



Business Report

ShipMates

Shared shipping platform

The Team:

- **Karoly Toth**
- **Lili Lu**
- **Uddalak Bhaduri**
- **Yuan Wo**
- **Yousef AbdElKhalek**

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The Need

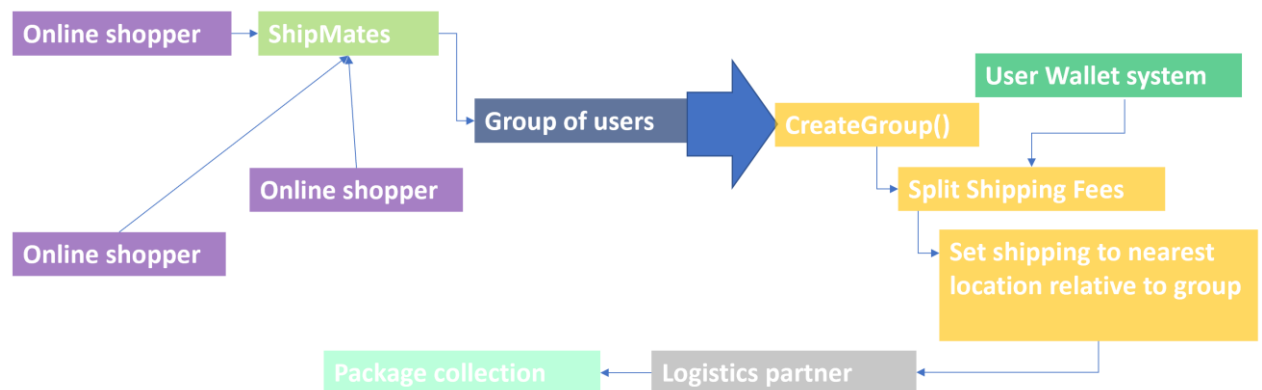
Talking about the need that is addressed by our platform, have you ever went online to make a small purchase, for example buying socks from H&M, lets say the socks cost 70Kr then you go to checkout only to find out that there is an extra shipping fee of 75kr to the initial price, making your total to be 145kr, from there you have three options, either to cancel your purchase because the shipping fee is too much, or start adding more stuff to your cart to get some discount that the store offers on the shipping, or maybe you just decide to bite the bullet and make the purchase. With whatever of the previous options you go with, we can agree that it's not optimum for you and probably has decreased the joy of your online shopping experience.

The approach to address the need

From the previous description, it can be understood that the need we target is that of decreasing the shipping fees for the users of our platform, but still in a sustainable way both for us and our users.

We at ShipMates offers a platform which connects users shopping online enabling them to split the shipping fees for their packages. The foundation of the platform is based on the concept of manpower.

How the Model Works



The model consists of the Online shoppers which are the users of our platform, then the actual platform in a website/application form, accompanying that is our logistics partners and partner stores. Online shoppers login to the ShipMates service, where each user has a wallet system which they can load with money, the idea of the wallet system is that it abstracts the payment procedure for the user once the user is in a group and ready to split shipping fees with other users. Talking about groups, groups are created based on an algorithm that treats users as nodes based on their location and connects them together in a group based on shortest distance calculation. After the user enters a group all the carts are joined together in a single cart and the shipping fees are split among the users and it is then time to checkout, the group of users is treated as a single user facing the platform making a purchase, but in reality it's a group of people making the purchase, the next part of the model is the logistics partner, someone like PostNord or Instabox, these will be handling the shipping of the package which works as a normal shipping operation only this time the shipping location is set based on the average nearest location of all the members of the created group. This takes us to the last phase or component of the model, which is the package collection, something to think about for the package collection was that to avoid problems we need all the members of the group to be present on package collection, this is the contribution of the user here where the platform offers a chat option with the group or polls to set the pick-up time of the package, upon agreement each user receives a pincode which they will then use to cooperatively receive their package from the pickup location.

Value proposition

By enabling shared shipping, we add a layer of accessibility and comfort to the online shopping experience, facilitating users who would like to decrease the shipping fees on their purchases to be able to do that with ease. We deliver our value via an online platform with future plans to develop it as a plugin that can be available via any online store enabling an easier delivery

of the value proposition to our target customer. The value is delivered by joining people purchasing from the store according to their location into a group where the shipping fees can then be split, our value is delivered here where shipMates enables the joining of multiple users' shopping carts into one, thus treating the users as one user in the face of the store, we can argue that we also decrease the carbon footprint of the shipping industry by joining multiple shipping orders into one, also optimizing logistics costs for the shipping industry.

Quality of Service

This section will talk about what is quality of service to shipMates and how we maintain it.

- Hosting an user-friendly interface platform to start with, the platform is designed to be easy to use enabling multiple target segments to use it which is one of the main goals of the service.
- Abstracting the fees splitting and payment procedure for the users, some users are worried about how the platform works concerning splitting fees with strangers but this is entirely abstracted to the user, the user gets their own wallet system on their account which they can load up with money that will be used for their purchases, this makes using the service a worry free one to use.
- Ensuring via our logistics partners that the packages arrive to the user in perfect condition as expected.
- The platform provides 24/7 support ensuring a fluid user experience, we would have a FAQ concerning questions like how the platform works and how users can pick up their packages ..etc, while also having a ticket system for issues raised by our users.

Revenue

Sources:

1. <https://ecommercenews.eu/the-average-shipping-costs-in-europe/>
2. <https://discountsuiteforwp.com/tutorials/setup-dynamic-woocommerce-discountshipping-fees/>

This section aims to describe how we would receive revenue after our platform. The source of revenue would be based on three pillars.

1. Commission from every group purchase
2. Hosting ads on the platform
3. Premium membership options

The main source would be the first option, hence it is the mostly elaborated in this report. The

explanation with concrete numbers could be found under the provided example. The main idea behind it is, that by people combining their purchases, they are going to be represented by their respective group, which is a single identity, not multiple as they were previously. Hence, they are going to pay a combined shipping fee, which is equivalent to one shipping fee. If they are able to exceed a limit that constitutes free shipping, then they are entitled to pay only for our service. Otherwise, they have to pay a small portion for shipping fee and for the service respectfully. As it is described in the example, it still provides great value for them and nevertheless, for us as well.

The other two pillars are not elaborated yet, as they are easy to add once the main platform is functioning, hence they are not top priority during this stage.

Example – Based on “Average shipping costs in Europe article” [3]:

- Select Hungary from the respective source to correspond with our survey
- Average shipping fee: 5.25 €
- Average number of people in a group: 5
- Accumulated total shipping value in this example: 26.25 €
- As a group, they immediately just have to pay one shipping fee, not 5
- If they receive free shipping
 - Value saved for them: 26.25 €
 - Ask for 20% of their saved shipping fee each
 - ✦ 1.05 € total for the service
 - ✦ They save 4.2€
 - ✦ Total revenue 5.25 €
- If they receive a partial reduction,
 - E.g., they have to pay 3€ in total
 - ✦ They pay 0.6 € for the shipping
 - Value saved for them 23.25 €
 - Ask for 15% of their saved shipping fee
 - ✦ 0.7875 € total for the service
 - ✦ They totally pay $0.6 + 0.7875 = 1.3875$ €
 - ✦ They save 3.8625 €
 - ✦ Total revenue 3 €
- If they don't receive free shipping,
 - They have to pay 5.25 € in total
 - They pay 1.05 € for the shipping
 - Value saved for them 21 €
 - Ask 10% of their saved shipping fee each

- ✦ 0.525 € total for the service
- ✦ They totally pay $1.05 + 0.525 = 1.575$ €
- ✦ They save 3.675 €
- ✦ Total revenue 2.625 €

- Shipping fees are standard prices normally, not dynamic

If they receive free shipping, we win 20% of their saved money.

If they receive partial reduction in this example, we win 12.9% of their saved money.

If they do not receive free shipping, we receive 12.5% of their saved money.

Cost and Financing

Sources:

1. <https://mlsdev.com/blog/app-development-cost>
2. <https://www.itproportal.com/features/how-much-does-it-cost-to-develop-a-webapplication/>
3. <https://www.volusion.com/blog/website-maintenance-costs/>

Based on the article included [2], the main initial cost would be the development of web-based platform. This approach seems more feasible for the starting as the development costs are less and we are able to launch it in a more rapid manner. To concretise this, the approximated funds are around 30.000 \$ and 4 months of development. This derives from the specific segment of the article where the costs are elaborated for a medium complexity web-based platform, as it is going to provide the following functionality:

1. User profile section
2. Personal wallet
3. API for specific stores
4. Group allocation

However, it is not large complexity, as it does not require complex features and extensive use of databases.

Other elements of the cost mainly constituted by marketing costs and maintaining the platform once launched. For maintenance, for our site, as described in the article [3], would be around 150 \$ on a monthly basis. For the marketing, we have not created large calculation,

as we have not yet realised a concrete marketing campaign for our product.

Elements of cost:

- Marketing costs
- Develop the platform
- Maintain the platform o Protection of data o Protection of money
- Check App Development Cost article
- Check Web Development Cost article

Promotion

Sources

1. <https://www.sendcloud.com/shopping-cart-abandonment-rate-shipping/>

Our marketing strategy is under development, however, we have a vague picture of it at this stage as well. As it is classical now, we are thinking in online advertisement, especially considering our service. The most natural way of our marketing channel would be our partner stores. As with the decrease of shipping fee, the cart abandonment for the respective stores would decrease, according to this article [1], hence it is natural for the stores to promote our group feature. Other sources of marketing could be social media advertisements, or finding promoters, as it is a successful marketing strategy recently.

Further development of this section would include the application of refined marketing strategy. The elements mentioned here are different tools for developing proper strategy and campaign. This includes our idea for the first marketing campaign, which would revolve around sustainability. It would be natural, as by using our platform, the usage of the trucks would be further optimised, hence their carbon emission would be reduced.

Marketing elements:

- Check SOSTAC principles
- 3M resource principle
- Theme for first marketing campaign: sustainability

Survey analysis

Basic idea & Purpose

The starting point of our project is the postage of online shopping that is not very convenient in daily life, and based on this problem, we propose to build a platform to share the shipping fee. The brief target segment is people who use the Internet to shop. In order to further confirm the feasibility of our ideas and the accuracy of the establishment of the business model, we designed a series of questionnaires to provide certain data support for our project.

Issuance Situation

The total number of surveys we collected was 153. The data sample was not large enough, but it could also reflect people's true wishes to a certain extent.

Question Design & Result Analysis

What kind of items do you buy online?

The first question of our survey is to confirm the main items that are most likely to be purchased online, which helps us to recommend similar types of items when designing the platform. Here, Figure.1 shows the results. We can find that gadgets, clothes, shoes, food and books occupy the main composition, which respectively accounted for 64.1, 62.7, 62.7, 59.5, 58.2, and other kinds of items have also been listed. Here we can get the trend of the online shopping items, and the items recommended on the homepage of our platform will be the core items obtained from our survey.



Figure. Online shopping items

How many times do you buy such items online in a month?

The second and the third questions are designed to confirm the frequency of online shopping by the interviewees and the inquiry into whether the fee is expensive or not. The setting of these two questions is to find out whether the starting point of our project is reasonable and practical.

The second question, through the results, we can find that the number of people who do not shop frequently in all options only accounted for 4.2%, so we can be sure that our platform has a large number of potential users.

Do you think the shipping fee is expensive to some extent?

The third question is to ask whether the freight is expensive to a certain extent. 39.9% of people chose yes, and 52.9% of people chose to look at it based on different cases. This data result also indirectly proves that postage does bring inconvenience to people within a certain range, so we can snoop out that our idea is that there is a huge market, and reasonable design of business models can get profits.

Under what kind of cases do you think the shipping fee is expensive?

In order to be able to confirm which specific situations people feel that shipping costs are expensive, we designed a derivative problem, and finally found that "High shipping costs for cheaper items" is the main reason, accounting for 73% of the number of people who chose "expensive shipping costs based on different cases", and "No free shipping despite buying a lot of items" also occupies 37%. Therefore, we can find that the above two problems are the main reasons for the feeling that freight is expensive. Among these two reasons, 54% chose

the first reason only, 35.8% chose both, and only 9.9% chose the second reason. From this, we can conclude that out of these two main reasons, the second reason may not necessarily make people feel unacceptable. That is to say, when we spend high shipping fees to buy cheap items, at this time, it will be unacceptable for many people to still not be able to reduce or exempt shipping costs after buying a lot. If the expensive shipping is not offered to cheap items, then the number of items purchased will not become a case where people feel that the shipping is expensive. Therefore, it can be concluded that for most people who shop online, buying cheap goods with high shipping costs is actually the fundamental reason people feel that shipping is expensive. The second reason is just a supplement. Figure.2 shows the result.

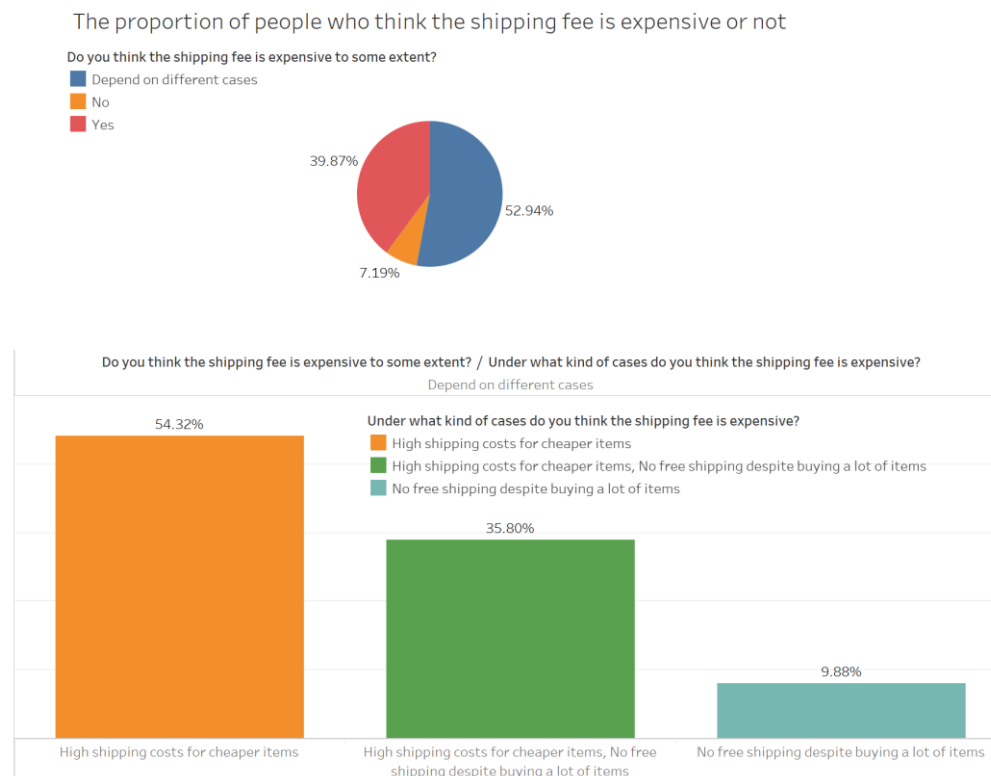


Figure. Whether shipping fee is expensive or not

The next questions are designed to confirm the shopping habits of target users and their willingness to use our platform.

Do you often add more items to your cart to get free shipping?

First of all, we found that 60.6% of people would tend to purchase a large number of items to get a shipping fee reduction. This data actually shows the buying habits of online shoppers, that is, they are willing to make a certain degree of over-consumption for shipping fee reduction or exemption. It also shows that there is a risk of buying some unnecessary items or purchasing more than needed items in order to reduce shipping costs. According to the results of this problem, it is not difficult to find that shipping fee has a greater influence in people's online consumption, and people tend to choose the option of reducing shipping fee during the shopping process. The platform we provide just meets the needs of most target customers, while also helping them rationalize their consumption structure.

How many times do you buy such items online in a month?

At the same time, in Figure.3 we are surprised to find that among those who choose to add more items to get shipping fee reduction or not, the number of online purchases in a month for 1-4 times accounted the most. For people who choose yes, we can define them as the target customers, and their online shopping frequency which is 1-4 times a month or even more implies that our platform can maintain the ability of sustainable development and stability, since the people who have the tendency to use our platform shop online regularly and very often, so we can guarantee that our platform will not have risk of instability in revenue and business model due to fluctuations in the number of target customers.

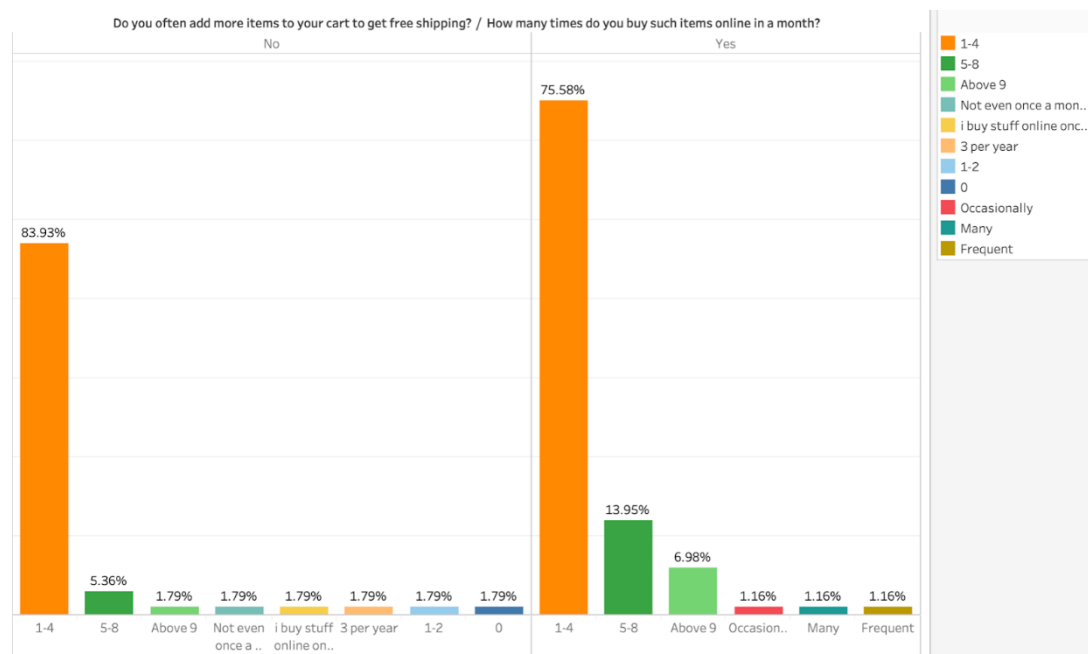


Figure. Figures to estimate monthly active users

Are you willing to share the shipping process with strangers in order to reduce the shipping fee?

Since our platform is designed to allow people who have purchased similar products to share the freight, it is very important to be able to accept sharing with strangers. According to the results, although 39.4% of people are unwilling, the overall audience is still willing to share with strangers. This also shows that the method of our platform design can be accepted by most target users, and the feasibility of platform implementation is very high.

If yes, how far the strangers live is suitable for you to share the shipping fee with them.

At the same time, we also consider that after sharing the shipping fee, there are certain problems with the item extraction. Distance is a very important factor, because if the location when you pick up the item is too far away from your place of residence, even if you can reduce the shipping cost, people may not choose to use our platform, because online shopping itself is to facilitate people to reduce the distance away from home to buy the product. Through the

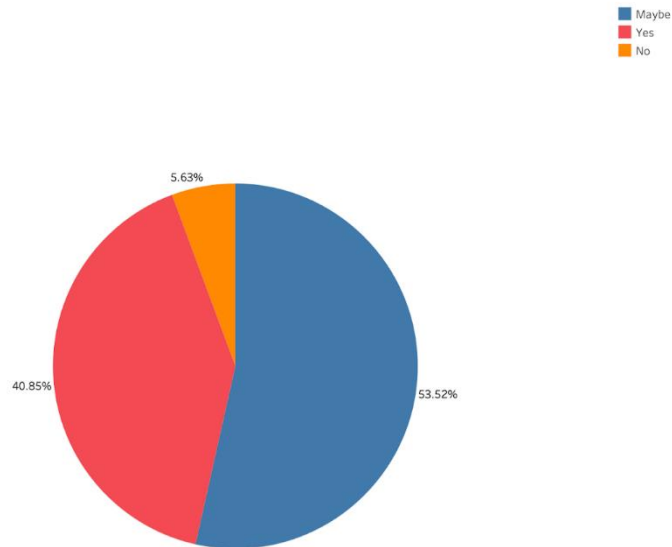


Figure. Willingness

At the same time, we also set up selective answer questions about occupation and country. These two questions can show the diversity of our questionnaire and help us understand the views of different cultures and different occupations on this idea, and also help us further refine the characteristics of target users.

Conclusion

In summary, our survey proves that our ideas have high feasibility, sufficient market potential and stable user targets, and also help us detail the functional design of the platform and the formulation of target users. The survey analysis is very beneficial to the advancement of follow-up projects.

Target segment

When it comes to target segment, we concluded it from the survey. First and foremost, we focus on people who shop online regularly before we did the survey because our project aims to help people who shop online to share the shipping fee. Furthermore, we want to get a detailed user portrait of our services so that we interviewed people through our survey. After analysis, more details are found and validated. We have a strong belief that our targeted customers are people who think the shipping fees is expensive, who want to add more items to the cart to get free shipping fee and who are willing to share shipping fee with strangers. The reason why we think these are our targeted customers is that our services facilitate them to solve their pain points. For example, our services help them to save money through sharing

the shipping fee. We also help them to avoid buying some unnecessary things because there is no need for a large proportion of customers to add items to cart to get free shipping fee.

Overall, we believe that people who are shop online frequently, who think shipping fee is expensive, who want to add more items to the cart to get free shipping fee and who are willing to share shipping fee with strangers are our target segment. And our services will be fulfil their needs.

Applying the Rabbit Model

The rabbit model is a model derived from the book “Stop! Nobody Move: Transformation beyond digital”. The main concept is based on a historical example and has two elements, namely the **Australia** and the **rabbit**. In this context, Australia was a country with a well-established ecosystem. However, when rabbits appeared in the country, they started to disrupt it completely. Eventually, they accustomed to live together with the rabbit, but the whole ecosystem had changed.

In the world of entrepreneurship, Australia is the current system of the economy, it could be applied to any industry, while the rabbit is a disruptive force, mostly a startup, which questions the status quo, and tries to get its respectful slice of the economic cake, so to say. We believe applying this model to our project would give us useful insights and could be the base for any estimations of the future.

Applying the model in our context:

- Australia -> Shipping Industry
- Rabbit -> Concept of shared shipping

It is trivial to derive these roles if we have a quick glance into our revenue calculation. When a customer buys something online, they normally pay a shipping fee. It is unknown where exactly this money goes to, probably the spoils are split between the shipping company and the respective store with a significantly larger portion to the shipping company. Even with our most basic calculations, applying this concept would reduce that fee by 50-80%, which is a tremendous amount. This is our basis for all the upcoming implications.

Effects of the rabbit entering Australia, disruption:

- Making enemies with the shipping companies
-> natural, as they would perceive, that their trucks are still full, but their revenue decreased heavily
- Making stores as our allies
-> comes natural as well, as we would potentially bring more customers to them. As researches suggest, the main reason behind cart abandonment is the shipping fee, by large. Hence, decreasing this by a large extent should bring more customers

As the roles are clear, it is crucial to conceptualize a strategy to deal with the disruption's opposing forces. The upcoming strategies could be applicable:

- As it was discussed, stores are potential allies we could rely on as we are able to provide them value by decreasing their cart abandonment. However, it is an important note that shipping companies and online stores are depending on each other, and neither of them is able to survive without the other. That means, that stores as our allies are in a good negotiating position, hence defend our position, but also until an extent which does not threaten the store's position as well, when they could also turn on us
- Contract with shipping companies, offering value as a stable source of income added to their normal revenue to compensate slightly for their losses. This is simply a method to decrease the natural opposition with us, probably would not make it vanish. Moreover, this requires that we are still able to break even, as we would share a portion of our revenue. Applying this strategy would require us to solidify our position. At this stage, we are able to conceptualize proper expansion plans in order to cope with these challenges. One, for instance, would be to develop the platform as a plugin instead of hosting our own store

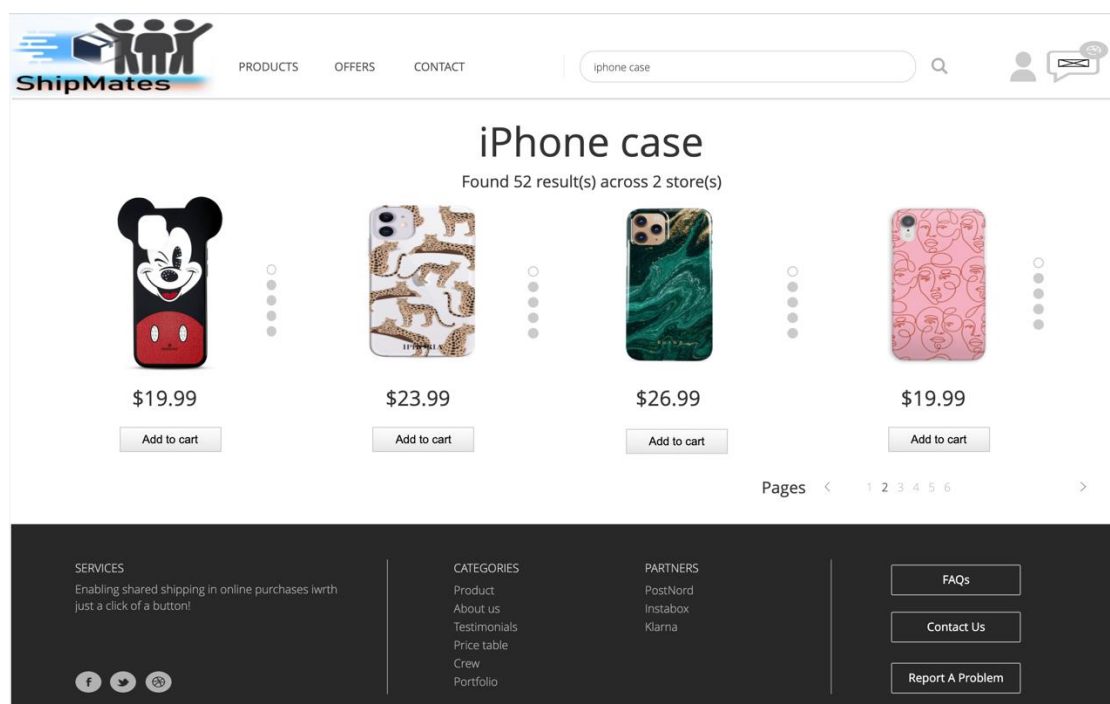
Also, it is wise to predict outcomes, which could derive from our disruption, which could affect our position as well:

- Economic effects on the entire industry would derive from the shipping companies when they perceive that their trucks are full but their revenue has decreased. This could lead to two responses from them
 - Making their transportation system more efficient, as it is the traditional way to decrease costs
 - Raising shipping prices to cover their losses
 - This could instill a chain reaction, as this would potentially affect online stores as well
 - Online stores could start to raise their prices
 - Overall, the economic cake would not shrink, simply we would have a slice out of it
 - In the long run, customers could end up paying the same amount as they pay today, because of the raised prices
- Another aspect to be considered, especially from the side of the shipping companies, that our model works on creating groups with the nearest location to each other, meaning that the shipping/pickup location would be one location close to the entire group instead of having an "n" number of locations for each of the customers.

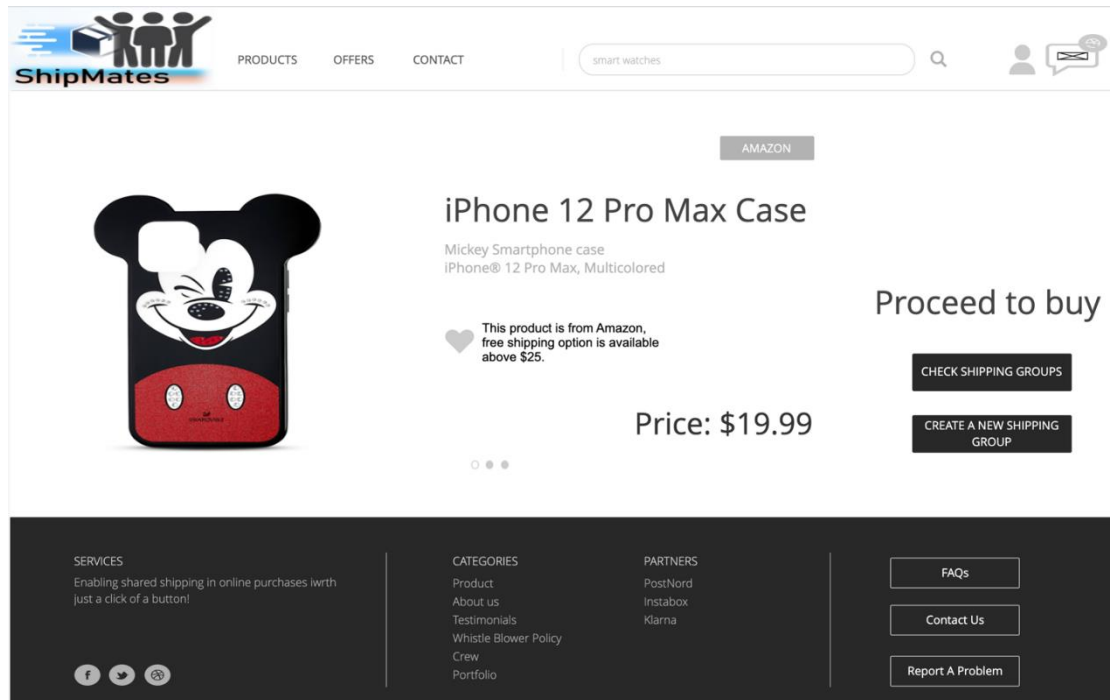
- This optimizes the shipping routes for the companies thus decreasing their logistics costs
- This could be the future of last-mile delivery issues, which require a large sum of money and also decreases sustainability
- This could be a positive effect of our presence for the shipping companies, it should be noted when the potential negotiations would occur

Proof of Concept Demonstration

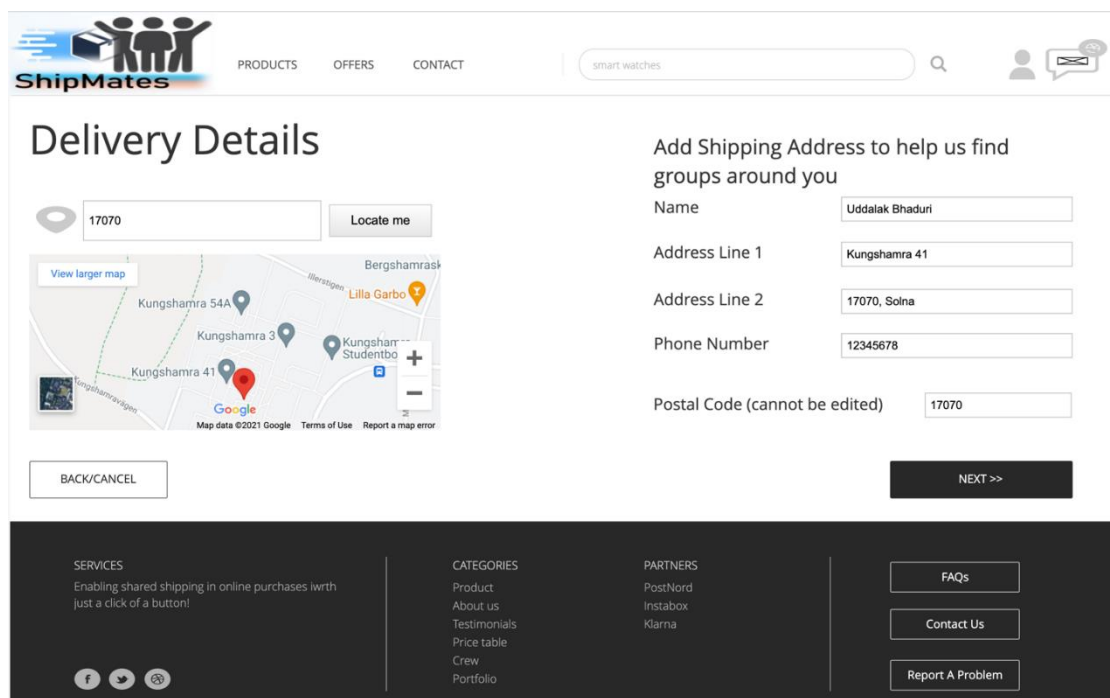
The website is still in the prototype stage and showcases our product only as a proof of concept. The website has been built using HTML, CSS and Javascript. We have used JustInMind Mockup template (<https://www.justinmind.com/>) for the POC. The codebase is available open source on GitHub. Our platform is very easy to use with a user-friendly UI. Anyone who shops online using Amazon, eBay, H&M, etc. will find Shipmates very easy to use because we have designed our platform in such a way that it caters to all their needs.



The initial landing or the home page is the inventory. The product that we wish to buy will appear in this page. For instance, if I want to buy an iPhone case, I will search for an “iPhone case” and it will show all iPhone cases across all different online shopping websites like (Amazon, Ebay, H&M, etc) as the result.



After this step, we add the specific product of our choice into the cart. Then, in the next screen it will show the price of the product and what is the normal shipping fee you need to pay to buy this product. For instance, if the aforementioned “iPhone case” is \$19.99, and Amazon has a \$25 threshold, for a free shipping then this page will show all such information.



After these two products pages, comes the User details page where you (as an user) need to add your details (mainly your address). This step is important as ShipMates would use your address data to find a shared shipping group around you (using GPS latitude and longitude

coordinates of the area) and return a shipping group nearest to the area you live. This group will be such that this serves as a common location for all the members in the group. We also have an interactive Google Map API that helps you find your exact location and pinpoint it. After completing this step, you will see all the Shipping groups around your location who are interested to split the shipping cost collaboratively.

ShipMates PRODUCTS OFFERS CONTACT smart watches

Shipping Groups

| Name | Head Count | Total Items | Shipping Fee in USD | Ratings |
|-----------------|------------|-------------|---------------------|---------|
| Kungshamra D... | 6 | 8 | 2.99 | 4.3 |
| Lappkärsberg... | 22 | 31 | 0.87 | 4.9 |

To enter the "Kungshamra Dorm" group, you need to complete a verification process using BankID.

Personnummer 19700101-1234

BankID

BACK/CANCEL JOIN SELECTED GROUP


SERVICES
Enabling shared shipping in online purchases is with just a click of a button!



CATEGORIES
Product
About us
Testimonials
Price table
Crew
Portfolio

PARTNERS
PostNord
Instabox
Klarna

FAQs
Contact Us
Report A Problem

You need to select the group that you like to join and provide your personnummer and verify yourself using BankID. We have this step because Shipmates wants to establish a sense of trust among all the group members during the delivery process. User authentication is an important process to track down the delivery system or to fix/report an issue if the delivery package is not in the right condition. We also want to ensure that the user who buys the product online is the one to collect it during delivery for a seamless experience.





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Checkout

To enter the "Kungshamra Dorm" group, you need to complete the payment process.

Shipping Cost: \$5.99
To Pay: \$0.99

FIRST NAME

CARD NUMBER

LAST NAME

NAME ON CARD

EMAIL

CARD TYPE

ADDRESS

COUNTRY

VALID THROUGH

CVC CODE

SERVICES

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BUTTON

FAQs

After verifying yourself with BankID, you need to checkout or pay the reduced shipping charge through Shipmates. In this page, you'll see your original shipping fee that you had to pay if you didn't use Shipmates and what is the new charge you need to pay after using Shipmates thus, highlighting the difference between the two. You can pay by Card, Swish, PayPal, Klarna, or Venmo etc. We have several (popular) payment gateways to cater to various user bases across the globe.


[PRODUCTS](#)
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Welcome to "Kungshamra Dorm"

| Username | Item | Price in USD |
|----------|-------------------|--------------|
| Uddalak | iPhone 11 Case | 17 |
| Károly | iPhone Lightni... | 25 |
| Yousef | Analogue Watch | 18.99 |
| Lili | Logitech Head... | 135 |
| Yuan | Fujitsu Mouse | 29.99 |

Delivery Details

Order Date

2021-04-28

Delivery Date

2021-05-05

Delivery Company


Instabox

Delivery Point

ICA Nära Bergshamra




Delivery Status

Dispatched from Warehouse

[View larger map](#)


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FAQs

Contact Us

Report A Problem

The final page is the group dashboard which appears after you have successfully paid the reduced shipping fee. The presence of this dashboard confirms that you have successfully

joined the Shared Shipping group. This page is exactly like a Delivery company's parcel tracking page where you could see the expected date of delivery, the status of the package, the collection point of your package and all other necessary logistic details. In this page, you could also see all the members in the group and what items are they buying and how much is per person paying for the item along with the shipping cost. If you want you could also chat with the group members and collaborate with them to split the shipping cost for a future purchase that you make online using ShipMates platform. Finally, if you have any issues with the group or would like to escalate a complaint for the delivery process – you could press the button "Report A Problem" and lodge a complaint ticket with ShipMates. Also, if you have questions regarding the logistics, you could also contact the Delivery Agent (PostNord, Instabox, etc.) through this dashboard. Since, we have partnered with the delivery agent companies, we have a special helpline channel for ShipMates.

Technical Work for the Future



Instead of having a dedicated website where you need to sign up and use our platform, we thought of implementing a plugin that would be present directly in the online shipping company website and you need to press a button to find a shipping group. This will save a lot of time in order to add the user's address details and completing the payment process separately for the shipping. However, for having such a plugin – we need to partner with the major online ecommerce giants for integrating this feature onto their platform as well. Hence, this could be a major future work for product development!