USABILITY INSPECTION REPORT

HCI
Fall 2017

TEAM

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EXECUTIVE SUMMARY

1 We, as a team decided to review the FedEx Website. FedEx is a large company and helps out providing courier service to people around the world. The purpose of picking this platform is to evaluate the usability regarding the user experience it provides to its users. This report starts of with an introduction which is mandatory to give an insight of the organization, the goals of organization as well as for their website and the overall purpose of the usability assessments conducted. This report then provides insight on the methods that were used for usability evaluations: Cognitive walkthrough, Think Aloud and Heuristic Evaluations. An insight of each methodology is introduced as well as how we implemented each method for the evaluation purpose.

2 The report integrates the results that were obtained from each evaluation method. We provide a detailed understanding of each method we assessed and the highlights of the areas that are related to usability aspects and what are the effects related to each one of them. The results consist of the outcome that was obtained based on the user experience aspect of each service provided on the website. It accumulates the positive outcome, the areas that has opportunities for improvement and the recommendations for respective product features identified during the process of evaluation. To provide a better insight of every aspect, screenshots and images of the aimed aspect with detailed description are also incorporated as well in results.

3 The conclusion consists of the overall impact of the usability of the website based on the experience of us as a team and our participants that took part in our evaluation process to evaluate some of the key tasks as well as the overall usability of the website. The conclusion also includes the overall recommendations that are proposed for each problem space identified during the evaluation phase and what are the limitations to each one of the evaluations that are conducted. In conclusion, we have also emphasized on additional evaluations that are instructive and can also serve the purpose of usability assessment.

4 We have included the appendix so to provides additional material to provide insight of our evaluations and to support our assessments. It includes some of the details that are left out purposely from the report to keep the report focused and only incorporates the main aspects to take into consideration.

INTRODUCTION

FedEx Corporation, founded in 1917 by Frederick W. Smith, is a well-known courier service provider around the world. It's headquarters is located in Memphis. Tennessee and has daily volume of more than 13 millions shipments each business day It has around 657 aircrafts, more than 375 airports,160,000 motorized vehicles as well as air and ocean freight forwarding services serving worldwide. FedEx services are available in more than 220 countries and territories around the world.

FedEx's *goal* is to provide customers and businesses worldwide with a brand portfolio of transportation, e-commerce, and business services. It provides superior financial returns for its shareholders by providing high value added logistics, transportation and related business services through focused operating companies. It focuses on providing its customers with products and services that consistently meet their needs and expectations.

The target users for the *FedEX* **website** is everyone that uses courier service, be it individuals or companies and businesses. FedEx aim to assist people out in the world in every way, whether it is an small document, sensitive items, large shipments or a dangerous goods. It tries to stay true to its

"*Purple* **Promise**" which states "*I will Make every Fedex experience outstanding*".

The **purpose** of the website is based on this promise. The purpose of our usability assessment is to guarantee easily accessible dynamic shipping-related services directly from website to the user, and to satisfy customer needs and give them good experiences with the services.

METHODS

To test the usability of FedEx website, our team used three evaluation methods which are cognitive walkthrough, think aloud, and heuristic analysis to evaluate the usability of the website. We chose two analytic techniques which are the cognitive walkthrough and the heuristic evaluation because they need to be performed only by experts in Human Computer Interaction to observe and analyze user actions and intentions. In addition, we chose one usability testing which is the think aloud test because we wanted the users to be involved in the evaluation process.

Cognitive Walkthrough

We chose four representative tasks (Schedule a Pickup, Track a Shipment, Create a Shipment, Get Rates & Transit Times) that we believed they are the most needed or reachable service by customers. After selecting the tasks by the team members, we corresponded them into description of action sequences. (For detailed steps of each tasks, see page 4&5)

Think Aloud Test

We conducted three interviews with three participants for the think aloud test session. The participants were female between the age of 19 to 24 years old. All the participants are a big fan of online shopping; however, none of them were familiar with package shipment service or with the FedEx website. The interviews were conducted sequentially on Sep 20, Sep 22, and Sep 23, and each interview took 30 to 60 munities. The participants were asked to explain the home page. Then, we signed them to do two main tasks. (For detailed task1&2, see Page 6)

Heuristic Evaluation

We went through six main steps to complete the heuristic evaluation:

1. Completing the Usability Aspect Reports (UAR) individually by each team member.
2. Conducting a team meeting to discuss, and walk through all the UARs.
3. Distinguishing and filtering the repeated UAR. (Each team members would write down their name, HE number in the relationship similar column if there is repeated UAR.
4. Selecting and aggregation the most common and stand out UARs.
5. Rating the aggregated UARs individually by all team members.
6. Conducting a second team meeting to decide upon the team severity rating and solutions for each problem introduced into the final UARs.
(For detailed UARs, see Appendix 4)

METHODS Cognitive Walkthrough

1. Schedule a pickup
Step 1. Locate the "Quick Access" section on the homepage;
Step 2. Click "Schedule and Manage Pickups" button in the "Quick Access" section;
Step 3. A User ID Login page shows, login with your User ID and press "continue" button;
or
Sign up your User ID, fill out your personal
information, then login, go back to step 2 to finish the task again;
Step 4. A User Account Login page shows, input 9-digit account number, then press "continue" button;
or
Sign up your User account, fill out your credit card information (ID and account are not the same), then go back to step 2 to finish the task again;
Step 5. Fill out Pickup Address;
Step 6. Select Package Type for pick-up schedule, then fill out package information in its bumping blanks;
i. Schedule a FedEx Express Pickup (option 1) - fill out package information;
ii. Schedule a FedEx Ground Pickup (option 2) - fill out package information;
iii. Schedule a FedEx Express Freight Pickup (option 3) - fill out package information;
Step 7. Select "Package Type" for pick-up schedule;
Step 8. Complete pick-up schedule and click "Schedule pickup" button to confirm.

2. Track a Shipment
Step 1. Locate the "Track a shipment" section on the homepage
Step 2. Enter your tracking number (one per line)
Step 3. View your tracking details and save the results for further reference
Step 4. Request notification for shipment status
 i. Provide email address and select option/options for notification, then submit. (Receive detailed information)
Step 5. Obtain proof of delivery for the delivery evidence
 i. Select one proof of delivery option (view/print, email, fax), then submit (Provide details for fax or email)
 ii. Proof of Delivery received successfully. (via view/print, email or Fax)

3. Create Shipment
Step 1. Sign in
Step 2. Go to create shipment
Step 3. Enter addresses information (From / To addresses)
Step 4. Shipment Details
i.   Choose FedEx one rate
ii.   Select package types
iii. Select delivery date, time and rate
Step 5. Enter payment information
Step 6. Conformation

METHODS   Cognitive Walkthrough

4. Get rates & Transit times
Step 1. Sign in.
Step 2. Mouse over the shipping tab and and click "Get rates & Transit times".
Step 3. Fill in "Ship from/To" form and other information, then click to fill in more details.
Step 4. Fill in details of the shipment (account, weight, quality, package type) then submit.
Step 5. Get the result of different rates corresponding to different transit times and services. (Can select a time and order shipment directly.)

Finally, each team member walked through the tasks, and identified issues during the analysis and recommended changes for it.

METHODS Think Aloud Test

Task 1:

You bought a T-shirt (1.3 lbs.) from Amazon but you are not
satisfied with it, so you want to return it. However, you're busy these days and you're not
at home except next Wednesday (September 27th) from 13:00-14:00. Could you please
use FedEx website to schedule this Pickup?
Your address: already filled.
Your name: Abc
Your phone number: 123-456-7890

Task 1:

Your mother's birthday is coming next week and you've already prepared a gift (2.2 lbs.).
But she lives in Chicago and you need to create a shipment to send the gift to her. Could
you please do it by using FedEx website?
Your address: already filled.
Your mother's address: 320 N. Morgan, Suite 600, Chicago, IL 60607, United States
Phone: 312-840-4100

RESULTS

☺ Positive Aspect

The website contains well-developed functions to cover all the needs that user might encounter. Hence, offers a pleasant experience. And it consists of common and specific features to enable users to select remotely for the services and do their intended task. Except all of the services, the website also contain extra information which helps users to fix problems or understand their situations clearly. Some parts of website utilize metaphor pictures which are self-explanatory for users.

☹ Issues

1. Hard to Understand the Terminology

Website contains terminology that users don't understand which is not user friendly. Users don't know what does the words FedEx Express, FedEx Ground or FedEx freight means and makes them confused about which is the right service. It would take them some time to figure out or the problem won't be solved at all which brings them low-quality services.

Recommended changes
Use common words which is self-explanatory for users to understand.

2. Hard to Recall the Weight

In "schedule a pickup" page, users need to fill out the package information. It is necessary, but users have to fill out the weights of the package which they might not know at first. They may probably not recall the weights of the package, they have to go back to the package tracking page to find the exact weight.

Recommended changes
Automatically show the weights of the package if users have a tracking number first. Or skip this weights part and leave it for the delivery man to fill out.

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2. Package Information

☐ Schedule a FedEx Express Pickup

☐ Schedule a FedEx Ground Pickup

☐ Schedule a FedEx Express Freight Pickup

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2. Package Information

☑ Schedule a FedEx Express Pickup

You can schedule FedEx Express pickups for either the same day or the next day. All shipments must be ready when the courier arrives.

(!) **Alert:** FedEx Express same-day pickup service currently is not available at your location. The first available pickup date has been indicated.

* Total no. of packages [   ]

* Total weight [   ] [lbs ◇]

RESULTS

☹ **Issues**

3. Unrelated Information in the Help Page

The help page contains lots of information that users don't have patient to read them all, The content contains several parts of different questions, sometime users only have question for only one part, the other parts are meaningless, and because of the font-size is too small, most users have hard time reading the information.

Recommended changes
Make the font-size bigger and simplify the information contained in the help page. Containing only one section would simplify the help information part and easy for users to locate. It means only show the answer the users want to know in this section instead of

4. Inefficiency for Users to Choose in the Drop-down Menu

The homepage drop-down menu contain a lot options with different types of services, users cannot locate the service they want. Some of the options are rarely used for common users, some of the options are overloaded. And again the font-size is small.

Recommended changes
Simplify the main page by listing common services on the main page (ex: create a shipment, tracking number, manage shipment.) And creating a special catalog like expedited/extra hadling, air/ocian freight forwarding for some choices that are not been commonly used. What's more, it would be better to get rid of the "learn" part from the main page, because users now these days don't

Package Information

You can schedule pickups for FedEx Express, FedEx Ground, and FedEx Ex select each pickup service needed and enter the required package informatic

Note: To set up FedEx Express or FedEx Ground regular pickup service, ple

Schedule a FedEx Express Pickup
- A Courier Pickup Charge applies when you request a FedEx Express fedex.com and FedEx Customer Service. See Shipping Fees.

Schedule a FedEx Ground Pickup
- FedEx Ground provides pickup service upon request, for an additio customers we assess the Weekly Pickup Fee to the account number For customers that do not have a regular scheduled pickup we asse pickup charges do not apply if you drop off your package at a FedEx charges do not apply to FedEx Print Return Label, FedEx E-Mail Re Program pickups. See Shipping Fees.
- For regular scheduled pickup customers, FedEx provides pickup ser shipping location of the FedEx Ground account number for an additic address per week. See Shipping Fees.

Schedule a FedEx Express Freight Pickup
- Select this option if your package weighs more than 150 pounds.
  - You can schedule a freight pickup for the current day only.
- For details, contact **Freight Customer Service** at **1.800.332.0807**.
  - Packages must be ready two (2) hours prior to your compan
  - The latest time that FedEx can accept a package for pickup the destination of your package.
- While labels can be generated for future day shipments and space r process, a freight pickup can only be scheduled for the actual shipp
- Domestic shipments weighing less than 151 lbs. can be sent by eith

| Package, Envelope, or Express Freight	Freight Shipments	Expedited/Extra-care Handling	Air/Ocean Freight Forwarding
FedEx Express or FedEx Ground	FedEx Freight	FedEx Custom Critical	FedEx Trade Networks
Access FedEx Administration 🔒	Obtain Proof of Delivery 🔒	View Shipping Documents 🔒	Run Reports 🔒
Manage Email Preferences 🔒	Obtain Bill of Lading 🔒	Review Open Invoices 🔒	FedEx Global Distribution System 🔒
View/Pay Bills 🔒	Request Reports 🔒	Reset Password 🔒	Global Order Logistics 🔒
Run Reports 🔒	Review Open Invoices 🔒	Change Password 🔒	Go to My Account 🔒
Submit Claims	Request Billing Adjustments 🔒	Add Locations 🔒	WorldTariff 🔒
Access Address Book	Claims Resolution		Reference 🔒
Go to FedEx Global Trade Manager	Access Address Book		My Products 🔒
Access FedEx Return Manager®			
FedEx Critical Inventory Logistics®			

RESULTS

☹ **Issues**

5. Unstructured Home-page

The home-page of the website is consists of multi-function, but does not arrange every section in a very structural way. Each part was distributed unevenly on the screen, and left too much grey area in the space which leaves users unpleasant impression for this website.

Recommended changes
Arrange every section in an aesthetic way by highlighting important/commonly used area and narrow down some less-important area. (ex: amplify the Quick Access area which is a commonly- used section for users). The interface could leave some space for empty, but should be appears aesthetically.
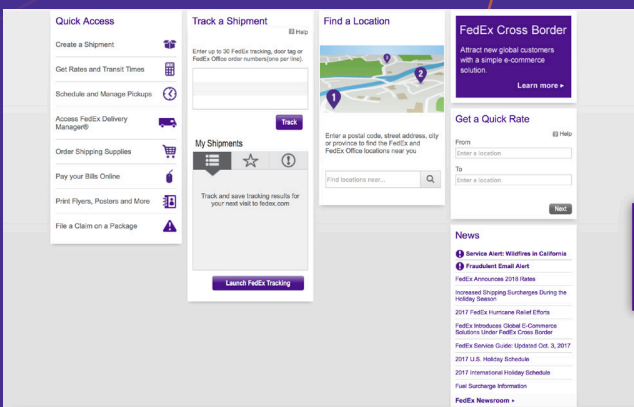
6. Multiple accounts creation

Once the user has signed up, the website would sign in automatically every time user enter the website. But when user want to create shipment for something really important which needs extra help. The website would need user to create another account even they've already had one, which is inconvenient for users.

Recommended changes
The solution to this would be to have only one account for all services. If there are special requirements for some particular type of service, then the user needs to provide the information from the same account linked to additional information requirement page rather than having to create another new account.because users now these days don't have too much patience to learn things. Make the font-size bigger.
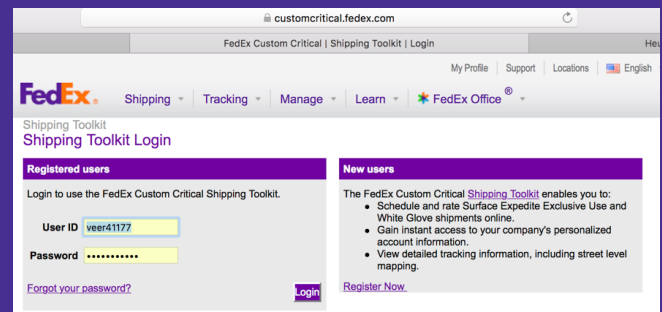
RESULTS

🙁 Opportunities for Improvement

1. Inconsistency of Title Color

The subtitles on the track webpage do not include hybrid-link to them. Although they colored the subtitle with purple (the theme color of text with hybrid link), the subtitle on the track webpage do not include this feature. This problem will make user confuse for a bit of time.

Improvement
Standardize the style of hybrid links that attached to title or subtitle. Or differentiate link color from tile and sub-title.

2. Hard to Find Way Back to Homepage

Most users click the wrong selection then wanted to go back to the homepage, which they can't. Though click the fedex could go back to homepage, but this is not common in other website.

Improvement
Adding a "Home" tab on every page, so it would be easier and self-explanatory for users to see.

RESULTS

☹ **Opportunities for Improvement**

3. Inefficient Learning Center

The website includes a whole section of learning center for services such as: Shipping, Packing, small business solutions, FedEx Compatibles, FedEx freight & services etc. Under each section there are various other in-depth learning sections included for each small to large scale service. Under each
section there are various other in-depth learning sections included for each small to large scale service. Users might don't spend time on this "learn" bar. They would rather click the help button if they encounter a problem.

Improvement
It would be better to distribute "learn" center into every part, so use could learn specific part when they have problem instead of looking for the answers through a large page of learn information.

Starting Point	Shipping 101	Knowledge Sharing	Service Guide
All the Basics	Learn How to:	Resources and Information	The FedEx Service Guide is your resource for FedEx service information and shipping basics.
Open an Account	Pack	Small Business Solutions	**View now** ▸
New Customer Center	Ship	E-Newsletter	
Sign Up for Email Offers	Return Shipments	Newsroom	
U.S. Shipping Services	Go Mobile	FedEx Blog	
International Shipping	Track	Developer Resource Center	
FedEx Freight Services	Pay Bills	FedEx Compatible	
	File a Claim	Industry Specific Solutions	

❓ Have specific questions? Visit Customer Support.

CONCLUSIONS

Overall usability of the website and the recommendations for improvements –

The website provides great value of features to ensure that every functionality is available for the users to make their experience a pleasant one. The website consists of every feature, common or user specific to enable users to remotely select their services and be able to do their intended tasks. It consists of all the services from tracking a shipment, creating a shipment, scheduling pick- up to services such as extra care handling shipments, filing claims or even paying bills. With such amount of services and also the information that needs to be incorporated on the website regarding the services, the complexity of the website increases as well. The website menu bar consists of too many options for each category listed. The menu bar must consist of only the most common items in one category and the uncommon ones in another set of category. The small business services must also be moved into a different set of category so that the common people do not get confused with those options. Another problem that our participants faced during the evaluation phase was related to terminology used on the website. The user is not able to differentiate between the various FedEx Package Services (FedEx Freight, Ground, Express) to be able to choose the intended one. Hence the terminology must have short descriptions at bottom to help the users understand what each term means to provide the ease of choice.

The text size and information amount was another set of problems faced by our participants and our team. The text size on the website is too small for some of the users to read and understand, esp. for people with eyesight problems and hence be made large enough not to violate the aesthetics of the website as well. The text amount on other hand is more than a user is able to read with their busy schedules. The user doesn't find it pleasing when they access the help button and find excessive amount of information on there that they don't intendent to read. Hence, it is desirable to have only particular amount of information for each service. Also, to emphasize on the aesthetic, the gray space on homepage is left unutilized and does not provide a pleasant effect to users, making the sections that are already there of size that would fit in the structure or adding in other services on the homepage would be an useful step toward this problem. Another problem faced by the users is recalling the weight of the package. The user is asked to put in the weight of the package when intending to schedule a pickup which a user might or might not remember and has to go back to the tracking page with their tracking number to read the weight off from there and then come back to schedule pickup page and type in the weight of the courier item. It would be really helpful to users if the package weight is automatically filled in into the box then they won't have to shuffle in between pages which would save their time.

One of the other key issue was of multiple registration. The website requires multiple registrations from users based on the services they intend to use. One of our participant provided us with the feedback of how they felt it was an extra step they had to take and how it added on to complexity. The recommended step for this would be to have one account for all the services and have some security measures or primary keys that would be necessary when intending to use service that would have extra charges or information needed.

CONCLUSIONS

Limitations of Evaluations

Even though we could successfully conduct our evaluations, there are some limitation that needs to be considered as well. Cognitive Walkthrough provided a detailed examination of a particular task rather than an overview of the interface. The assessment was focused more on a particular task rather than being able to assess the overall usability of website.

In the evaluation method, "Think Aloud Test", the sample size of the participants was limited due to time constraint and hence the assessments are accordingly from respective sample size. The participants were provided with task scenarios and hence had only been able to access the requested aspects of the website.Heuristic evaluation provides a premade set of aspects to focus on for overall usability of the product and hence the results were based on those aspects only and no aspect on own was introduced or assessed. Another limitation of HE is that the evaluations are primarily based on the judgement of the evaluator and his/her level of expertise. Hence, these are some of the limitations that need to be considered for the website usability assessments.

Additional Informative Evaluations

We also conducted observations and interviews to understand the type of people who used the website as well as what services where they making use of. The main purpose of these was to gain an insight of what features are most useful and what features people use the least. With the evaluation methods i.e. Cognitive Walkthrough, Think Aloud Tests and Heuristic Evaluations we incorporated in our usability evaluation, there are some of other informative methods that could have been incorporated but because of time constraints could not have been included such as: Questionnaires (shared set of questions between the participants and the evaluators), logging actual use(finds highly used/unused features) and usability testing where the quantitative approaches could have been incorporated to record time taken to complete task or wrong clicks that are made on the page for each particular task. Hence, these are some, out of many evaluations methods out there, that could have provided a valuable assessments as well for the overall usability of the website.