

S.I.L.A.com Test



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Introduction

S.I.L.A.com provides an online presentation of Spear International Logistics Agency, their services offered and the benefits of doing business with them. S.I.L.A.com also serves as the entry point into an employee portal for account representatives to enter fsr (freight shipment request), create new client accounts, and update their login credentials.

The expectancy of a usability test is to determine, to what degree, does an interface facilitate a user's capacity to execute routine tasks. Usually the test is conducted with a group of potential users, in either a usability lab, remotely (using e-conference software and telephone connection), or on-site with transportable equipment. Once there the users are instructed to execute a sequence of routine tasks. Each session is logged and analyzed to detect all probable areas for improvements to the website.

The usability test for S.I.L.A.com was conducted remotely using a live version of S.I.L.A.com located at informatics.mercer.edu/~kimberlys/capstone/web/index.html on Mercer University's server. Each session was proctored using TeamViewer an e-conference software. The participant's facial expressions along with their verbal comments and their choice of navigations were all captured using the screen-share and camera feature on TeamViewer. The users overall satisfaction ratings, along with any questions and feedback, were all logged by the proctor for each session.

Executive Summary

The S.I.L.A.com project team led a remote usability test using TeamViewer software on December 1, 2014 and December 2, 2014. S.I.L.A is an international logistics agency that currently has accounts with large corporations to ship their manufactured and produce goods internationally. The objective of this test was to evaluate the usability of the web interface design, the flow of information, and the architectural structure of the information displayed on the site.

There were eight participants for the usability test; four participated on December 1st and four more on December 2nd. Usually, when completing a usability test it is ideal to have between eight and 10 participants to ensure the validity and stability of the findings. Both sessions lasted roughly an hour. Scenarios for the test changed over the testing days in accordance to S.I.L.A's recommendations.

Overall, the participants in the usability test stated that they found the website to be clear-cut and uncomplicated. Ninety percent of the participants stated that the website was very easy to navigate. 4 out of 8 participants have worked in the logistics sector and have navigated such websites for over 10 years.

The usability test detected a few inconsequential problems including:

- The nonexistence of a classification of topics on the services page.
- The lack of a fact sheet/brochure category section for the different types of freight transportation.
- The absence of a shipping and cargo regulations and rules section.
- The absence of a customer feedback section.

This document includes the feedback of the participants, the ratings of satisfaction, task completion, and the simplicity or complication of executing tasks, the time spent on each task, the errors that participants made and recommendations for improvements. In addition, the scenarios and questionnaires will be included in the Attachments' section of this document.

Methodology

Sessions

The test proctor e-mailed and recruited participants via LinkedIn.com from the Mercer University group followers. The test proctor contacted group followers via email telling them of the usability test procedures and invited their participation. The participants then responded with a time and date for their assistance with the usability test.

Individually the sessions lasted roughly one hour. Throughout each session the test proctor explicated the test sessions and requested that all participants fill out a short background questionnaire (see Attachment A). Participants read the task scenarios and tried to execute each task.

Afterwards the proctor instructed the participants to rate the interface on a 5-point Likert Scale with measures ranging from "Strongly Disagree" to "Strongly Agree." Post-task scenarios where "subjective measures" are incorporated (see Attachment B):

- Ease of locating information on the homepage.
- Capability to keep track of their location in the website.
- Accuracy of guessing the part of the website that contained the information.

Afterwards the proctor instructed the participants to give an overall rating of the company's website using the 5-point Likert scale ("Strongly Disagree" to "Strongly Agree") for eight subjective measures including:

- Frequency of usage
- Challenging to keep record of position in website
- Understand ability - by what method would it be easy for most users to understand how to use the website
- Information simplification – how fast a participant could locate the information
- Appearance & feel appeal – "index.html" (homepage) content makes me want to explore the site further
- Website content – site's content would keep me coming back
- Website arrangement

In addition, the test proctor questioned the participant. Asking the following general website questions:

- Was there anything the participant enjoyed the most?
- Was there anything the participant disliked?

- Are there any suggestions for improvements?

See Attachment C for the subjective and general questionnaires.

Participants

The participants all attend Mercer University. Four out of eight participants are employed in the logistics sector for major logistic agencies here in Georgia. Altogether eight participants were scheduled to complete the usability test; four on December 1ST and four more on December 2nd, five male and three female.

Role in Logistics Sector

The participants chose their role in the Logistics Sector from a broad list of job roles in a logistics agency.

Role

Operations	Sales	IT	Accounting	Recruiter	* Other Organization
1	2	1	-	-	4

Evaluation Tasks/Scenarios

Usability test participants tried to execute the tasks listed below (see Attachment D for the comprehensive test scenarios and self-directed tasks :

- Locate the different shipment types' information.
- Locate the testimonials information.
- Locate the events information.
- Locate the container sizes information.
- Locate the company address information.
- Locate the achievements information.
- Locate the freight shipment request form.

Results

Task Completion Success Rate

Each participant executed Task 1 effectively (locate the shipment types). Three of the four (75%) completed Task 6 and Task 5 (locate the achievements), (locate the company address). Exactly half (50%) of participants were able to complete Task 4 (locate container size) and 25% were able to complete Task 2 and Task 3 (locate the testimonials), (locate events). None of the participants was able to execute Task 7, which required them to locate the freight shipment request form.

Task Completion Rates

Participant	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7
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1	✓	-	-	✓	✓	✓	-
2	✓	-	-	✓	✓	✓	-
3	✓	-	-	-	✓	✓	-
4	✓	✓	✓	-	-	-	-
5	✓	✓	✓	-	✓	✓	-
6	✓	-	-	✓	✓	✓	-
7	✓	-	-	✓	✓	✓	-
8	✓	-	-	-	-	-	-
Success	8	2	2	4	7	7	0
Completion Rates	100 %	25 %	25 %	50 %	75 %	75 %	0 %

✓ = December 1st Test Results

✓ = December 2nd Test Results

Task Ratings

Upon the completion of each task, the test proctor instructed the participants to rate the simplicity or complication of executing the task for three factors:

- It was effortless to locate this page from the homepage on the website.
- It was easy to keep track my location while executing each task.
- It was not difficult to guess where the location of the information requested for each task.

The 5-point Likert scale varied from one being “Strongly disagree” to five being “Strongly agree.” The “Agree” ratings stood for agree and the “Strongly agree” ratings were calculated and resulted in a mean agreement rating of >2.4 believed that as users the information requested was not difficult to locate and guess its whereabouts within the website.

Ease in Finding Information

All of the participants rated “Locate the different shipment types’ information,” as being the easiest task (mean agreement rating = 4.4). 75% of the participants agreed that “Locate the company address information,” and “Locate the achievements information,” were an easy task to execute, (mean agreement rating = 3.2). 50% of the participants agreed that “Locate the container sizes information,” was easy to locate on the website (mean agreement rating = 2.6). 25% thought it was easy to “Locate the testimonials information,” (mean agreement rating = 1.6). 25% of the participants also agreed that “Locate the events information” was an easy task to execute (mean agreement rating = 1.5).

Keeping Track of Location in Site

All of the participants rated “Locate the different shipment types’ information,” as being the easiest to keep track of their location in the website as they executed the task (mean agreement rating = 4.2). 75% of the participants agreed that “Locate

the company address information,” and “Locate the achievements information,” as being easy to keep track of their location in the website as they executed the task, (mean agreement rating = 3.5). 50% of the participants agreed, “Locate the container sizes information,” as being easy to keep track of their location in the website as they executed the task (mean agreement rating = 2.5). 25% of the participants rated “Locate the testimonials information,” as being easy to keep track of their location in the website as they executed the task (mean agreement rating = 1.8). 25% of the participants also agreed that “Locate the events information” as being easy to keep track of their location in the website as they executed the task (mean agreement rating = 1.2).

Predicting Information Section

All of the participants rated “Locate the different shipment types’ information,” as being the easiest to guess the location of the information on the website (mean agreement rating = 3.8). 75% of the participants agreed that “Locate the company address information,” and “Locate the achievements information,” as being the easiest to guess the location of the information on the website, (mean agreement rating = 3.8). 50% of the participants agreed, “Locate the container sizes information,” as being the easiest to guess the location of the information on the website (mean agreement rating = 2.2). 25% of the participants rated “Locate the testimonials information,” as being the easiest to guess the location of the information on the website (mean agreement rating = 1.2). 25% of the participants also agreed that “Locate the events information” as being the easiest to guess the location of the information on the website (mean agreement rating = 1.3).

Mean Task Ratings & Percent Agree

Task	Ease – Finding Info	Location in Site	Predict Section	Overall
1 – Locate the different shipment types	4.4 (100%)	3.8 (100%)	3.8 (100%)	4.0
2 – Locate the testimonials	1.5 (25%)	1.8 (25%)	1.2 (25%)	1.5
3 – Locate the events information	1.5 (25%)	1.2 (25%)	1.3 (25%)	1.3
4 – Locate the container sizes	2.6 (50%)	2.5 (50%)	2.2 (50%)	2.4
5 – Locate the company address	3.2 (75%)	3.5 (75%)	3.8 (75%)	3.5
6 – Locate the achievements	3.2 (75%)	3.5 (75%)	3.8 (75%)	3.5
7 – Locate the freight shipment request form.	0 (0%)	0 (0%)	0 (0%)	0

**Percent Agree (%) = Agree & Strongly Agree Responses combined*

Time on Task

Each participant held a stopwatch to the camera and pressed start when started a task and then they held the stopwatch to the camera and pressed stop when they have fully executed a task. The test proctors logged all of start, stop times, to calculate the time spent on each task. Some tasks were naturally more challenging to complete than others, which is reflected by the average time on task.

The task that took the longest to execute was Task 7 where the participants were instructed to "Locate the freight shipment request form," (mean = 430 seconds). However, the times of execution varied from 30 seconds to 530 seconds (more than 8 minutes) although majority of the times are less than 300 seconds (less than 5 minutes).

Time on Task

	P1	P2	P3	P4	P5	P6	P7	P8	Avg. TOT*
Task 1	78	70	65	65	85	100	63	96	77.75
Task 2	100	350	70	100	109	56	380	380	193.13
Task 3	100	465	465	350	200	100	150	150	247.5
Task 4	190	60	50	160	170	60	235	235	145
Task 5	100	125	30	70	80	45	115	115	85
Task 6	146	110	120	465	130	175	325	325	224.5
Task 7									
Avg. TOT	102	168.57	114.29	172.86	110.57	76.57	181.14	185.86	138.98

Errors

The test proctor captured the number of errors participants made while trying to complete the task scenarios.

Summary of Data

The table below displays a summary of the test data. Low completion rates, satisfaction ratings, high errors, and time on tasks are highlighted in red.

For example:

Summary of Completion, Errors, Time on Task, Mean Satisfaction

Task	Task Completion	Errors	Time on Task	Satisfaction *
1	8	2	77.75	4.0
2	2	6	193.13	1.5
3	2	6	247.50	1.3
4	4	4	145	2.4
5	6	3	85	3.5
6	6	14	224.5	3.5
7	0	8		

* Satisfaction = Mean combined rating across three post-task measures: ease of finding the information, ability to keep track of location in website, and the accuracy of predicting the location of the information on the website.

Overall Metrics

Overall Ratings

After task session completion, participants rated the site for eight overall measures. These measures include:

- Ease of use
- Frequency of use
- Difficulty of keeping track of where they were in the site
- How quickly most people would learn to use the site

- Getting information quickly
- Homepage's content facilities exploration
- Relevancy of site content
- Site organization

Post-Task Overall Questionnaire

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Rating	Percent Agree
Thought Website was easy to use		1	1	6		3.6	75%
Would use this website frequently			2	4	2	4.0	80%
It was difficult to keep track of where I was in the website while executing tasks	3	1		4		2.1	50%
Thought most people would learn to use website quickly			4	4		3.5	50%
Can get information quickly		4		4		3.0	50%
The homepage was inviting, and it made me want to see more of the website		1	5	1	1	3.6	20%
Site's content would keep me coming back			2	6		4.2	80%
Website is well organized			5		3	4.0	62%

*Percent Agree (%) = Agree & Strongly Agree Responses combined

4.6.2 Likes, Dislikes, Participant Recommendations

Upon completion of the tasks, participants provided feedback for what they liked most and least about the website, and recommendations for improving the website.

Liked Most

The following comments capture what the participants liked most:

“Good website design.”

“Loved the slider at the top of the webpage on the homescreen.”

“Colors followed a central theme.”

Liked Least

The following comments capture what the participants liked the least:

“Did not like the way each page was labelled on the menu bar, it was a little misleading.”

“Did not like the fact that the contact-us page did not work.”

Recommendations

Locate the customer feedback information (Task 7)

Task 7 required participant to locate the freight shipment request form.

Change	Justification	Severity
• Add a users/operations manual for the web portal	Participants across both tests rated the ease of locating the freight shipment request form 1 (out of 5).	High

Conclusion

Majority of the participants found that S.I.L.A.com was an innovative website. They enjoyed the design and layout of the website. There were a couple of issues with the schematics of the website, which will be corrected immediately. All in all the test went as expected. Moreover, its findings are valid and stable. The implementation of the recommendation along with other improvements will be completed to ensure a user-centric website that full-fill's its purpose.

Attachment A: Background

Please circle the best answer.

1. Have you ever worked in the Logistics sector before and if so please list the position below:

2. How often are you on the internet?
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. Yearly
 - e. Never

3. How would you rate your computer literacy, with 1 being "I know nothing about computers" and 5 being "I am a computer guru."
 - a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5

4. Have you ever taken an interface design course?
 - a. Yes
 - b. No

5. Do you have a job where you are constantly using the internet?
 - a. Yes
 - b. No

6. Do you attend Mercer University?
 - a. Yes
 - b. No

7. How often do you use an e-meeting or e-conference software to conduct meetings?
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. Yearly
 - e. Never

8. How often do you use skype?
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. Yearly
 - e. Never

Attachment B: Post-test questionnaire

Post-Task Overall Questionnaire

Please rate each questions from 1 to 5 with on being “Strongly Disagree” and 5 being “Strongly Agree.”

1. The website was easy to use.

a. 1

b. 2

c. 3

d. 4

e. 5

2. I would use this website frequently.

a. 1

b. 2

c. 3

d. 4

e. 5

3. It was difficult to keep track of where I was in the website while executing tasks.

a. 1

b. 2

c. 3

d. 4

- e. 5
4. People could easily learn how to use this website.
- a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
5. When completing a task I could locate and retrieve the information quickly.
- a. 1
 - b. 2
 - c. 3
 - d. 4
 - e. 5
6. The homepage was inviting, and it made me want to see more of the website.
- a. 1
 - b. 2
 - c. 3
 - d. 4

e. 5

7. The content on the website was informative.

a. 1

b. 2

c. 3

d. 4

e. 5

8. The website was well organized

a. 1

b. 2

c. 3

d. 4

e. 5

Attachment C: Subjective questionnaire

Please answer each question completely.

1. Was there anything the participant enjoyed the most?
2. Was there anything the participant disliked?
3. Are there any suggestions for improvements?

Attachment D: Task scenarios

Task Scenarios

Please complete each task to the best of your ability.

1. Locate the different shipment types' information.
2. Locate the testimonials information.
3. Locate the events information.
4. Locate the container sizes information.
5. Locate the company address information.
6. Locate the achievements information.
7. Locate the customer feedback information

Self-Directed Task

Goal-Based Scenario

Manufacturing Company

A local manufacturing company is looking to do business internationally. As a result, they are looking for a reputable logistics agency that will ship their goods to parts of Asia and Europe. The company is currently browsing for open-top containers for their irregular-shaped freight. At this time the company is not looking to place any orders just yet, instead they are comparing prices between different international logistics agencies, for container prices and for the flat-rate cost for cargo-ship transport:

- User will select containers from the drop-down menu. At the bottom of the page, the user will see a detailed listing of the types of containers and the price for each type of container.
- User will select services from the drop-down menu. In the middle of the page, the user will see a detailed listing of the types of transportation for freight shipment and the flat-rate cost for each service.

Site Admin

S.I.L.A hired a new employee in the sales department. The new employee needs to be registered by the site admin in order to login and complete F.S.R (Freight Shipment Request) for clients. Because the F.S.R is located, in the employee portal that is restricted to only employee of S.I.L.A who has a valid company email address and a password:

- Admin/User will select employee-login from the drop-down menu. The admin/user will then login into the employee portal; because the user is an admin/user then they will have the option to register the new employee with their first and last name their company email address and their temporary password that they will have to change once they login.

Employee

An employee of S.I.L.A has just received a call from a client that wishes to place a F.S.R:

- User will select employee-login from the drop-down menu. The user will then login into the employee portal with a valid email address and password. The user will then select enter F.S.R and enter requested information on the form. The user will then select submit, which will enter the information into the company's system to prepare for a freight shipment.

Future Client

A manufacturing company is looking to place an order tomorrow for an international freight shipment. The company has browsed S.I.L.A's website and they wish to contact a representative via email:

- The user will select contact from the drop-down menu. Once there the user will enter in their company name, their fax number, their company email-address and they will enter any questions they may have for S.I.L.A
- An employee will then send the company via fax and email additional information about the company in order to seal the deal.