# Usability Report

User Testing of Office Depot's Computer Diagnostic Intake Process

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## **Executive Summary**

For this project, I am assessing the usability of Office Depot's current intake materials that are used for taking in customer computers for computer diagnostics. I determined three common scenarios that occur in store when taking in a computer for diagnostics:

- 1. Customer fills out form
- 2. Associate performs verification and finished form with customer
- 3. Associate fills out form with customer and misses a required field

The way the scenarios are set up, I was able to assess the diagnostic process from both the customer and the associate viewpoint. Three participants were chosen, all owning computers and never having visited an Office Depot for a diagnostic. Each user took an average of eight minutes to get through all of the scenarios, including all questionnaires.

The primary conclusions that were drawn include:

- The digital form was easy to use
- The instructions at the beginning of the form were explanatory enough for users to read and understand what they were supposed to do
- The pop-ups were helpful but had bad placement that was not always visible
- User information was always accurate
- The form did not take long to fill out
- The tab function does not always work for all of the fields
- Users felt comfortable putting their information in due to associate password protection

In conclusion, the form still needs some improvement in terms of assisting users when a mistake has been made, and also when tabbing between fields, but ultimately it has been determined to be an efficient, accurate, and safe way to obtain customer data. It eliminates the paper copy, which can potentially fall into the wrong hands if misplaced, putting customer information at risk, and it also eliminates associate error when transferring data from paper into the digital form. This saves the users and the company time and money.

# Introduction/Background Information

I chose to evaluate the intake materials that are used in the procedure of taking in a customer's computer for a computer diagnostic, a service that we offer to identify if computers are in need of any software-based repair, such as virus removal or eliminating programs that are making a computer run slow. Currently, associates use a paper project folder\* to take the customer's information down, have the customer write down their specific problem and then sign, space to identify potential issues that we could sell other services on (i.e. identify how much RAM a computer has, what its maximum capacity is, and a space to write down the cost of an upgrade), and a couple pages worth of descriptions of our services. Associates then take the customer information that is on the folder and enter it into a form that creates a contract that we print out and have the customer sign. The main issues that other managers and I run into include inaccuracy of customer information and associates not filling out the folder in entirety. This leads to errors including simply having incorrect information, inability to contact customers if needed, slow down the process of completing the diagnostic properly or further repairs, and missing out on sales because associates are not taking all necessary information. Currently, the only remedy to this is constant review and validation by a manager, which can take up a lot of time, and it usually occurs after we are facing a consequence of an error.

The objective of the test was to try a new method for obtaining necessary customer information by eliminating the paper folder and entering everything directly into the computer. I wanted to see if the new digital form would increase efficiency and accuracy between both the customer and the associate.

<sup>\*</sup>Company did not allow for me to use folder in this project due to confidentiality agreements. Actual form would be shown in real report or proposal of project.

<b>Computer Diagnos</b>	tic Intake Form
Thank you for choosing Office Depot for your com with the red asterisk(*) and any other fields you ca Ask any associate if you need assistance.	nputer repair needs. Please fill out all fields an to expedite the intake process.
Name*	
First Last	
Address*	722
Street Address*	
Address Line 2 (if needed)	
City State Postal/ Zip Code*	
Phone Number*	
Email*	<b>—</b>
Computer Model Number	T
Computer Serial Number	
Operating System	
Select ▼	
Describe the reason(s) for needing a diagn	nostic today, including any issues or concerns*

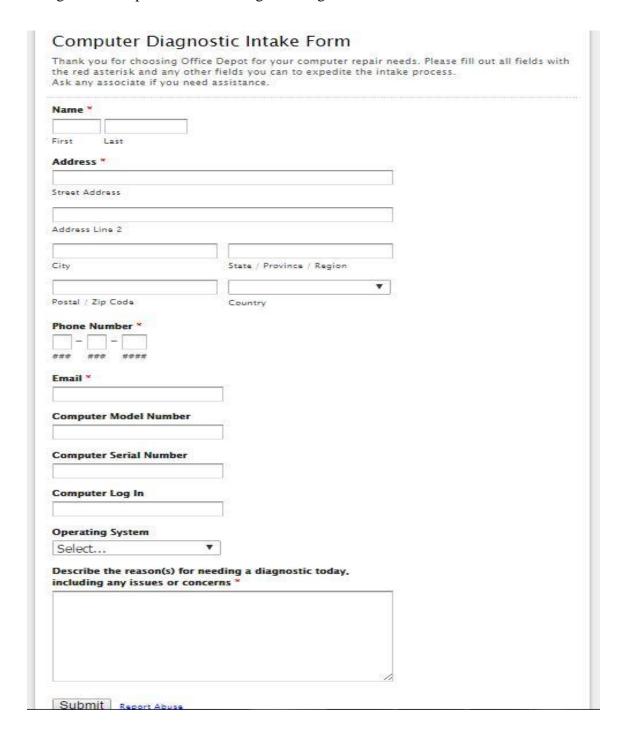
## **Design Proposition**

Information accuracy is extremely important, especially when it comes to customer personal information. These inaccuracies cause losses of time and confidence in our program and staff. To remedy this, the project folder should be made digital and accessible to customers to fill out themselves. This consolidates the transfer of information from customer-to-associate-to-paper-to-digital form down to customer-to-digital form. After the customer enters their information, an associate will then view the information to look for any missing pieces of information that may be necessary to an accurate diagnosis and recommendation. To make sure the associate did not miss anything, all form fields will be required to proceed. If an associate chooses to skip a section, they will still have to input something to move on, proving acknowledgment of the field. This will improve the accuracy of recommendations and improve accountability, thus reducing time spent on coaching and correcting mistakes. The improved accuracy will raise our credibility and potentially generate more sales and customer loyalty.

The other benefit to the digital form is that a customer will not have to wait for an associate to go through it with them if they do not need assistance. Customers can use the designated kiosk to input their information, while an associate may be helping someone else. This will allow the diagnostic to occur faster, saving the customer and the company time. Associates will still be available to assist customers if needed, and associates can still fill the form out with the customer, but inputting everything directly into the computer reduces paper waste, keeps customer information safer because there is less risk of losing the paper with the information on it, and improves accuracy.

# <u>Sketches</u>

The following are preliminary sketches of the form that the customer and associate will use during the intake process. Form designed using Wufoo



This is an example of the customer filling out the form:

Name *			
Kathy Porter			
First Last			
Address *			
1234 Washington St			
Street Address			
Address Line 2		4	
Minneaplis	MN		
City	State / Province / Regio	in .	
55408	United States	▼	
Postal / Zip Code	Country		
123 - 456 - 7890 *** *** **** Email *			
123 - 456 - 7890 *** *** **** Email *			
123 - 456 - 7890 ### ### Email * example@example.com			
123 - 456 - 7890 ### ### #### Email * example@example.com Computer Model Number			
123 - 456 - 7890  ere ree reer  Email *  example@example.com  Computer Model Number  Computer Serial Number			
123 - 456 - 7890  ### ### ###  Email *  example@example.com  Computer Model Number  Computer Serial Number  Computer Log In			
123 - 456 - 7890  ### ###  Email *  example@example.com  Computer Model Number  Computer Serial Number  Computer Log In			
Email *  example@example.com  Computer Model Number  Computer Serial Number  Computer Log In  Operating System  Windows 10	▼ r needing a diagnostic toda	<b>y.</b>	

This is an example of what the error message will look like when the customer or the associate has missing information.

	as a problem with		
E	rrors have been highli	jhted below.	
Name *			
Kathy Porter			
First Last			
Address *			
1234 Washington St			
Street Address			
Address Line 2			
Minneapolis	MN		
City	State / Province / Regio	E CONTRACTOR OF THE CONTRACTOR	
55408	United States	<b>v</b>	
Postal / Zip Code	Country	10	
Phone Number *			
123 - 456 - 7890			
*** *** ****			
Email *			
This field is required. Please ent	er a value.		
Computer Model Number			
Computer Social Number			
Computer Serial Number	79		
	-16		
Computer Log In			
Operating System	_I.c.		
Windows 10	7		

# **User Analysis**

The target user is anyone with a computer who needs to have a problem diagnosed. The age range varies greatly, so the intake process needs to be usable by anyone at any age range over 18. All participants owned their own computers and have varied technology proficiency levels.

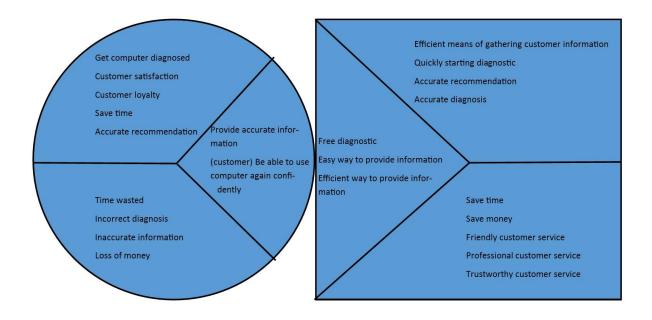
## **User Discovery**

The main objective of Office Depot's current intake procedure is to obtain accurate customer information and permissions by providing a simple document for associates to fill out and maintain so they can make effective recommendations to customers after the diagnostics are complete.

Primary Users	User Expectations
<ul> <li>Senior Sales Consultants-Tech</li> <li>Sales Consultants</li> <li>Managers</li> </ul>	<ul> <li>Easy to complete</li> <li>Easy for customers to see what information is required</li> <li>Clear</li> <li>Relevant information</li> </ul>
User Objectives	<b>Business Objectives</b>
<ul> <li>Obtain customer information</li> <li>Obtain information about the computer</li> <li>Find information on various services to recommend</li> <li>Make sales off of recommendations</li> </ul>	<ul> <li>Make money on repairs based off diagnostic recommendations</li> <li>Make money on repairs based off of associate evaluation of hardware</li> <li>High customer satisfaction</li> <li>High customer loyalty</li> </ul>

Primary Users	User Expectations
• Customers	<ul> <li>Easy to complete</li> <li>Easy to see what information is required</li> <li>Clear</li> <li>Relevant information</li> </ul>
User Objectives	Business Objectives
<ul> <li>Provide necessary information for diagnostic</li> <li>Provide accurate information</li> <li>Find out what is wrong with computer</li> </ul>	<ul> <li>Make money on repairs based off diagnostic recommendations</li> <li>Make money on repairs based off of associate evaluation of hardware</li> <li>High customer satisfaction</li> <li>High customer loyalty</li> </ul>

# Values Proposition Canvas



#### Persona

Based on an average user, a persona was developed to further understand user requirements.

Name: Kathy Porter

Age: 43

Gender: Female

Location: Downtown Minneapolis

Education: College graduate

Family: Married with one child

Occupation: Administrative assistant

Technology Usage: Uses laptop and iPhone mobile device daily

Profile: Kathy uses a computer every day at work, since she schedules and plans meetings for her boss. Whenever she has a problem, she can call her company's I.T. department, and they help her with any issues. When she got home one day, her daughter wanted to use the family laptop to get some homework done. Half way through, the daughter came to Kathy saying that the computer randomly shut off. Kathy turned it back on, but it took a very long time to load. Then when her daughter tried to use it again, every action was taking too long to finish to do anything. Now her daughter couldn't use the laptop. Kathy knew that Office Depot fixed computers, so she is going to drive it to the closest one to have it looked at and hopefully fixed.



## Scenario 1:

Kathy gets to Office Depot and approaches the Tech Repair area. The associate behind the counter was already helping someone, and pointed to the computer on counter and said that she could begin filling out the form on the screen to speed up the check-in process.

User Actions	System Responsibility
Fill out form fields with personal information:	Keyboard works
name, address, phone number, email address	Typed text shows up in form fields
Fill out form fields with computer	
information: passwords (if applicable), model	
number, serial number	
Press "Create Work Order"	Checks what fields are filled in
	Make sure all mandatory fields are filled out
	Move forward to next page if all mandatory
	fields are filled out
	Stay on same page if mandatory fields are
	missing
	Show "error message" at top of page,
	indicating missing fields
	Highlight missing fields with red boxes
Associate pulls up work order on computer	Display the form the customer was filling out,
	with any empty fields highlighted
Associate asks customer about the missing	Typed text shows up in form fields
fields and fills in any missing information	
Press "Create Work Order"	Checks what fields are filled in
	Make sure ALL fields are filled out
	Move forward to next page if ALL fields are
	filled out
	Stay on same page if any fields are missing
	Show "error message" at top of page,
	indicating missing fields
	Highlight missing fields with red boxes
Print 2 copies of work order out	Send file to printer
Have customer sign one work order, and take	
the copy home	

## Scenario 2:

Kathy gets to Office Depot and approaches the Tech Repair area. The associate behind the counter was already helping someone, and pointed to the computer on counter and said that she could begin filling out the form on the screen to speed up the check-in process. Kathy says that she would rather wait and have an associate help her. The associate frees up and begins to help her.

User Actions	System Responsibility
Associate fills out form fields with customer's	Keyboard works
information: name, address, phone number,	Typed text shows up in form fields
email address	
Fill out form fields with computer	
information: passwords (if applicable), model	
number, serial number	
Show customer filled out form to check for	
mistakes.	
Press "Create Work Order"	Checks what fields are filled in
	Make sure ALL fields are filled out
	Move forward to next page if ALL fields are
	filled out
	Stay on same page if any fields are missing
	Show "error message" at top of page,
	indicating missing fields
	Highlight missing fields with red boxes
Print 2 copies of work order out	Send file to printer
Have customer sign one work order, and take	
the copy home	

#### Requirements

## **Functional Requirements**

- 1. Intake form
  - a. Enough fields to accommodate all needed customer information
  - b. Buttons that lead to explanation of why certain information is needed
  - c. Buttons that lead to example of how to find information
- 2. Intake form after "Create Work Order" has been clicked by customer
  - a. Move forward to a page where the form can be reviewed
    - Display message thanking customer for using the kiosk and now just needs to wait for an associate to complete it.
  - b. Remain on same page if not all mandatory fields are filled in
    - i. Highlight missing fields
    - ii. Display message indicating missing fields
- 3. Intake form when associate opens it
  - a. Shows all customer's previously filled information
  - b. Indicates missing fields
- 4. Intake form after "Create Work Order" has been clicked by associate
  - a. Move forward to page where the form can be printed
  - b. Remain on same page if not all fields are filled in
    - i. Highlight missing fields
    - ii. Display message saying that all fields must be filled in, anything not applicable must be filled in with a "N/A"

#### Data Requirements

- 1. Recognize empty fields
- 2. Recognize when form is complete
- 3. Ability to pull up previously filled out form on associate's computer

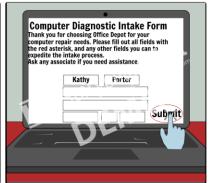
## Contextual Requirements

- 1. Browser on kiosk computer must be connected to the internet
- 2. Instructions should be straight-forward and clear for customers using the kiosk
- 3. The customer should be able to understand why certain information is needed
- 4. There must be examples of how to find tough information available to the customer
- 5. It should be clear what is mandatory and what is optional for the customer to fill out
- 6. It should be clear to the associate that all fields must be filled out to continue

# Storyboard #1







Kathy is upset that her computer is not working. She brings it to Office Depot because she heard about their free diagnostic service. Kathy approaches the counter where the associate is already helping a customer. The associate directs her to the kiosk on the counter to complete the intake form.

Kathy reads the information on the screen and begins to fill out the the form. She clicks "submit" when finished.







Kathy did not fill out all of the the required fields, so the form highlighted the missing information that is needed. Kathy fills out the highlighted fields and selects "Submit" again.

Kathy successfully completed the intake form and now will wait for the associate to assist her.

The associate is now ready to confirm Kathy's information and begin the diagnostic.

Create your own at Storyboard That

# Storyboard #2



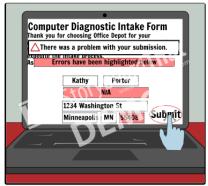




Kathy is upset that her computer is not working. She brings it to Office Depot because she heard about their free diagnostic service.

Kathy approaches the counter where the associate is available to assist her. He invites her to use the kiosk to enter her information herself, but she tells him that she would like him to help her.

The associate reads the instructions, notes the message to associate about filling out every field, and asks Kathy for the corresponding information. He clicks "submit" when finished.







The associate did not fill out all of the the required fields, so the form highlighted the missing information that is needed. The associate fills out the highlighted fields and selects "Submit" again.

The associate successfully completed the form, and is instructed to print out the completed copies.

The associate is now ready to begin the diagnostic.

Create your own at Storyboard That

# Methodology

Testing took place at an Office Depot when I was off the clock on August 10<sup>th</sup>, 2017. I asked the chosen participants to meet there so the environment would be similar to an actual customer's experience. I set up a computer at a desk to look similar to the Tech Services area in the store. Each participant was given a consent form, pre-test questionnaire, and a computer information card. After each task, each user was asked four questions about the experience. After completing all the tasks, the participants were given a post-test questionnaire.

# Scenario Tests and Results

## Scenario 1: Customer Data Entry

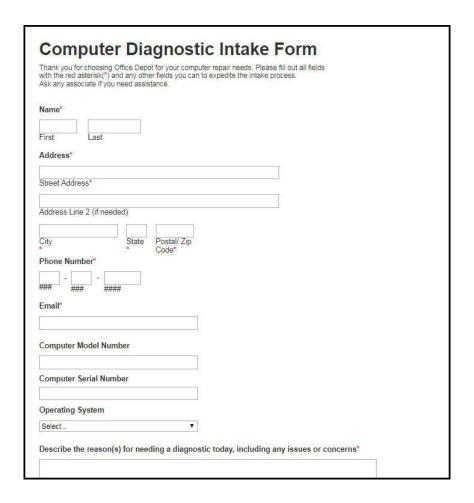
The participant will play a customer who brings in laptop to be diagnosed and is instructed to use the kiosk. The goal is to have the form filled out to the point of associate verification.

#### **Results:**

Success: 100%, 3/3 participants completed this task

**Difficulty:** 100% score of 1 (Very Easy)

**Feedback:** One user tried to tab between all of the fields and was unable to tab from "city" to "state". The same user was also frustrated that the "phone number" fields were not continuous. The other two users clicked between the fields with the mouse and did not experience any issues.



#### Scenario Two: Associate Verifies Customer's Information

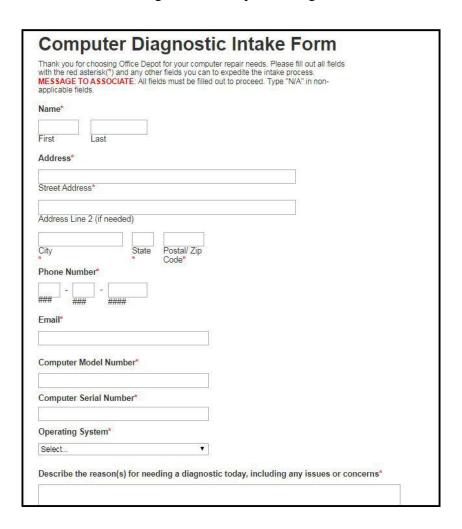
There will be a participant playing an associate for the verification scenario. The "customer" from the previous scenario will be available to answer questions about what they did or didn't fill out on the form. The task is to complete the form entirely.

## **Results:**

Success: 100%, 3/3 participants completed this task

**Difficulty:** 100% score of 1 (Very Easy)

**Feedback:** When one user was placed as the associate, it was unclear to them what was still needed on the form due to asterisk placement. User recommended that asterisks be placed at the front of the field title. The other two users had no issues. One user struggled with the associate password input due to network settings on the computer being used. Moderator did assist.



## Scenario Three: Forgotten Field

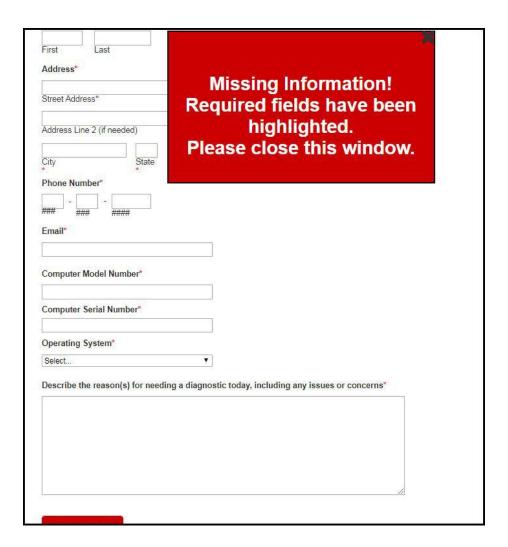
There will be a participant playing an associate for this scenario, and a participant playing a customer. The associate will assist the customer by filling the form out with them. The goal of the task is to fill the form out completely. The associate will purposely skip a required field.

## **Results:**

Success: 100%, 3/3 participants completed this task

**Difficulty:** 100% score of 1 (Very Easy)

**Feedback:** One user was observed having a hard time seeing the error message pop up when clicking "create work order". Because the user did not see the message right away, the user assumed nothing was happening and that something was wrong. Once the message was seen, the user struggled to close it by clicking all over in the pop up window, not seeing the "x" in the corner. The other two users had no issue.



# Recommendations

Before this process can be used in stores, improvements must be made to the form to better the user experience, but ultimately it has been determined that this process is easy enough for any user to complete if they were to come into a store. The participants all agreed that they would be comfortable completing this form if they had to wait for an associate to help them, however, one said that they would still have preferred associate involvement throughout the entire process. All agreed that the digital form increased efficiency and accuracy vs using a paper form plus data entry. Eliminating the written folder got rid of the chance for misspellings, difficulties reading handwriting, and associate misinterpretation.

Improvements that are needed include being able to tab successfully to every field, continuous phone number fields, and more prominent error message with an easier way to close the pop-up. The password entry issue was determined to be solely a network identification issue, and is fully functional on a secured network.

Overall, the digital form is an efficient way to obtain customer data while maintaining accuracy and efficiency. This new process can save the customer and the company valuable time and money.

# **Appendix**

## **Usability Protocol**

#### Introduction

For this test, I will be looking at the usability of the digital diagnostic intake form and overall intake process for Office Depot's Computer Diagnostic program. I will be assessing information from questionnaires, feedback, and observation notes to determine if this new process is more efficient than the current paper form and entry process. There will be three tasks that consist of the primary uses of the new form.

The participants will include potential customers who own computer and who have never brought their computer in for a diagnostic before at Office Depot. Setup should take only about five minutes or less, the testing itself should last only five to ten minutes. The testing session will include a consent form, a pre-test questionnaire, the three task-oriented tests to be completed, then a couple post-task questions, and ending with a post-test questionnaire.

After the testing is completed, I will review the collected data to get an idea of how efficient that form was, how comfortable the users felt while trying it, and see what can be improved with the intake process.

#### Moderator and Test Introduction

Hello, my name is Alyssa Kieffer, and I am here today as your moderator. I want to start off by thanking you for taking a few minutes out of your day to help us test a new intake process for Office Depot's computer diagnostic program.

The point of this test is to try a new process that includes a digital intake form that customers themselves will be able to fill out with their information, instead of the customer filling out a paper form and then the associate entering that information into the computer. An observer and I will be monitoring behaviors and reactions as you go through the process. You may ask us any questions, but we will not be able to tell you how to complete a task. With your feedback, we are hoping that we can develop the process further to help save customers' time and money.

Before we start, we ask that everyone reads and signs this consent form if they are going to participate. I want to assure everyone that the information filled out in the tests will not be saved or distributed, so we encourage you to enter accurate information. We also will not use names in the final report.

#### -Hands out consent form-

Now please fill out our brief pre-test questionnaire so we can get to know you a little better.

#### -Hands out pre-test questionnaire-

Now since we only have one kiosk, we will take two participants at a time, as two people are needed for a couple of scenarios. We expect each test to take about five to ten minutes.

Everyone will get a computer information card that will help you answer some of the form questions. You may choose to use it, or enter your own information if you have it.

Please be vocal about any frustration or confusion that you may have. We want to know if you are struggling, and we also want to know what you like about the process. After each scenario, we will ask you to answer a couple follow up questions.

At the end of your test, you will be given a brief questionnaire that should only take a couple minutes to complete to help us gauge your overall experience.

Thank you again for your participation. What questions or concerns do you have?

# Pre-Test Questionnaire:

Thank you for being a part of the demo test of the new Office Depot computer diagnostic intake process. Please answer the following questions to help us gather some background information on potential customers.

1.	What i	s your age group?
	a.	0-18
	b.	19-25
	c.	26-40
	d.	41-55
		56+
2.	Do you	ı own a computer?
	a.	Yes
	b.	No
3.	Have y	you ever visited an Office Depot for computer diagnostics before?
	a.	Yes
		If Yes, why?
	b.	No
4.	Would	you say you are more comfortable with pen and paper vs using a computer?
	a.	Pen and paper
		Why?
	b.	Computer
		Why?
		•

#### **Consent Form**

Thank you for your interest in improving the Office Depot diagnostic intake process. We are working on this project because we want to improve the efficiency of the Office Depot diagnostic intake process to help save consumers and the company time and money. During this test, you will be asked to provide personal information to complete the diagnostic form. We will also be observing your actions while completing the tasks. The testing will take about 5-10 minutes.

We will not share any information that you provide during the test, although you are welcome to "make-up" information.

make-up information.
ou may leave at any time.
y signing this form, I agree to participate in the testing:
ignature
rinted Name

#### Scenarios and Tasks

#### Scenario 1: Customer Data Entry

The participant will play a customer who brings in laptop to be diagnosed and is instructed to use the kiosk. The goal is to have the form filled out to the point of associate verification.

Observer: Record any outward reactions to the site, and keep time.

Moderator: One participant will play the customer for the first scenario. We have given you a computer information card which will help you fill out the form. Please try to imagine yourself in the scenario as much as possible. You do not have to use your own personal information if you are not comfortable. Please use the kiosk to begin the process.

Post-task Questions:

Were you successful in completing the task?

Rate the difficulty of this task on the scale of 1 to 5 (1 is very easy, 5 is very difficult)

Were there any struggles with navigating the site for this task?

How would you improve the experience?

Observer notes:

## Scenario Two: Associate Verifies Customer's Information

There will be a participant playing an associate for the verification scenario. The "customer" from the previous scenario will be available to answer questions about what they did or didn't fill out on the form. The task is to complete the form entirely.

Observer: Record any outward reactions to the process, and keep time.

Moderator: Another participant will join you as the associate, and may ask you questions based on what you filled out in scenario 1.

The participant playing the associate may now begin the verification process, and the "customer" can answer any questions that the "associate" has about the form.

"Associate": The password is "admin"

Post-task Questions (Associate and customer answer these separately):

Were you successful in completing the task?

Rate the difficulty of this task on the scale of 1 to 5 (1 is very easy, 5 is very difficult)

Were there any struggles with navigating the site for this task?

How would you improve the experience?

Observer notes:

#### Scenario Three: Forgotten Field

There will be a participant playing an associate for this scenario, and a participant playing a customer. The associate will assist the customer by filling the form out with them. The goal of the task is to fill the form out completely. The associate will purposely skip a required field.

Observer: Record any outward reactions to the process, and keep time.

Moderator: A participant playing an associate will assist a participant playing a customer. The "associate" will fill out the form, asking the "customer" for information that is provided on the computer information card. As the customer, you may choose to enter your personal information or not. "Associate": Please skip a required field.

Post-task Questions (Associate and customer answer these separately):

Were you successful in completing the task?

Rate the difficulty of this task on the scale of 1 to 5 (1 is very easy, 5 is very difficult)

Were there any struggles with navigating the site for this task?

How would you improve the experience?

Observer notes:

## Scenario Information Card

# Scenario Information Card

Computer Info: Dell Inspiron 15 3001 Serial Number: 1SLD0974BUEMXA

Operating System: Windows 10

Problem: Lots of pop-ups, maybe virus

#### Post-Test Questionnaire

Moderator: Thank you for participating in our test of the new Office Depot Computer Diagnostic Intake process. We hope that your feedback will help us continue to improve the intake process and save everyone time and money. We have just a couple follow up questions that we would like to ask. Once you have completed them, the testing is over and you may leave. Thank you again everyone, and have a great rest of your day.

Was the form easy to use?
What parts of the intake process were frustrating or confusing (if any)?
What would you change about the process to make it more efficient?
Is this process efficient?
Is the digital form process more accurate than the paper plus data entry method? Why?
Would you visit an Office Depot and feel comfortable with this process?