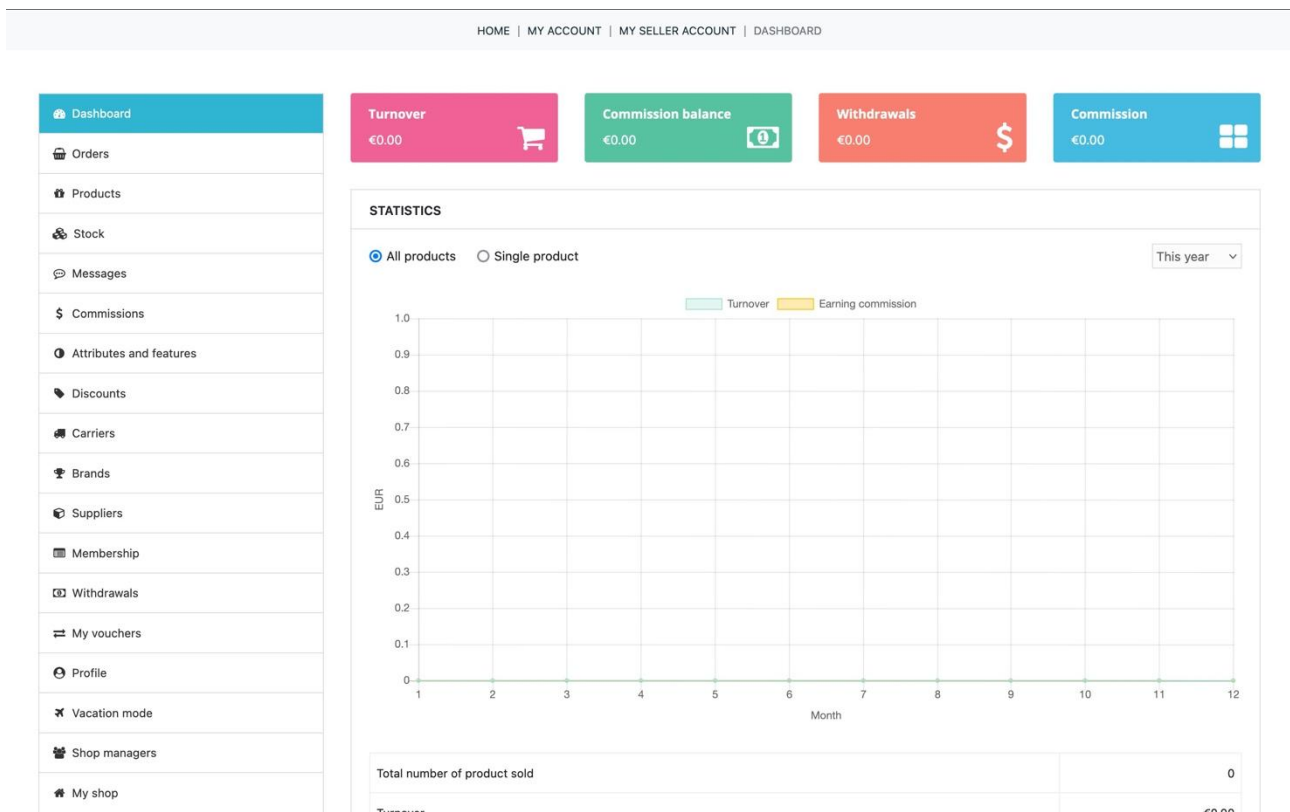
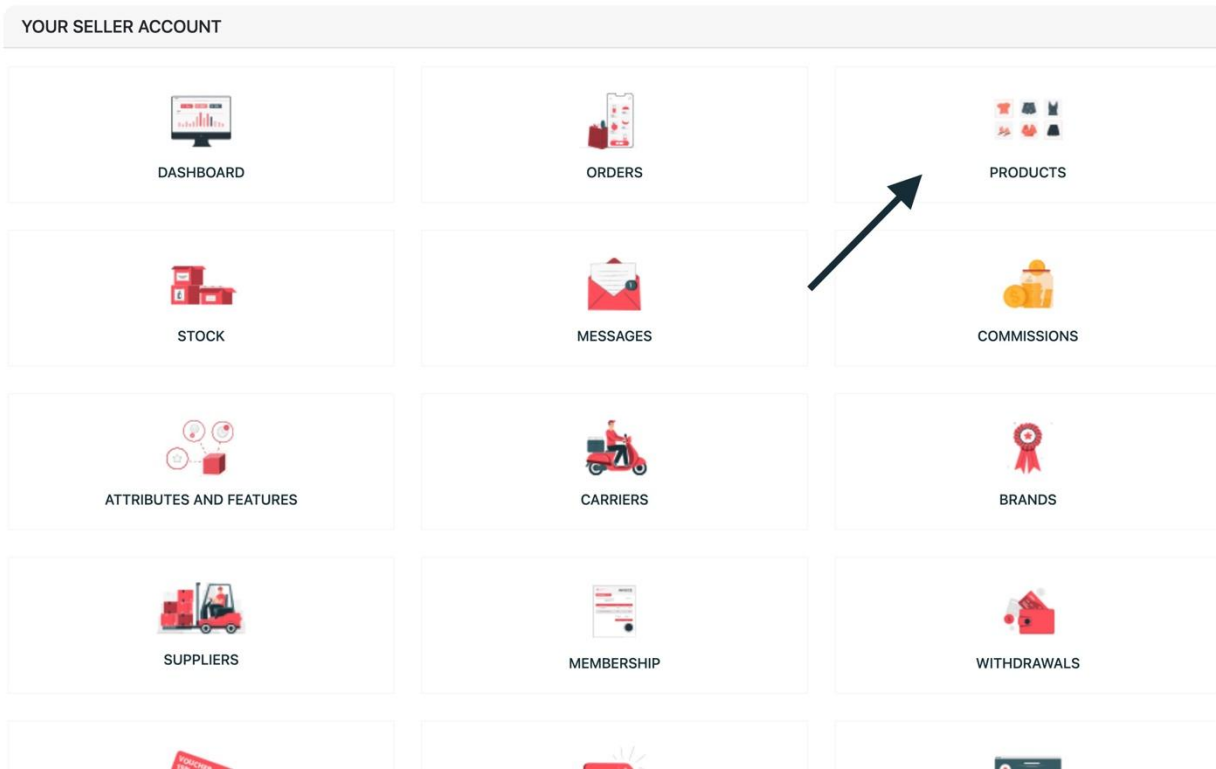


Figure 16: Seller statistics dashboard

3.4 Create or edit products.



Open the seller dashboard and click on the product card.
Create a new product front the button top right.

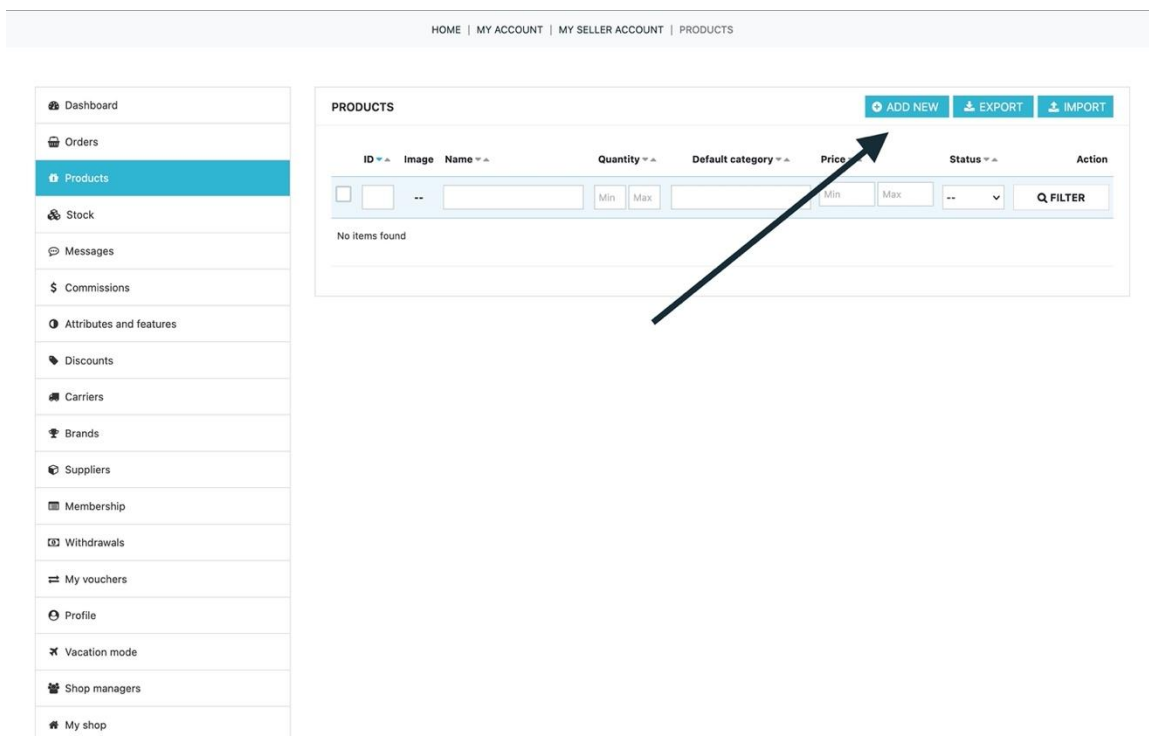


Figure 17: Add new product

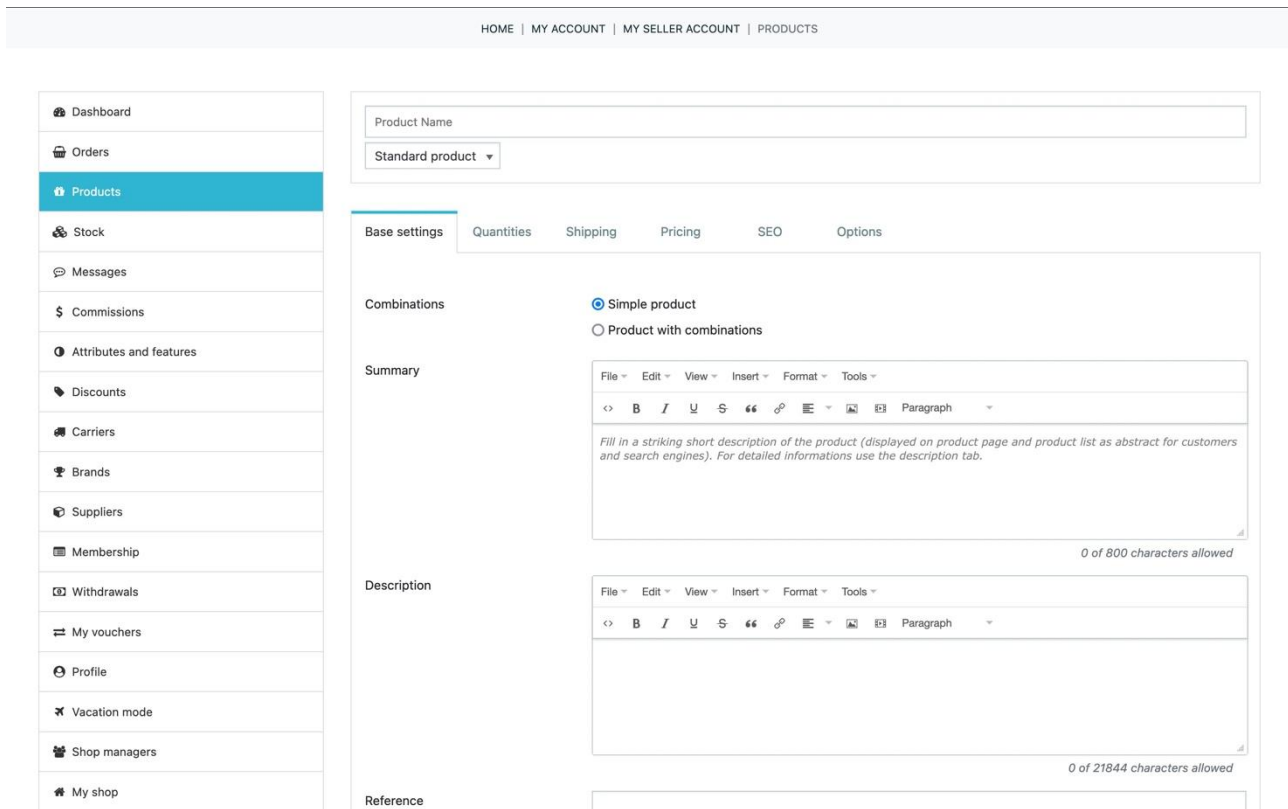


Figure 18: new product confirmation

Confirm the creation

4. CONCLUSIONS AND NEXT STEPS

WWSL is a foundational tool for Wasabi deployment, empowering instance owners to swiftly create customized instances. It offers flexibility, allowing tailored solutions, diverse business models, and decentralized data control. This adaptable framework fosters rapid deployment, ensuring a dynamic and responsive marketplace for a wide array of applications and services.

In addition, its open integration (fig.1) with the NFT-based royalty management framework for skill developers provided by ICCS and with the federation module by Atlantis enables the open and flexible deployment of Wasabi concept in the use cases already provided by the end users of the consortium and, in the future by the open call winners and third parties.

At M9, T3.1 has made available the WWSL to the partners of the project, first of all the from to the end users who will exploit it to implement their pilots. This job has been carried out in the six months from M4 to M9.

This activity has been successfully accomplished thanks to the coordination with WP1, to create a common understanding of what is the WWSL , and what are its instances and their functions.

WP1 collected the questions by the partners and end users, which have been discussed in the 5 workshops dedicated to alignment between WP1 and WP3, found an answer and created the basis to drive the end users to understand the functions and the limitations of the WWSL, necessary to define and implement their pilots.

The WWLS demonstrator has been delivered on time no deviations are foresees.

4.1 Lessons learnt and next steps

In hindsight, it would have been advisable to start WP1 and WP3 at the same time, to create a routine of common meetings to synchronize the reciprocal activities: in fact, the most significant problem faced by WP3 has been to drive the partners of WP1 towards the common understanding of the WWLS. This temporal gap has been recovered and this goal has been achieved: now WP1 and WP3 are aligned and coordinated.

The next step of T3.1 from now to its end at M15 will be to provide software deployment mechanism to create assistance solution instances in a public/private cloud edge device (D3.3) and the first implementation and demonstration of the federation (D3.4).

In addition, its will provide the support for the integration with the NFT-based royalty management framework for skill developers provided by ICCS and with the federation module by Atlantis. The support to the activities of T3.3 - Contract and tort law for AI-based digital assistance solution and T3.4 - Learning and training concept will be also carried out.

Thanks to the alignment reached with WP1, these next steps are reasonably achievable in the six months remaining to the end of T3.1 and will pave the way for a successful exploitation of WWLS for pilot deployments.