

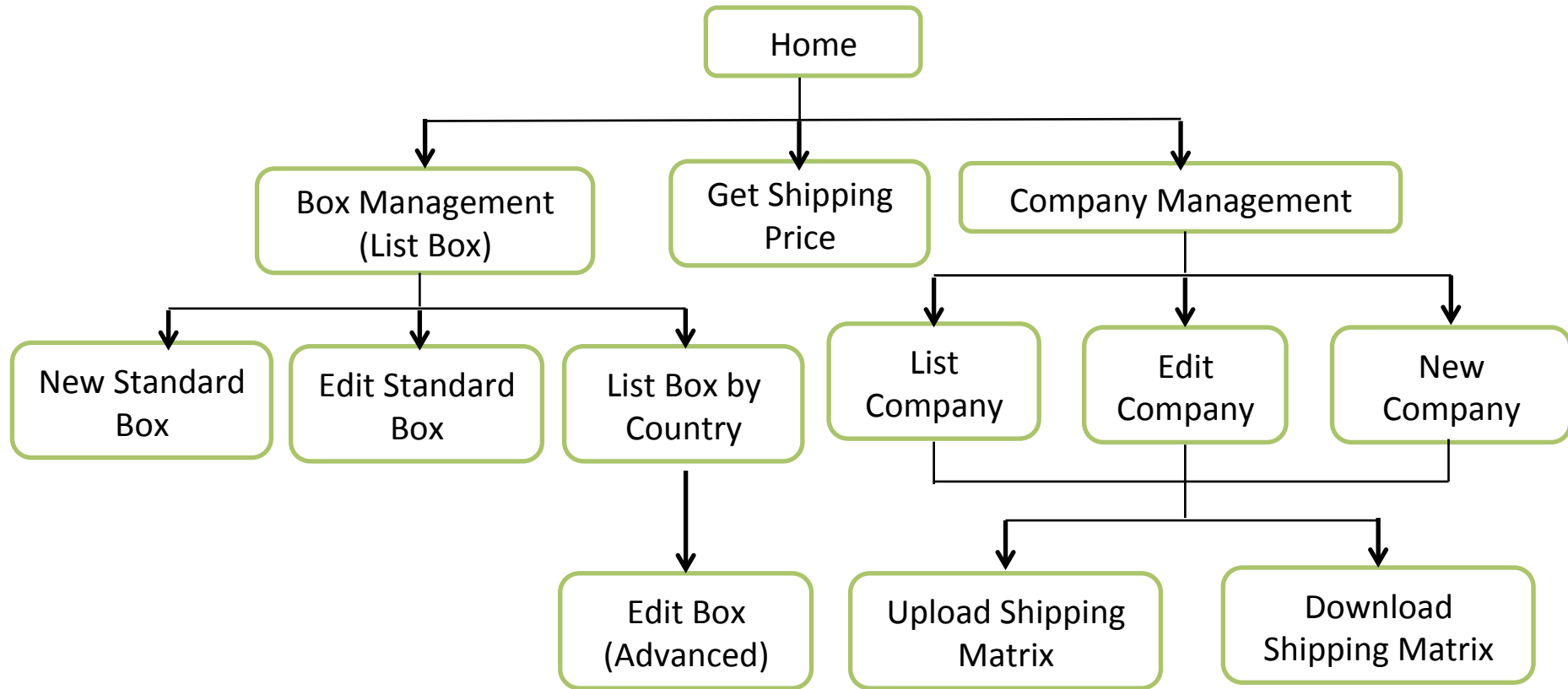
Shipping Matrix Calculator Interaction Design

Pamono is an e-commerce website selling furniture and decor from offline boutiques in Europe. Internally, for different product, because of different product sizes, product weight, shipping box used, shipping origin and destination, shipping companies with the lowest shipping price was chose to ship the product. This Shipping Matrix Calculator is meant to be used to automatize the process of shipping price calculation and the choice of best shipping company for different products.

For shipping price calculation the most important information is the price of box and the shipping price of different shipping company. Because the user want to manage all the information online, here comes the most complicated part of interaction design: company management and box management.

In this document, we show how the box information and company information are managed in this system.

Site Map



Terms

- Box type: Different types of box.
 - Example: Box 1, Box 2, ...
- Company: Company here means shipping company.
- Country of origin: The country where the product is shipped from.
- Country of destination: The country where the product is shipped to.
- Box price: The price of the box itself.
- Shipping price: The price to ship the product from country of origin to country of destination.
- Shipping matrix: Shipping matrix is a 2 dimensional table that records the shipping price for each box type and country of destination pair. A company may have different shipping matrix for different country of origin. But for one country of origin, one company only has one shipping matrix for that origin.

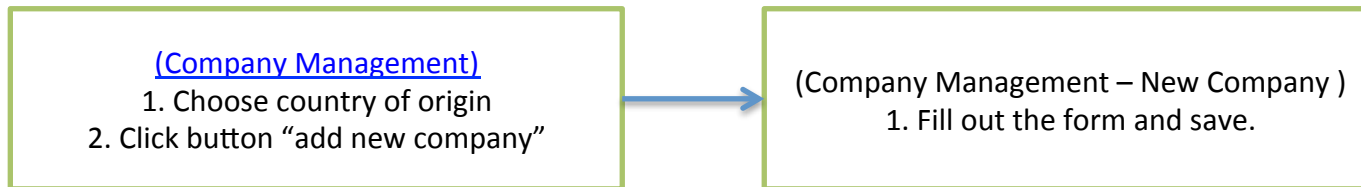
– Example:

	Country 1	Country 2	Coutry 3	Country 4
Box 1	21. 51	21. 51	21. 51	12. 76
Box 2	21. 51	21. 51	21. 51	12. 76
Box 3	21. 51	21. 51	21. 51	12. 76

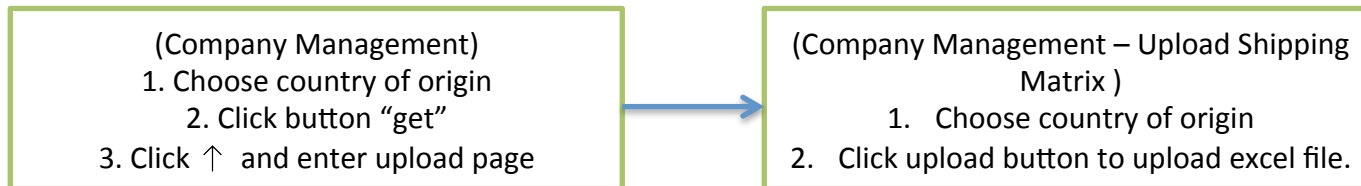
Scenarios

The user start the tool the first time. There is no data in the tool yet. The user has a product excel file at hand, and would like to let the system calculate the cheapest shipping price and the shipping company to choose for each product in the file. The following are the steps the user should go through.

1. Add new company

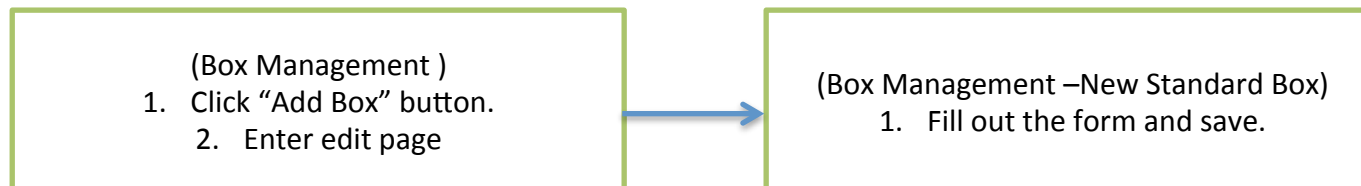


2. Upload shipping martix



In this way, add and configure all the companies.

3. Add new box type



Scenarios (cont.)

4. Configure box state and price under different country of origin.

(Box Management)

1. Choose country of origin in section **Boxes by Country.**
2. Click button “get”
3. Enter page “Box by Country”



(Box Management – Box by Country)

1. Click the row of the listed box type that you want to edit.
2. Enter page “Edit Box (Advanced)”
3. Fill out the form and save.

In this way, add and configure all the boxes.

5. Get shipping price of products.

(Get Shipping Price)

1. Click button “Upload”, select and upload the product excel with required format.

LOGO

Products Orders Shipping▼ Pictures Users Settings Logout

Company Management

Shipment from:

Germany

The Netherlands

Japan

France

Inactive

Get

Add new company

Add "Inactive" option here so that users can get all existing companies at once.

Manager

→ Company Management

→ Box Management

→ Get Shipping Price

Company Management

LOGO

Products Orders **Shipping**▼ Pictures Users Settings Logout

Company Management

Shipment from:




Germany

Get

Add new company

Select the country and list all shipping companies that are active under this country of origin.

Ground Shipping

Company name	Relationship	Contact Person	Contact Email	Shipping Matrix	Other Document
UPS				↑ ↓	
Hermes Private				↑ ↓	
Hermes Business				↑ ↓	

Click to enter pages for upload or download of shipping matrix of the corresponding company.

Delete the country **from the selected country of origin**, or to say the country will be disabled from the selected country of origin.

Manager

➔ **Company Management**

➔ Box Management

➔ Get Shipping Price

Company Management
– List Company (by
origin)

LOGO

Products Orders **Shipping**▼ Pictures Users Settings Logout

Company Management

Shipment from:




Inactive

Get

Add new company

When “Inactive” is selected, all countries existing in the system will be displayed below.

Ground Shipping

Company name	Relationship	Contact Person	Contact Email	Shipping Matrix	Other Document
UPS				↑ ↓	
Hermes Private				↑ ↓	
Hermes Business				↑ ↓	

Click to enter pages for upload or download of shipping matrix of the corresponding company.

Delete the country **totally** from the system.

Manager

➔ **Company Management**

➔ Box Management

➔ Get Shipping Price

Company Management
– List Company (all)

LOGO

Manager

- ➔ Company Management
- ➔ Box Management
- ➔ Get Shipping Price

Edit Company

Service type	<input type="text"/>	
Company name	<input type="text"/>	
Relationship	<input type="text"/>	
Contact person	<input type="text"/>	
Contact email	<input type="text"/>	
Country of destination	<input type="checkbox"/> Country name	<input type="checkbox"/> Country name
	<input type="checkbox"/> Country name	<input type="checkbox"/> Country name
Country of origin	<input type="checkbox"/> Country name	<input type="checkbox"/> Country name
	<input type="checkbox"/> Country name	<input type="checkbox"/> Country name
Shipping matrix	<input type="button" value="Download"/>	<input type="button" value="Upload"/>
Surcharges	<input type="text"/>	
	<input type="button" value="Save"/>	<input type="button" value="Cancel"/>
	<input type="button" value="Delete"/>	

LOGO

Products Orders **Shipping▼** Pictures Users Settings Logout

Manager

- ➔ **Company Management**
- ➔ Box Management
- ➔ Get Shipping Price

New Company

Service type

Company name

Relationship

Contact person

Contact email

Country of destination

<input type="checkbox"/>	Country name	<input type="checkbox"/>	Country name
<input type="checkbox"/>	Country name	<input type="checkbox"/>	Country name

Country of origin

<input type="checkbox"/>	Country name	<input type="checkbox"/>	Country name
<input type="checkbox"/>	Country name	<input type="checkbox"/>	Country name

Shipping matrix

Download	Upload
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Surcharges

Save

Cancel

Company Management
– New Company

LOGO

Products Orders **Shipping ▼** Pictures Users Settings Logout

Manager

- ➔ **Company Management**
- ➔ Box Management
- ➔ Get Shipping Price

Upload Shipping Matrix

Shipment from

Germany

Shipment from

Upload File

Because each company may be active in several country of origin and thus need to upload several different shipping matrix for those origins, a separate page is designed for this purpose.

Company Management
– Upload Shipping
Matrix

LOGO

Products Orders **Shipping ▼** Pictures Users Settings Logout

Manager

- ➔ **Company Management**
- ➔ Box Management
- ➔ Get Shipping Price

Download Shipping Matrix

Shipment from

Germany

Shipment from

Download File

Because each company may be active in several country of origin and thus need to download several different shipping matrix of those origins, a separate page is designed for this purpose.

Company Management
– Download Shipping
Matrix




LOGO

Products Orders **Shipping** ▼ Pictures Users Settings Logout

Standard Boxes

Add Box

Download

Box name	Size1	Size2	Size3	
Box 1	20.00	20.00	20.00	
Box 2	20.00	20.00	20.00	
Box 3	20.00	20.00	20.00	

Edit button. Click and go to "Edit Standard Box" Page.

Boxes by Country

Select a country

Germany

Get

Each box type (e.g., box1, box2) has different prices under different shipping origins. So I divide box information into two part: basic info and country-based info so that the operations of adding, listing and deleting boxes are more clearly defined. This is different from the old design where all the info is mixed together.

Add button. Click and go to "New Standard Box" Page.

Show country of origin in the combo box. Select one and get a list of box information under this country of origin.

Box Management – List Box

Add box

Shipments from:

Austria

Shipping company:

Hermes business

Show

Download

Box name	Company	Website	Price	Size1	Size2	Size3	
Box 1	DHL	dhl.com	0.356	29.50	17.00	12.50	 

old design

LOGO

Products Orders **Shipping ▼** Pictures Users Settings Logout

Manager

- ➔ Company Management
- ➔ **Box Management**
- ➔ Get Shipping Price

Edit Standard Box

Box name

Size1

Size2

Size3

Save

Cancel

Delete from the system

Click to delete this box type totally from the system.

Box Management –
Edit/New Standard Box

LOGO

Products Orders **Shipping▼** Pictures Users Settings Logout

[Country Name]

Box Name	Size1	Size2	Size3	Active	Distributor	Website	Box Price
Box 1				Yes			
Box 2				No			
Box 3				No			

Display all available box types in the system in this table. Click each row to enter edit page to disable or enable the box type for the selected country of origin.

Shows whether or not the box type is active in the current country or origin.

Manager

- ➔ Company Management
- ➔ **Box Management**
- ➔ Get Shipping Price

Company Management
– Box by Country

LOGO

Products Orders **Shipping ▼** Pictures Users Settings Logout

Manager

- ➔ Company Management
- ➔ **Box Management**
- ➔ Get Shipping Price

Edit Box – Shipments from [Country Name]

Box name

Name

Size1

1.00

Size2

2.00

Size3

3.00

Delete from the system

Shipments from

Germany

Distributor

Website

Contact person

Contact email

Price per total boxes

Amount

Price per box

User has already created the basic box type and those information will be shown here and is not editable.

Price per box will be automatically calculated. = "Price per total boxes" / "Amount"

Box Management – Edit Box (Advanced)

Volume will be automatically calculated. = size1 * size2 * size3.

Volume

Valid in shipping companies

☐ Company name

☐ Company name

Here the shipping companies that are active in the selected country of origin will be displayed here.

Because for each box type, they have different prices under different shipping origins

Delete from country

Save and back

Save and add more region

Cancel

Two save buttons are designed here so as to reduce clicks for users who may want to add several boxes for one time.

Box Management – Edit Box (Advanced) cont.

LOGO

Products Orders **Shipping ▼** Pictures Users Settings Logout

Get Shipping Price

Upload product information and get caculated shipping price

Uplaod

After uploading all necessary box information and company information, the user can upload a product excel file and the system will process it at backend and return a result file with calculated shipping price for each product.

Get Shipping Price